

The background of the cover features a complex pattern of white, hand-drawn style lines on a blue gradient. These lines form a central vertical stem that branches out into several large, overlapping circular and spiral shapes, resembling a stylized tree or a musical staff with notes. The lines are thick and have a slightly irregular, textured appearance.

MUSICAL PRACTICES FOR RELIGIOUS EDUCATION

Knowledge and Emotion-Based Approach

Yusuf Ziya Öğretici

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**MUSICAL PRACTICES
FOR RELIGIOUS EDUCATION**

KNOWLEDGE AND EMOTION-BASED APPROACH



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2023

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Yusuf Ziya ÖĞRETİCİ

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Abstract

It is widely supposed that there is an appropriate and vital role for music in Religious Education (RE). However, the answer to the question of '*how* music should be included in the teaching of RE' remains uncertain. This research examines the position and role of music in RE to offer a better way forward for their collaboration. In an interdisciplinary style, the research incorporates aspects of educational research and theory, music, emotion, psychology, and philosophy. It aims to address music as a way of fostering students' affective and cognitive responses and engagement in the context of effective RE –as well as seeking to provide curriculum guidelines for musical activities of RE.

The hypothesis within this research is that music with its capabilities for stimulating emotions and facilitating the communication of knowledge can enhance RE, by developing students' meaning-making processes, rooted in their emotional, cognitive, and behavioural engagement with the classroom subject. On a broad theoretical framework and through comprehensive literature in different research fields –including education, philosophy, theology, music, psychology, and sociology– the premise of the current research is advanced that music and RE are related in various key and critical respects.

With a mixed-method research design, this research then encompassed three interrelated types of investigation: conceptual-hermeneutical, empirical-analytical, and phenomenological. The critical assessment of relevant literature and prevailing theories of emotion, cognition, values, music, *makam* in Turkish musical culture, and meaning-making were central to the present project and its identification of possible and viable ways in which RE practices might integrate these concepts more meaningfully and effectively in the classroom.

Emotions, knowledge, and meaning-making, in line with musical experiences, are important themes for the current research and worthy to be investigated in the context of RE, since music has a relationship with these in almost all cultures. In particular, from its basis in music and Islamic theology (religious studies), this research also developed a distinctive theoretical foundation for the concepts of ‘musical emotions’ and ‘communication of knowledge with music’, and for the context of RE which then highlights ways of using music for the teaching / learning of values efficiently in RE.

For the empirical investigation, this research evaluated the field of RE from two perspectives: that of students and that of RE professionals. Then, it discussed the implications of the findings in line with existing literature, curriculum, and policies.

For measuring emotional response to listening to Turkish *makam* music (consisting of 12 excerpts), I used the renowned and respected Geneva Emotional Music Scale (GEMS-25) with selected student populations (n= 350). Regarding the historical associations of Turkish *makam* music with emotional stimulation, five excerpts were successful in inducing the intended emotion (in inducing *peacefulness* via Buselik and Hüseyini, *nostalgia* via Saba, *joyful-activation* via Rast, and *power* via Neva), while five excerpts were partly successful (in inducing *wonder* via Irak, *power* via Nihavend, *transcendence* via Segah, and *sadness* via Zirefkend; and in reducing *tension* via Isfahan). However, two excerpts (Mahur and Hicaz) were unsuccessful.

Furthermore, a range of RE professionals (n= 20) was interviewed, employing the method of grounded theory, in order to understand bet-

ter the current place of music in RE and future implementation possibilities. The participants' experiences of the present conditions for using music in RE shed important light on the standards for musical material (legitimation, disapproval, reasoning, and musical features), the characteristics of musical activities of RE (classroom, students, and teachers), and the theoretical and practical considerations for musical interventions in RE. However, it was clear that, despite the potential revealed by this research, the currently modest number of initiatives using music in RE is far from reaching a broad range of adoption and support.

By the thematic approach of the present research, I integrated these concepts and theories for the musical activities of RE, to provide a pedagogical model for effective RE in Secondary schools in Turkey (though with potential cross-cultural insights). Regarding the implications of the research, I evaluated the teaching methods used in musical activities in the classroom/school settings, the musical material selection and preparation in terms of emotional and cognitive characteristics, the measurement of students' responses to music, and the assessment of the activities. Consequently, in this pedagogical model, *student, music, environment, and teacher* represent the key emerging themes aligned with the musical activities of RE, on the basis of their personal/intrinsic, cultural/religious, and situational/responsive characteristics.

This research project investigated important questions surrounding the ongoing debates of emotions in education, music in RE, music in Islam, and values education within the RE context. Navigating this complex matrix of interrelated and overlapping questions in the manner undertaken here demonstrates clearly that, for the development of students' feelings, cognition, and behaviours, the presence and the practice of musical activities in Secondary RE classrooms can indeed offer a constructive and inspiring transformational experience in the study of Religious Education –even though this potential is for the most part still under-utilized in the present era.

Keywords: *Religious Education, values education, music, emotion, knowledge, meaning-making.*

Abbreviations

<i>AÜİFD</i>	Ankara Üniversitesi İlahiyat Fakültesi Dergisi [The Journal of the Faculty of Theology of Ankara University]
<i>CoHE</i>	The Council of Higher Education [Yükseköğretim Kurulu]
<i>DİA</i>	Türkiye Diyanet Vakfı İslam Ansiklopedisi [Turkish Diyanet Foundation Islamic Encyclopaedia]
<i>DİB</i>	Diyanet İşleri Başkanlığı [The Presidency of Religious Affairs (of Turkey)]
<i>DGRТ</i>	Directorate General for Religious Teaching
<i>(d.)</i>	Date of death
<i>EBA</i>	Eğitim Bilişim Ağı [Education Information Network]
<i>GEMS</i>	Geneva Emotional Music Scale
<i>MEB</i>	Milli Eğitim Bakanlığı
<i>MoNE</i>	Ministry of National Education (Turkey)
<i>PoRA</i>	The Presidency of Religious Affairs (Turkey)
<i>RE</i>	Religious Education
<i>TRT</i>	Türkiye Radyo ve Televizyonu
<i>TÜMATA</i>	The Group for the Research and Promotion of Turkish Music

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Glossary

All translations from Ottoman Turkish, modern Turkish, to English are the present author's, unless stated otherwise. However, a number of non-English terms are used in this book. These terms are generally italicised. Nonetheless, the common terms in English such as Allah or Eid are the exceptions to this rule. For simplification, I only used the standard Latin alphabet.¹ The specific and unusual terms such as *makam*, *traditional*, or *mawlid* are italicised for the sake of clarity. This was only applied for singular versions, not for plural (e.g. *makams*) and possessive forms (e.g. *makam of X*). Moreover, *makam* names are always capitalized (e.g. Rast, Neva, or Nihavend) in order to distinguish them from other terms and names. However, as a methodological choice, I preferred to write the concept of 'makam' and names of makams in the contemporary Turkish language (e.g. makam instead of maqam; and Nevâ instead of Nava). Yet, this is not a choice about the musicological facts, but about the perception and conceptualisation in the cultural milieu of Turkey. The following sign, letters, and terms may also help the reader:

‘^’: Sign for extending the sound of the letter on which it is placed.

Ç: ch

C: j or dj

Ğ: ygh

Ö: rounded o, as it is used in German

Ş: sh

Ü: rounded u as it is used in German

Terms used in the text:

Cami: Mosque.

Dhikr/Zikr: The 'remembrance' of God.

Diyanet: The Presidency of Religious Affairs (of Turkey).

1 Ottoman-Turkish sounds in Latin script. Library of Congress, ed. (2016): <http://www.loc.gov/catdir/cpsol/romanization/ottoman.pdf> (10/02/2021).

Eid: Islamic-religious festival

Adhan/Ezan: Muslim call to prayer

Fiqh: Islamic jurisprudence

Hadith: Sayings of the Prophet Muhammad, *pbuh*, (*pl. ahadith*)

Halal: Not forbidden/ permissible

Haram: Forbidden

İlahi: Religious hymn/ prayer/ chant

İmam–Hatip: Vocational state-schools for religious education in Turkey

Makam: Scale of microtonal steps and its logic of melodic construction (*pl. makamat*).

Mawlana/Mevlana: Jalal al-Din Rumi

Mawlawi/Mevlevi: Follower of Mevlana, ‘whirling dervish’

Mawlid: 1. The birthday celebration of Prophet Muhammed, *pbuh*. 2. poem or musical improvisation on same.

Musiki: Music

Ney/nay: A wind instrument of seven holes, made of reed.

Ramadan: The holy month of Ramadan in the Islamic lunar calendar

Sama’: The *dhikr* of Mawlawism

Seyir: Melodic progression unique to each makam

Sunnah: The words and practices of Prophet Muhammed, *pbuh*.

Takbīr: Chanting of *Allāhu akbar* (God is the greatest)

Taksim: Instrumental improvisation

Tarikat: Sufi/ Dervish order

Tasavvuf: Sufism

Tekke/Dergâh: Dervish lodge

Usûl: Preconceived rhythmic pattern/ mode in makam music.

Chapter I

Introduction

1. Rationale of the Research

This multi-disciplinary research critically examines the contribution of music to effective Religious Education (RE), incorporating elements of philosophy, psychology, sociology, theology, and educational research and theory. It is widely supposed that there is an appropriate and vital role for music in RE. However, the answer to the question of 'how music should be included in the teaching of RE?' remains uncertain.

Across literature from different fields –such as in education, philosophy, psychology, theology, etc.– the premise of the book emerges that music and RE are related in various important respects. Correspondingly, this research leans on the significance of music in communicating knowledge and expressing and inducing emotions, in order to indicate a way by which music can contribute to RE in developing dispositions which encompass the dimensions of emotion, knowledge, and behaviour. Music is valuable for RE primarily due to its potential for the development and improvement of moral sensibilities, emotions, and feelings (Yob, 1995a). Regarding the capacity of music for conveying knowledge and inducing emotions in relation to the 'feeling' / affective element in religion, there is a quality in music that expresses and makes accessible the emotive dimension of attitudes and underpinning

values. Thus, the relation of music to values and attitudes seems to be identified according to *musical effects on emotional arousal*, discovering or communicating knowledge, and guiding behaviour (Yob, 1997). It might also be suggested on this basis that RE must give space for music, so that students will utilize the intellectual and emotional resources in values education (Carr, 2006b). In this context, music in RE can play a significant role in reconfiguring, for instance, moral thinking by influencing students' moral thoughts, thanks to its power to elicit the standard modes of ethical discourse (Walden, 2015). Consequently, an immense potential for the growth of personality and character can be gained through music (Sidiropoulou, 2013).

The recognition of the importance of music for both individuals and communities in terms of character and moral development is far from new. Since antiquity, the domain of cultural concepts in relation to morality has had a strong association with music (Mesz, et al., 2015). Both Plato and Aristotle acknowledged music as having a remarkable influence on shaping character, though they did not agree on the most appropriate form of music to achieve this goal (Carr, 2009). For Plato, music can express complex human concepts (Mesz, et al., 2015). Given the details of the effects of Greek musical modes for moral excellence set forth in *The Republic* (Plato, 2012), moral development has included reflection on the moral implications of music (Carr, 2006a). Plato associates the various Greek musical modes with character development (Plato, 2012: 101; Nettleship, 1937). His view, generally, is that 'music is a kind of ordered affect-charged auditory experience, that some forms of musical order are more conducive to the harmony or balance of the soul than others, and that a healthy human soul or character should in some way reflect the harmony of appropriate or approved forms of music' (Carr, 2006a: 104). Likewise, Aristotle argues for the necessity of music in improving the practical wisdom of virtue (Aristotle, 2014), attributable to its function for emotional development (Curzer, 2012). Music can contribute to the development of moral virtue because

the artist can make the world, including the emotional dimensions of life, more understandable or bearable (Aristotle, 1997a: 51-3). In short, the philosophical line of the present research is the significance of music for moral development as Plato and Aristotle first articulated it (Carr, 2010a).

Similarly, as it is outlined below (Chapter 2.1 and 3.1), Islamic perspectives on music (religious, philosophical, health practice, etc.) concern the relationship between listener (as a believer) and the effect of music. Furthermore, regarding the concept of *makam*, there is a highly pertinent discussion on the emotional qualities of music in the Turkish-Islamic environment. *Makam* is the term which conceptualises the basic modal-tonal character of Turkish and Arabic music (Altun and Egermann, 2020; Salvucci, 2016; Albright, 1978). Signell defines the *makam* system as 'a set of compositional rules by which the melodic component of a piece of music is realized' (1977: 16). Since from al-Farabi (10th century), it is argued that music can induce particular emotions due to its makams (Özkan, 2003).

Additionally, several associated perspectives, such as correspondences between musical structures and features of the moral life (Nettleship, 1937), moral emotions and behaviour (Kivy, 2009), and moral judgments (Seidel and Prinz, 2013), offer further contributions to the present research. In this respect, the role of music in expressing or transferring moral understandings is not peculiar to antiquity, because responses to music can be observable in everyday life across the ages and cultures (Sloboda, et al., 2001).

In a work preceding this research, I discussed the relationship between emotions (expressed and induced by music), meaning-making within religion, and the experience and the articulation of specifically *religious* emotions (Ogretici, 2016: 6):

In Schleiermacher, for instance, religion and art should not be alien, because art possessing religious character is the greatest kind. Furthermore, as feeling is the fundamental characteristic of religious experience; he

argued that the religious emotion of utter dependence is coexistent on a certain level with cognitive awareness, perceptive sensing, and revelatory insight (Schleiermacher, 1958). Namely, in the emotional essence of piety, since the Infinite perceived by religion is manifested and reflected by art, music might be the shadows of religious emotions. Writing from a similar perspective, Rudolph Otto's thesis (1973), is that since music convey more than general feelings, music serves as a means for awakening mysterious and numinous feelings, which is, in return, suggestive of mystery and numen (Yob, 1995a). Paul Tillich, also, considers art expressing ultimate concern which is universally religious. (Tillich, 1968, 1957).

According to Jorgensen (1993), Tillich further proposed five religious experiences exemplified musically, such as mythical, mystical, prophetic-protesting, prophetic-critical, and ecstatic-spiritual religious experiences. The arts and religions should be apprehended in relation to ineffable and unspeakable realities that are better enacted, represented, or expressed than spoken of didactically (Jorgensen, 2011). On account of the fact that every cultural creation has a religious dimension, even if the artist rejects the religion, and even artworks' content is nonreligious, art contributes to the question of the meaning of the existence by possessing religious style (Yob, 1995a). However, James (1902) gives a different argument on the connection of the arts and religious experience. The aesthetic motive is defined in his thought as one of the 'buildings-out' of religion, a natural, even spontaneous accompaniment of religion (Yob, 1995b), just as it is argued that the message of religious texts is more appreciated and has a higher emotional influence when it is accompanied by music (Argyle, 2000).

The present research recognises that religious feelings *can* be expressed and are accessible through music in accordance with its responsive emotional elements. Namely, music has the potential to speak directly in forms that cannot be expressed by any other languages of everyday experience (Yob, 1995a). As James (1902: 412) puts it, 'music gives ontological messages which non-musical criticism is unable to contradict'. This is not only about whether music has a kind of seman-

tic machinery (Robinson and Hatten, 2012). Owing to the relationship between the moral and the aesthetic, music must also be evaluated in terms of its educational significance (Carr, 2006a). Given the relation between moral behaviours and moral emotions (James, 1902), we can agree that some artworks can underpin moral attitudes (McGonigal, 2010). Therefore, music might well support cultural and moral development if we accept its facility for promoting wider perspectives and deeper understandings of the world (Sidiropoulou, 2013).

The present research applies the component-process model for the concept of emotion (Chapter 2.1). It follows then that the 'musical emotions' comprising subjective feelings, bodily change, and cognitive evaluations are significant in RE for both appraising a situation and in learning how to deal with it (Robinson and Hatten, 2012). Thus, it could be suggested that music is influential in RE not only for its capacity to invoke emotions but also for its potential to make pupils ready for possible actions. Consequently, music in RE may well include responsive dimensions that strengthen inclusive and social interactions (Stern, 2004).

Furthermore, although feeling and knowing are different concepts, feeling (through music) must be understood not as an independent phenomenon but as an accompaniment to particular kinds of knowing (Yob, 1995a). However, this does not mean that music cannot communicate knowledge. On the contrary, specific dimensions of music are consistently informative –for instance, to convey moral concepts (Mesz, et al., 2015). As Sidiropoulou (2013) argues, artworks may be of epistemic and educational value insofar as they convey knowledge as illustrative representations (Young, 2001), or as affective presentations of particular moral realities (Carr and Davis 2007; Wynn, 2004). This possibility may well make music a unique way to acquire and to transmit knowledge. Music in worship, for instance, most probably is employed for congregants in sacred spaces to understand the teaching of the sermon and/or the nature of divine truths, such as the mystery

of God (Miller and Strongman, 2002). Meanwhile, music with a set of values provides a perspective and an orientation which shapes one's apprehensions for, among other things, both the objects of music and of religion (Ok and Erdal, 2014). In other words, music is a factor in promoting religious affiliation –from Islamic Sufi lodges, to mosques and churches (Park, 2015; Alperson and Carroll, 2008).

Given that music can appropriately be heard as containing a set of emotions, knowledge, and values, its pedagogical/ educational emphasis within RE merits deeper consideration than it is usually accorded. Music might well be an influence that invites the listener not only to *recognise* the expressions of such music but also to *experience* them. Actually or in the imagination, the listener moves on an emotional/ psychological journey through the encounter with music (Robinson and Hatten, 2012). These are the functions of music since ancient times: mimesis –the exposure to the reality, and catharsis– revelation of the personal stance with affective experience (Cook and Dibben, 2010). If music can reflect emotions and ideas, it ought to be a method within RE, owing to its effect on the human spirit (Ho, 2010). Hence acknowledging the presence and the power of emotions and knowledge in music leads us to reconsider its role in RE.

Dealing with religious music has a focus, however, not only on knowing about worldviews but also on developing appropriate feelings of appreciation, respect, and empathy towards them (Yob, 1995b). Hence it is commonly argued that even secularists can appreciate religious music because imaginative responses reflect the 'Platonic' nature of the emotions expressed in such music (Putman, 2008; Pugmire, 2006). In this regard, attitudes to music are affected by both internal musical features and external extra-musical dispositions. It is often reported by listeners that significant motivations for music listening are, among others, the emotional and intellectual stimulation, the expression of religious and national feelings, and the strengthening of identity and a sense of community (Tekman and Hortaçsu, 2002).

If learners' own experience is necessary for understanding and embracing values (Werkmeister, 1961), it follows that music in RE has the potential to create a space in which the subject's emotions, interests, purposes, and valuations are recognised for their roles in this process. If benevolent music has a more profound effect on listeners than benevolent words (Lau, 1970 in Park, 2015: 126), it can be argued that music contributes to morality, not by preaching, but by exerting a profound influence on emotional experience (Park, 2015). In this respect, music claims a place in the teaching of moral concepts, so that learners employ their own emotional experience of music throughout the learning process.

Because music, as a part of cultural and moral life, can induce emotions and communicate knowledge, then its value in RE is seen as integral for the present study. By helping to develop a critical lens and by providing another language, music provides opportunities for students to explore and interpret the world (Stern, 2004). More specifically, emotions and knowledge embedded in music may well have a distinctive contribution to make to RE. Beyond the instrumental value of the pursuit of musical activities, 'the study of art can greatly help [us] to break out of [our] narrow parochialism of time and place to get acquainted with other cultures, different people, and landscapes' (Jarrett, 1981: 7). This may explain why arts-based pedagogical strategies and features have become a substantial part of learning over the last few generations (Nathan, 2008). To contribute to moral development and the acquisition of values, RE with musical activities should be committed to the communication of knowledge, skills, and abilities; furthermore, it has the potential to develop emotional awareness among students. In this perspective, the extent to which music can convey religious values (Plato, 2012; Carr, 2009) can be validated by showing the unique significance of music for expressing emotions and conveying knowledge, in relation to the attitudes and dispositions of learners (Otto, 1973; Yob, 1995a). Consequently, the answers proposed in this study lean on the relationship between emotions, knowledge,

and music across a broad range philosophical/theological, psychological, and pedagogical perspectives.

In summary, the central *hypothesis* of the research is that using music in RE can empower students in fostering their emotional and cognitive engagement with the subject. On the understanding that music can be used to express values and capture states of mind in the RE class, the role and capacity of music will be investigated, with a particular emphasis on the extent to which it can stimulate intended emotions for students and can communicate certain forms of knowledge and information within the classroom.

2. Research Questions, Design, and Methodology

Addressing affective and cognitive domains by means of music, the research undertaken here seeks to develop strategies for empowering learning and teaching in RE, leading to the principal research question:

How should music, with its capacity to induce emotions and to facilitate the communication of knowledge, be included in the teaching of RE?

The present research is conducted with a mixed-method research design. Regarding its theoretical and educational limitations, the research incorporates three interrelated types of investigation: *conceptual-hermeneutical*, *empirical-analytical*, and *phenomenological*. The first is represented in the critical assessment of relevant literature and prevailing theories of emotion, cognition, values, music, and meaning making –using these to identify possible ways in which educational practices may apply these concepts more meaningfully and effectively. Since the empirical part of the study uses Turkish music stimuli, the philosophical and historical opening of the study reassesses the place of the concept of *makam* in Turkish musical culture, and music in the Islamic context. Moreover, existing literature on the role of music in relation to its emotional and cognitive implications for teaching and learning is critically evaluated.

For the empirical part of the research, first, I used *GEMS* (Geneva Emotional Music Scale, Zentner, et al., 2008) to measure selected student populations' emotional responses to musical listening. Within the phenomenological paradigm, I also applied an empirical methodology in academic conversations with RE professionals to understand their perspectives on the current situation and on future opportunities for using music in RE. In relation to the overarching research enquiry and objectives for the study, a set of sub-questions were derived from the principal question. The first sub-question is:

How do listeners (students) emotionally respond to Turkish music when they listen to it?

More concretely, this research was not conducted to measure the emotional response to any arbitrary kind of music, but specifically to Turkish *makam* music. Therefore, Turkish *makam* music with its historical associations with emotional arousal (as it is reviewed in Chapter 3) has a substantial value for assessing the emotional responses in line with cross-cultural interpretations. Similarly, utilizing a convenient measurement tool for emotional responses has an equal significance. To measure the listeners' emotional response to Turkish *makam* music, a questionnaire for listening to and rating sessions using the GEMS-25 tool (Zentner, 2017) is accompanied by a set of demographic/background information questions. The stimuli were twelve excerpts from different Turkish *makam* music. The number of the participants was 350 for the questionnaire sessions. Participants rated and recorded their feelings while they listened to each stimulus. What is measured with the questionnaires by means of GEMS is, in essence, the self-reported subjective feeling component of the felt emotions of listeners (Gabrielsson, 2001-02). In this regard, *the position of listener* is prioritised in the present research over other aspects of music-emotion research areas such as musical and environmental features. This is also to try to see the field from the perspective of students. The data obtained from the questionnaires is analysed in R-Software to model specific emotional response patterns to Turkish music. The results are also then

compared with the historical emotional attributions to makams in order to create a ground for generalisation of the findings.

The second sub-question is:

How do RE professionals evaluate the place of music in RE?

With the method of 'informed grounded theory' (Thornberg, 2012), interviews of a range of education professionals are here analysed in order to understand better the current place of music in RE and future implementation possibilities. The research participants are a range of RE professionals, occupying key roles in academia, decision-making, and policy implementation in RE. In response to students' views from the questionnaires, interviews were then conducted to see the field from the perspective of teachers (and other professionals). The data gathered from 20 interviewees was analysed in accordance with the standard open, axial, and selective coding procedures of grounded theory research methods to modify and to assess the emerging concepts and relationships.

Thereafter, I took a thematic approach to combine the philosophical, empirical, and conceptual elements for enriching RE with musical interventions, with a specific focus upon the implementation prospects. In this area, qualitative and quantitative findings of the present research were brought together and discussed in comparison with the existing literature, curriculum, and policies. This research, of course, does not provide a single answer to the problem statement, but accepts there might be different answers to the related question. Therefore, the main objective here is presenting an insight into the ways by which music can support RE, with an emphasis on providing a guide for successful methods and outcomes.

3. Aims and Objectives

This research does not provide a critical and general assessment of the philosophical and pedagogical controversies surrounding RE. Instead, it aims to examine critically the ways of fostering the affective and cognitive responses of students in RE in the present era by means of

musical interventions. For this objective, the research investigates the experiences of students and RE professionals in relation to musical activities. It first measures the emotional response to Turkish music by using the widely respected GEMS tool (Zentner, et al., 2008). Then, findings are also compared with the historical claims on the emotional effects of Turkish music makams. In this regard, this research attempts to create a link between emotional response patterns and 'values' of RE curriculum in line with the historical claims. The second objective is to evaluate (the current situation by means of) RE professionals' views of the use of music in RE in order to reassess its weaknesses and its potential. Beyond these, the ultimate objective is to propose viable means for integrating music more effectively into RE, centred upon young people's *emotional and cognitive responses* to musical activities.

4. Research Significance

This research is primarily rooted in the pursuit of educational improvements for RE teaching in the domain of high-quality values education. For this objective, the research has been conducted in 'social sciences' discipline in the UK and set within the context of the discipline of RE, in particular its critical values education dimensions. It is also anticipated that the work will possess *generalizable elements of relevance for other school subjects, especially in relation to implementation possibilities*.

Since scholars assert that music is not properly included in the teaching of RE in most current contexts (Babacan, 2019; Berglund, 2014; 2008), this topic is worthy of advanced doctoral research. This is a crucial motivation for the religious and cultural enrichment advocated in the research, and with wider benefits for the educational community. The implications given in the conclusion of this research, on understanding better how music might be included in teaching, may be found useful for those responsible for managing / directing RE from a policy or regulatory perspective. As for wider potential benefits, RE practitioners, as well as teachers in other disciplines, may be afforded new ways of

including music in their teaching: by recognising in a scientific fashion and integrating into their practice the cognitive and the emotional power of music for RE. It is also expected that, as partners in the shared work of RE, the researcher, students, teachers, and those who are responsible for RE policies, may also gain important benefits from the research.

At first glance, RE and values education might be seen as the confines of this research. While rooted in a specific subject and domain, however, it is expected that this research will contribute to the wider field of humanities education beyond the subject limits of the study. For other educational disciplines, potential research outcomes may offer new ways of including music in teaching and by considering more systematically the knowledge-based and the emotion-based practices of music for attaining a broad spectrum of educational outcomes (Immordino-Yang and Damasio, 2007).

The researcher aims to contribute to the field from three distinct perspectives. On the practical level of educational research, the study, first, implies that using music in the RE context has benefits for intended educational outcomes. In the theoretical level of music psychology, the researcher argues that studying Turkish *makam* music for emotional response is relevant for cross-cultural music-emotion research domain. Third, this research defends the view that there is one more way to study music in the Islamic context –which is using music to enhance RE for the benefit of all students.

5. Structure

This book consists of 7 chapters, including this introduction. The current chapter (1) provides guidance for a structured reading of the material here presented.

Chapter 2, The Conceptual Framework, identifies the key terms of the book and, therefore, presents the boundaries for the study. The second chapter clarifies the meaning of concepts such as emotion, music in the Islamic context –including the concept of *makam*, and values

education for the present research. In other words, attention is drawn to the interdisciplinarity of the research. This chapter indicates how psychology, (Islamic) religious studies, and education have affected the approaches adopted in this research. It is strictly recommended to read this chapter first to avoid any conceptual ambiguity. For the definition of the concept of emotion, for example, while there is no consensus in the field among 'emotion experts', it is necessary to explain in which context the current research applies its key concepts.

Next, in Chapter 3, Literature Review, what is explored in the first-two broad sections is the emerging concepts in the expanding music-emotion research domain. These sections are devoted to evaluating both Western and Turkish literature on the music-emotion research field. This is not an attempt to reconcile these two worlds. Since the current research employs 'Western' techniques to measure emotional responses, and 'Turkish' stimuli to induce emotions, this chapter highlights the benefits and effects of previous such studies as well as the important gap to be filled. The third section of Chapter 3 also critically evaluates prevailing views on the role of music in meaning making. In this regard, it highlights a path music may take in the context of RE.

Chapter 4, Methodology, describes the process and the methodology adopted for conducting the research. It outlines the consideration of overall conceptualisation; the research design, including the qualitative and the quantitative methods, and the role of the researcher; the ethical compliance covering issues such as the research location, data collection tools, gaining access for data collection, and the chronology of data collection; procedures and techniques for data analysis.

In Chapter 5, Emotional Response to Turkish Music: Quantitative Analysis with GEMS, listeners' emotional responses to Turkish *makam* music are examined and compared. This chapter analyses the quantitative data of emotional response to musical listening and underlines the congruence between the findings and the historical emotional attributions for makams. The chapter then defends the link between emotional response, historical claims, and value terms of current Turkish RE curricula.

Chapter 6, Qualitative Investigations: Experience of Religious Education Professionals, considers RE professionals' views of the field. The participants' experience dominates the chapter, in order to evaluate the current role of music in RE and its potential benefits; to identify relevant music; to describe the proper class/school, student, teacher, and teaching activity; to acknowledge potential negative outcomes; and to indicate possible future directions.

The 7th Chapter, Issues and Questions in Educational Practice and Concluding Analysis, combines the qualitative and quantitative findings of the research and evaluates implementation possibilities. This chapter brings together the successful intended emotion induction of students by Turkish *makam* music and the potential of music identified by RE professionals for knowledge communication possibilities. Furthermore, while the current situation on using music for RE purposes is not at a level commensurate with its importance, what is stressed here is the rich potential to employ music within RE more effectively with regard to the significance of such music for emotion stimulation and knowledge communication. As concluding remarks, this chapter addresses the relationship between the research questions and the ways they were answered. The conclusion also revisits several issues, including limitations of the research and suggestions for further research needed to improve the present understanding of the themes explored throughout the book.

Chapter II

The Conceptual Framework

This chapter provides and explains the key terms of the book, therefore, sets the framework of the research. It is radically important for this research to identify the key concepts and to share their meanings in the right way for both the participants in the research and the readership. This is crucial to root the research in what the researcher exactly would like to study (Evans, 2002; Wilson and Wilson, 1998). Hence, this chapter first pays attention to the concept of musical emotions. Then, from different views and philosophies, it discusses the place of music in Islamic understandings. Next, it evaluates the domain of Values Education in the context of Religious Education.

1. Knowledge vs Feeling: Perceived and Felt Emotions in Music

1.1. Introduction

One of the key terms for the current research is 'emotion'. While it is possible to examine the concept of emotion in different disciplines, in this research, the focus will be on the relationship between music and emotion that might be also called 'musical emotions' (Juslin and Sloboda, 2010b; Liljeström, et al., 2012). Although in the literature there is voluminous research on emotion, we remain far away from reaching a consensus on many points (Gabrielsson, 2001-02); the aim of the current section is therefore to present the perspective from which the

term will be used here, in order to clarify the framework of the present research, rather than to reconcile divergent ideas. This will reduce the confusion that surrounds the term emotion (Konecni et al., 2008; Scherer and Zentner, 2001). To avoid confusion, firstly I will explain the definition of the concept of emotion and its components stipulated for this study. Secondly, I shall highlight the difference between *perceived* and *felt* emotions in music so that the significance of that distinction for educational understandings will be pointed out.

1.2. Defining the Term: 'Musical Emotions'

In the literature, many studies use terms such 'emotion', 'mood', and 'feeling' to describe the same phenomenon, while the distinctions between these terms are not always stated clearly (Västfjäll, 2001-02). Before explaining their uses in this study, I will discuss some key differences between these concepts.

First, the concept of *mood* is highlighted to shed light on those affective states which have a lower intensity than emotions, have a longer duration than emotions, and do not possess a clear object (Juslin and Sloboda, 2010b, Västfjäll, 2001-02). Then, the concept of *feeling* indicates the subjective experience of moods or emotions. It might be treated as a component of emotions (Juslin and Sloboda, 2010b).

For emotion, many diverse kinds of research flourish in different specialist disciplines. The debate continues about the nature of emotions, their functions, their relations to affective dimensions, their processes of evocation, and their role in everyday life (Izard, 2007). However, since there is no agreement currently on even the definition of the term of emotion (Frijda, 2007), it must be recognised that the usage of the term by researchers can entail different processes and meanings (Izard, 2007). Almost 40 years ago, Kleinginna and Kleinginna (1981) identified 92 definitions of emotion in various sources, each definition based on a different set of criteria. Similarly, in a recent study (Izard, 2006), 39 international experts in emotion were asked to give a defini-

tion of emotion. However, there was no agreement in the definitions (Izard, 2007). This situation reveals the complexity of defining (and, in turn, to measuring) the concept of emotion. With these controversies in mind, I will explain the context in which I will use the term by conducting a focused analysis of emotion.

There are various ways to define emotions. According to the 'hydraulic theory' of the emotions, for instance, they are not cognitive. Subjects passively experience emotions and connect them to their causes and behavioural manifestations (Davies, 2010). By contrast, in the 'cognitive theory' model (Solomon, 2008), emotions are regarded as having a phenomenological profile, in which all elements are necessary and none of them is in isolation sufficient for emotions to occur. Moreover, Robinson (2005) has also defended the theory originally developed by William James (1884), according to which what makes an emotion *emotional* is the presence of characteristic bodily changes. These kinds of attempts give an insight into the field or thinker from which the definition is proposed. To put it in a different way, according to Koelsch, 'Emotions are understood to be the result of the integrated activity of affect systems (affect-generating brain systems such as the brainstem, diencephalon, hippocampus, and orbitofrontal cortex)' (Koelsch, 2014: 171; Koelsch et al., 2010). Koelsch's definition clearly stems from neurobiological interpretations. However, considering emotions as neural signals connecting instinctual and conceptual brain regions (Perlovsky, 2010) makes little sense for the present research. Given that the focus of this research is on the *musical emotions*, the distinction between every-day life emotion (or any other type of emotion) and *musically perceived or induced emotions* (Zentner et al., 2008) must be maintained throughout this study.

This enquiry approaches the concept of the emotion as it is presented in the 'component process model' outlined by Scherer (2004) and that might be regarded as transferring previous conceptualisations of emotion into musical emotions. In this model, *cognitive evaluation processes* and *behaviour preparation* ('action readiness – tendencies')

launch the emotional event, consisting of three major components. These are *physiological arousal*, *motor expression*, and *subjective feeling* (Egermann et al., 2011; Niedenthal, et al., 2006). Physiological arousal, motor expression, and subjective feeling have been recognised as emotion components for centuries, while behaviour preparation and concomitant cognitive processes are relatively new in the list (Scherer, 2004). In addition, it must be highlighted that, in relation to brief, intense, and rapidly changing responses, there is a 'synchronization' (Juslin and Scherer, 2005: 70–1) or 'coherence' (Ekman, 1992) between these emotion components (Sloboda and Juslin, 2010).

In emotion definitions of this kind, physiological changes in the experiencing subject including heart and pulse rate, blood pressure, skin conductance, muscular tension, and respiration (Robinson and Hatten, 2012); temperature sensations, cardiovascular accelerations and decelerations, and trembling (Scherer, 2004) are also regarded as components of emotion (Hodges, 2010; Frijda, 1986). Facial and vocal motor expressions, gesture, and posture (Scherer, 2004; Robinson and Hatten, 2012) are also accepted as motor components of emotion (Ekman, 1992), with respect to its communicative potential for corresponding behaviour intentions (Frijda, 1986). Behaviour preparation (or action tendencies/readiness) as a motivational function of emotional response (Västfjäll, 2010; Frijda, 1986) is a way of dealing with the environmental contingency, by showing to the organism the alternative reactions (Scherer, 2004). The subjective component of emotion, then, generally referred to as *feeling* (Zentner and Eerola, 2010), indicates a particular individual's irreducible experience of emotion (Scherer, 2004). Self-report measurement instruments and tools substantially and habitually rely on this component of emotion (Zentner and Eerola, 2010: 189). Last, but not least, the cognitive processes are part of emotion in this model (Kania, 2017), though the cognitive aspect is not homogenous in all forms of emotions (Davies, 2010). In this regard, it is said that the subjective evaluation of situations directs

emotional reactions (Scherer, 2004). Hence emotions are influential on 'perceptual and cognitive processes such as attention, thinking, memory, problem-solving, judgment, decision making' (Dalgleish and Power, 1999 in Scherer, 2004: 241). It is further argued that, while theoretically there is a distinction between feeling and knowing, emotions accompany the quest of knowledge (Yob, 1997). To sum up, according to component process model, 'emotions are not just appraisals or judgments, not just physiological changes, not just behaviour or action tendencies, and not just feelings of bodily change, but a process in which all of these aspects of emotion play a role' (Robinson and Hatten, 2012: 74). It is reasonable to concede that these sub-components can be used to measure emotional responses (Juslin and Sloboda, 2010b).

I will now discuss the difference between perceived and felt emotions associated with music.

1.3. Emotions in Music: Perceived vs Felt Emotions

Speaking in the realm of music and emotion, one of the prime distinctions is between *perception and induction* –the experience of emotions (Sloboda and Juslin, 2010). On the question of whether music 'expresses' emotion (that is also called 'perceived emotion') or not, there is an abundance of historical and contemporary research (Kania, 2017), and its impact is not underestimated here (Scherer, 2004)– though the related topic, of emotions induced or produced in listeners through music (that is also called 'felt emotion'), has been always more controversial. While, for many studies, the distinction is not considered, it is reasonable to argue that music-emotion studies have become equally divided between perceived and felt emotions over the past 30 years (Vuoskoski and Eerola, 2011). In those studies, suggesting no distinction between the expression and arousal of emotion through music, it is argued that the music, expressing emotion A, will be simply *evoking* emotion A in the listener (Robinson and Hatten, 2012). However, in many contemporary studies, actual listeners' judgments of the music they are hearing (e.g., this music is happy/expresses happiness) are

examined to describe the emotional characteristics of the heard music. In contrast, examining how music makes the listener feel is the second way to study musical emotions (Zentner and Eerola, 2010).

The distinction between perceived and felt emotions is not only conceptual, the emotional responses on these patterns are also empirically dissimilar (Zentner et al., 2008). Perceived emotion requires the listener's intellectual ability on expressed (or intended to be expressed) emotional character of the music itself. In that frame, music is an object of the listener's perception (Gabrielsson, 2001-02; Kreutz et al., 2008). Yet, for felt emotions, listeners introspectively experience their own psychophysiological changes as emotion. Music is something that *causes* emotional response (Gabrielsson, 2001-02; Kreutz et al., 2008). Further explanations of the relationship between perceived and felt emotions are extensively presented in Gabrielsson's ground-breaking study (2001-02).

According to Gabrielsson, there are 4 categories for perceived and felt emotions: (i) a positive relationship, (ii) a negative relationship, (iii) no systematic relationship, and (iv) no relationship. Additionally, there is an interaction between musical, personal, and situational factors that might affect emotional response and emotion perception. The positive relationship indicates that the listener's emotional response will be similar to the emotional expression in the music: therefore, listeners to 'happy music' are happy and so on. A negative relationship implies that positive emotion in the music evokes a negative response or *vice versa*. That might be linked to music for which the listener may idiosyncratically have associations with the opposite emotional quality. 'No systematic relation' occurs in two ways; (i) whatever emotion is perceived in the music, the listener stays neutral or remains with whatever emotion s/he already holds, and (ii) there might be no connection between perceived and felt emotions. 'No relationship' explains the cases of feeling an emotion, while it is not perceived in the music –because the emotional response/experience towards the music may not only have resulted from the music itself. Furthermore, it might be also affected by the 'listener features' (earlier experiences, expectations, attention, preferences,

attitudes, personality, present physical and psychological state, etc.) and the situational factors (environment, acoustics, time of day, being alone or accompanied, etc.) (Gabrielsson, 2001-02: 130-8).

There are also other contrasting theories of perception and feeling emotions in music. Kivy, for example, proposes the distinction of 'cognitivist' and 'emotivist' positions (1990). In the cognitivist position, a listener can perceive expressions of emotions *in the music*, without necessarily feeling that emotion subjectively (Hodges, 2010) because music can 'only' be expressive of emotions (Gabrielsson, 2001-02: 140). In the emotivist position, music induces emotions in listeners and they actually experience specific feelings (Hodges, 2010). That kind of explanation might derive from the understanding that 'emotions are less frequently felt in response to music than they are perceived as expressive properties of the music' (Zentner, et al., 2008). Nonetheless, 'cognitivist' observations are not shared by many researchers (Gabrielsson, 2001-2002) and do not inform the perspective of the present research.

The distinction between *emotion perception* and *emotion induction* should not be underestimated. Especially for verbal-report measurements of musical emotions, explaining the difference between perceived and felt emotions requires truly substantial methodological rigour (Zentner et al., 2008). Furthermore, the difference is also empirically echoed in the field. It is reported frequently that 'emotional responses and intellectual (objective, analytical) responses tend not to occur together, and that musically experienced listeners are more likely to focus on intellectual features, whereas less musically experienced listeners tend to focus on emotional properties' (Gabrielsson, 2001-02: 124). This might be the reason why emotional response tests are mostly accompanied by a questionnaire asking about prior musical training and listening habits. In the current research, perceived emotion is considered as '*knowledge-based emotion*' and felt emotion is considered as '*feeling-based emotion*'. This separation has fundamentally affected the current research and it will be revisited thoroughly in Chapter 5 and Chapter 6.

In the next section, I will discuss music in the Islamic context.

2. Between Prohibition and Permission: Music in Islamic Thought

2.1. Introduction

One can easily argue that music is forbidden in Islam, though it is very widespread throughout Muslim communities. Even if that case is worthy of discussion, this is just one side of the issue, namely a problem of *fiqh* (Islamic jurisprudence), the main aim of which is more generally to specify one's rights and responsibilities in terms of Islam (Siddiqui, 2012). However, the place of music in Islamic thought might be evaluated from different viewpoints within different philosophies: e.g. in el-Kindi, al-Farabi, and Ibn Sina; and practically within Sufism in Mawlawism. Under these terms of the research, I will first explain the debates on music among Muslims, concerning whether it is prohibited or permitted. Then different theoretical and practical accounts for music in Islamic culture, including the concept of *makam*, will be interpreted by reading certain key thinkers. Lastly, I will discuss what 'Turkish music' means for the current research, in order to expand the research opportunities for music within Islamic discourse. The purpose of this section is twofold: to provide a layout for the research and the grounds on which it is possible to study music in Islamic thought and for the next chapter, to apprehend how Muslims have arrived at concepts such as *makam* in music.

2.2. Halal or Haram?

It is taught, even in the secondary schools' textbooks of RE in Turkey (Nayir, et al., 2018: 114-118) that, in order to clarify what is forbidden or permitted, the first authority in Islam is the *Quran*. If the *Quran* does not tell the answer, the second source is the *Sunnah* (words and practices of Prophet Muhammed) (Siddiqui, 2012; Esposito, 2003). I will follow the same order, explaining the place of music in Islamic jurisprudence. Thus, it must be stated firstly that music is not directly mentioned in the *Quran* either in relation to permission or prohibition (Farmer, 1957; Uludağ, 2004: 35). However, it is often claimed that several verses in the *Quran* indicate negative meanings for music (The Quran,

Luqman, 31:6; an-Najm, 53:59-61; ash-Shu'ara', 26:224; al-'Anfal, 8:35; al-'Isra', 17:64, 81; al-Furqan, 25:72; al-Qasas, 28:55; az-Zumar, 39:23; an-Nazi'at, 79:40-41). These verses have been interpreted as evidence for the banning of music. Similar unclear readings can be found towards the *Sunnah*. While there is no direct indication in the *hadith literature* (the works on *Sunnah*) regarding the permission or prohibition of music, many have tried to find evidence in the *hadith literature* for their own theory of music (Akdoğan, 1999b).

Muslim scholars have broadly discussed the status of music and produced an expansive literature (Faruqi, 1985; Otterbeck and Ackfeldt, 2012). Some argue that the great majority of early Muslim thinkers united in seeing music unfavourably, even if it is not quite forbidden. Others argue that many classical Muslim scholars, including friends of Prophet Muhammed, had affirmative attitudes to music and some of them actively listened to music (Alpaydın, 2006; Faruqi, 1985). Figures such as al-Ghazzālī (d.1111) and Ibn Hazm (d.1064) mainly defended music (Nasr, 1976), but many important scholars in the fields of fiqh, tafsir (exegesis of Quran), and Hadith were against it (Çağıl, 2013). Likewise, across the literature, there are many contradictory evaluations across different Muslim denominations, as well as sometimes also within denominations (Alpaydın, 2006).

Why there are many different perspectives on music in Islamic thought might be explained as follows:

1. In the primary resources of Islam (the Quran and the Sunnah), there is no clear teaching on the status of music (Çağıl, 2013).
2. Music is evaluated by projecting the view of those who might be regarded as important persons of faith, such as a friend of the Prophet or a leader of a religious group (Akdoğan, 1999b).
3. In these instances, personal inclinations might be seen by others as a religious rule. In other words, a leader of a religious sect may have an interest in music and encourage music, whereas some might ban music because of personal dispositions (Akdoğan, 1999b).

4. There may be different nuances in relation to the prohibition or permitting of music: such as the type of music, the situation of singer, player, and listeners, the character of lyrics, the listening place, and the time of performance (Akdoğan, 1999b). There is of course no guarantee of 'qualified' readers who will always understand these distinctions (Table-1).
5. Although the distinction between religious and non-religious music is significant in discussion of the legitimization of music in Islam, many stances do not observe such a distinction (Alpaydın, 2006). As a kind of 'religious music', reading the Quran, performing the adhan (the call to prayer), invocations after worship, and Sufi music have received relatively more benign endorsement (Çağıl, 2013). Yet, non-religious music is normally evaluated in terms of its purposes, its character, and its consequences (Alpaydın, 2006).

Table 1: Attributions to Music in the Islamic Context

Kind	Type	Example	Status
Non-Music	Qur'anic chant	Qira'ah	Legitimate (Halal)
	Call to prayer	Adhan	
	Pilgrimage chants	Talbiyya, Takbirat	
	Eulogy chants	Madih, Na't, Tahmid, etc.	
	Chanted poetry with noble themes	Shi'r	
	Family & Celebration music	Wedding Songs, Lullabies, etc	
	Occupational music	Caravan chants, work songs, Shepherd's tunes, etc.	
	Military band music	Tabl khanah	
INVISIBLE BARRIER			
Music	Vocal & instrumental improvisation	Taqsim, Layali, Qasidah, Avaz, etc.	Controversial (Halal, Mubah, Makruh, Haram)
	Serious metred songs	Muwashsha, Batayhi, Dawr, Tasnif, etc.	
	Music related to pre-Islamic or non-Islamic origins		
OPAQUE BARRIER			
	Sensuous Music associated with unacceptable contexts		Illegitimate (Haram)

Overall, music is not entirely rejected in Islam, but it has several restrictions in practice. As a general principle, everything is *halal* (permitted) in Islam, unless it is clearly stated as *haram* (forbidden) in the *Quran* or the *Sunnah* (Siddiqui, 2012; Esposito, 2003). Bearing in mind the aforementioned viewpoints for and against music, it can be seen that music is not unconditionally prohibited, but tends to be permitted under certain circumstances. Music is evaluated by Muslim scholars under several stipulations –such as whether it is required or not and what are its purposes and its effects. Therefore, music is permitted on the condition that it is not being used against the fundamentals of faith, the principles of worship, and the moral order of Islam. In this regard, music need not become a question either of committing a sin or infringing someone's rights (Alpaydın, 2006; Uludağ, 2004). Thus, specific musical instruments and types of music are not prohibited, but the misuse of music, in such a way that it stimulates religiously prohibited acts or states of mind, where Islamic rules are transgressed, is not allowed (Uludağ, 2004: 127; Ok and Erdal, 2014; al-Ghazzālī, 1910; al-Qaradawi, 198-).

2.3. Islamic Philosophy

Though the misrepresentation of the 'ban' on music in Islam is often repeated by contemporary Muslims and orientalists (Nasr, 1976), the pendulum of discussion swinging from *halal* to *haram* is often itself a kind of barrier that prevents us from seeing the whole complex picture. The religious issues from the Sharī'ite point of view are, of course, important for the life of believers. However, these views and practices are not necessarily synonymous with religious doctrine in Islam but comprise only one of its most important and indispensable elements (Nasr, 1976). Yet, Sharia discussion often does not help us to understand how (a) many great Islamic philosophers, mathematicians, and physicians were well grounded in music –like al-Kindi, al-Fârâbî, Ibn Sîna, *Ikhwân al-Safâ*, and Urmawî; (b) how it was possible for Sufi masters, such a Jalâl al-Dîn Rûmî, the founder of the Mawlawî order, to

take songs and convert them into vehicles for the expression of religious concepts, and (c) music was used for health and wellbeing purposes. In the following pages, I will discuss these points.

The first Muslim philosopher Yakub b. Ishak al-Kindi (d.874) was the first who wrote on the theory of music in Islamic philosophy (Özcan and Çetinkaya, 2006; Turabi, 2005). With his 10 epistles on music, 4 of them known, al-Kindi is recognised as the founder of the scientific school of Arabic musical culture (Özcan and Çetinkaya, 2006). Farmer states that al-Kindi generally rejoiced in the translated books of Greek philosophers (Farmer, 1932: 562; 1930: 29; Turabi, 1996). He had created his own musical notation (Özcan and Çetinkaya, 2006), and contemplated music alongside logic, philosophy, mathematics, geometry, and astronomy (Turabi, 1996). In this regard, for him, music was not only a subject of mathematical consideration, but also was of great psychological and physiological interest (Farmer, 1925-26: 97). As he stressed, the relation between music and psychology underpinned its use for medical purposes (Turabi, 2005).

If al-Kindi is the first in the chain, then the second is al-Farabi (d.950), ‘probably the greatest writer on the theory of music during the Middle Ages’ (Farmer, 1932: 562). Even though music is today considered as an art, it remained in the list of sciences (among mathematics, geometry, and astronomy) for al-Farabi in *İhsa el-Ulûm* (Dyer, 2007; Farmer, 1932; Çetinkaya, 2014). Hence, he is seen as bridging the understanding of music between Greek philosophy and Islamic theology (Turabi, 2006). Al-Farabi read the music theory of the Greek theorists in Arabic translations (Farmer, 1930: 330; Tura, 2014), but did not stop there, exceeding them by covering their omissions on e.g., the essence of sound and the instruments in *Kitab al-Musiki al-Kabir* [The Book of Great Music] (Özcan and Çetinkaya, 2006). While following the Aristotelian philosophy (Randel, 1976), al-Farabi seems to be closer to Pythagoras, in applying mathematics to music (Çetinkaya, 2014; Nasr, 1964: 26). He uses ‘numbers’ to explain his thoughts on music, though there is no place in his theory for the Pythagorean views of the relation between musical

sounds and the planets (the 'Music of the Spheres') (Randel, 1976; Turabi, 2006). Al-Farabi was not only a good theorist of music, but also a successful practitioner, playing instruments to the extent that he was able to affect the listeners in ways that induced deep feelings (Farmer, 1932; Bardakçı, 1986: 118; Akpınar, 2001). In fact, his music theory is built on the premise that 'the practice comes first, then the theory' (Turabi, 2006; Özcan and Çetinkaya, 2006). The influence of al-Farabi's music theory is quite clear in Ibn Sina and Abdulkadir-i Meragi (Özcan and Çetinkaya, 2006) as well as in later Western music thought (Farmer, 1932).

In the same way as al-Kindi and al-Farabi, Ibn Sina (d.1037) also considered music as a branch of the mathematical sciences (Granot and Shair, 2019; McGinnis, 2010; Shehadi, 1995: 68; Turabi, 2009). While he wrote no books devoted entirely music, his works *Kitab ash-Shifā* [The book of health], *Kitab al-Najat* [the Salvation], and *Dāneshnāme-yi 'Alā'ī* [The Book of Sciences], have specially assigned sections for music (Farmer, 1930; Özcan and Çetinkaya, 2006; Turabi, 2009). He acknowledges, for his music theory, the contribution of al-Kindi, al-Farabi, and Ikhwān al-Safā (Turabi, 2009). He rejects the idea of Muslim Pythagoreans on the origin of music, which sought to explain the relation between musical sounds and planets (Granot and Shair, 2019). On the contrary, he prefers a naturalistic explanation for the origin of the music (Özcan and Çetinkaya, 2006). For him, planets may produce music with their movements, however, that may only coincidentally have similarities with humankind's music (Turabi, 2009). In practice, he applies music as a psychologist. His words, '*Inter omnia exercitia sanitatis cantare melius est*' (Singing is the best exercise that protects health) is quite famous for this respect (Shehadi, 1995: 75; Turabi, 2004). By saying 'If a melody has a resemblance to each other in its character, then the soul [of the listener] applies it to what it belongs to and that character', he, as a psychologist, draws attention to the healing effect of music (Turabi, 2009). Therefore, his contribution is vital to the view that music retains key aspects of emotional communication (Granot and Shair, 2019: 598).

After Ibn Sina, the 11th and 12th centuries are quiescent for musical thought, until an extraordinary musicologist, Safi al-Din (Abd al-Mu'min) al-Urmawi (d.1294) came to prominence in the 13th century (Van Gelder, 2012; Akdoğan, 2005). Rather than focusing on the musical theory built by al-Kindi, al-Farabi, and Ibn Sina, al-Urmawi stressed the contemporary 'living' music (Uygun, 2008). His music theory was regarded as very important between 14th and 16th centuries. His two books devoted to music theory (*Kitab al-Advar and er-Risalah al-Sharafiyah*) (Urmawi, 1984; Wright, 1995; Van Gelder, 2012) were translated and reviewed many times and became the main resource of music theory for later Muslim thinkers, including Abd al-Qādir al-Marāghī (d.1435) (Wright, 1994) and Fathallah al-Shirwani (d.1468) (Shirwani, 1986; Wright, 1995; Uygun, 2008). There are, at least, over 20 studies examining these two books in this period (Arslan, 2004; Uygun, 1996; Can, 2001). While he had about 130 compositions in his time (Uygun, 2008), only one of them is known today. This composition is considered as the oldest written example of classical Turkish music (Özcan, 2001: 11 in Karabaşoğlu, 2010).

So far in this chapter, I have critically evaluated the historic discussion on the permissibility of music in the Islamic context. Prominent examples of Muslim thinkers have been highlighted, with al-Kindi, al-Farabi and Avicenna offering Islamic sympathetic theoretical perspectives in music theory. After that, Urmawi joins this list to emphasise the theory into practice. What I am doing here is stressing that music was not only a matter of discussion for the religious life of believers throughout Islamic history, but it also has been under debate from a variety of other perspectives. For example, philosophy, mathematics, physics, and aesthetic thought have served as grounds on which to contemplate music in Islamic thought.

According to a recent conceptualisation, Islamic thought might be categorised as belonging to four historical periods: i. *Classic* (VII.-XI. centuries), ii. *Regeneration* (XII.-XVI. centuries), iii. *Evaluation* (XVII.-

XVIII. centuries), and iv. *Quest* (XIX.-XX. centuries) (Üçer, 2017). Within this framework, music is a domain that had a place (among others) during the Classic period of Islamic thought. The lifespans of al-Kindi (d.874), al-Farabi (d.950), Ibn Sina (d.1037), al-Ghazzālī (d.1111), and Safiyyuddin Abdu'l-Mu'min al-Urmawi (d.1294) also indicate that there is continuity from medieval thinking about music. Briefly, discussing music is neither limited to a contemporary dispute nor an ancient controversy. However, its religious roots have been recently over-emphasised at the expense of other perspectives.

Following these broader theoretical perspectives, I will now look at how music was a matter of practical interpretation in Sufism (especially Mawlawism) and in Islamic health practices. Next, the concept of *makam* will be explained. Then, the last question of the section will be asked: what does *Turkish music* exactly mean in this educational investigation?

2.4. Music in Practice: Religious Purposes, and Health and Wellbeing

The highest interest of music in the Muslim world belongs to the movement called Sufism (*tasavvuf*) (Schimmel, 2011; Çetinkaya, 1991). With the idea that it is a kind of nutrition for those having wisdom (*hikmah*) and it contributes to personal excellence, music has been empowered in Islamic thought through Sufism (Turabi, 2005). Sufis have used the word *sama'* instead of *ghunā* (music) because they wished to be considered apart from those who use music only for pleasure and ego (Lewisohn, 1997; Çetinkaya, 2011: 83). Under the name of *sama'*, music is embraced by almost all Sufi paths, for its possession of a religious character that brings humankind closer to Allah (Çetinkaya, 2011). In Turkish-Islamic history, for instance, many Sufi orders such as Bektashi, Kadiri, Jilwati, and Gulshani have contributed to Turkish religious music (Akdoğan, 2005), but it is obvious that Mawlawism is the most appreciated Sufi sect with respect to music (Schimmel, 2011). In this regard, music is sometimes a tool of inspiration for various Sufi masters (Nasr, 1976). Having a divine, celestial, angelic, sacred, and lofty root,

'Sama' means in Sufism one's to find Allah in the soul under the influence of music, and, therefore, feeling the excitement of the divine presence (Gribetz, 1991; Çetinkaya, 2011). (The role of musical emotions in this process will be revisited in Chapter 3). The significance and the legitimation of music in Sufism might be read as of the inner and spiritual aspect of Islam, rather than merely juridical and theological (Nasr, 1976: 3). In a parallel perspective, another expression of this form of relationship might be in health and wellbeing practices involving music.

Even though music therapy has a longer history for Turks as well as for other nations (Güvenç, 1985), I will only focus here upon Islamic understandings in Turkish culture. Rather than the 'everyday' usage of music, its specialist institutional applications should be contemplated. As emotional evocation and mood alteration will be discussed in Chapter 3.1, I will here only provide the historical background to this topic. In Islamic culture, the theory of the therapeutic nature of music was formulated by al-Kindi, al-Razi (d.932), Farabi, and Ibn Sina, and then turned into practice in many special hospitals throughout the Seljuk and Ottoman eras (Dişli, 2015; Erdal and Erbaş, 2013; Ak, 1997). In this history, there were many 'Daruşşifa's (one of the names given to medical and educational establishments) in that era, such as 'Kayseri Gevher Nesibe' (Medical madrasah- 1206), 'Divriği' (Mosque and Hospital- 1228), Amasya (Daruşşifa- 1309), Fatih (Daruşşifa- 1470), Edirne (Daruşşifa- 1488), Süleymaniye (Medical Madrasah and Hospital- 1556) where music therapy applied (Dişli, 2015; Güvenç, 1985). These hospitals were especially employed for mental illnesses, for patients requiring special care (Dişli, 2015; Baltacı, 2005: 69 in Erdal and Erbaş, 2013). In the hospitals, the service was carried out by the staff including doctors, 'kehhal' (ophthalmologists), surgeons, pharmacists, service groups, nurses, 'imams', 'hanende' (singers) and 'sazende' (musicians) (Erdal and Erbaş, 2013; Kalender, 1989). There are about 300 musical instruments from various Turkic provinces that have been confirmed for medical use in those settings (Güvenç, 2006).

2.5. The Concept of Makam in Turkish Music

After introducing the significant issues related to music in Islamic thought, I now present one of the key concepts of the research, namely *makam*, from the perspective of musicology in the Turkish-Islamic thought. As explained in Chapter 3, there is a strong connection between emotion induction and the concept of *makam*. As it is such an unfamiliar concept for the Western readers, this is a relatively broad section. Accordingly, I begin by giving the literal explanations for the concept of *makam*, then discuss how this term can be translated satisfactorily. After that, I explain what *makam* means in musical terms. Last, I elaborate on the historical perspectives of the concept of *makam*. This section indicates the voluminous effort of the perspective of musicology in the Turkish-Islamic thought.

2.5.1. Literal Definitions

Makam in musical nomenclature is the term which states the basic character of Turkish and Arabic music (Özkan, 2003) as if it is the heart of the complex and sophisticated body of that music literature (Albright, 1978). *Makam*, as a word, means a place to be standing or sitting, situation, station, position, rank, social status, and reputation. However, as a term, it is originally derived from the Arabic verb قام (*kâme*) which means standing on one's feet, attentiveness, being alert, giving strength to (Turabi, 2005; Akdoğan, 1999a; Özkan, 2003). As having the same origin, in contemporary Turkish, there are many valid words such as *kavim* (race), *kayyûm* (trustee), *kıyâm* (rising up), *kıyâmet* (resurrection), *ikâme* (substitution), *ikâmet* (residing), *istikâmet* (direction), *takvîm* (calender), and *mukâvemet* (resistance) (Yahya Kaçar, 2008).

Makam has been used as a term in Turkish at least since the 15th century and observed in the first Turkish music theory books of the Ottoman era (Yahya Kaçar, 2008; Can, 1993: 1). It is thought that *makam*, as a musical concept, was first used by Abd al-Qâdir al-Marâghî in the 15th century for

music theory, while, before him, many musicians had written works on the concept of *makam* (Yahya Kaçar, 2008). However, in the Middle Ages, the concept of makam had been being expressed as ‘*edvar*’ or ‘*şed*’ (Turabi, 2005; Özkan, 2003). Before proceeding to explain makam in musical terms, I will now discuss how the concept of *makam* can be translated into English.

2.5.2. Possible Translations or Non-Translatableness

The comparable pioneer presentation for the traditional Turkish music concepts in a Western language might be ‘*La Musique turque*’ (Yekta, 1922). The publication of Karl Signell’s work, *Makam: Modal Practice in Turkish Art Music* (1977), is the first attempt in English to examine this concept, yet offers no translation of *makam*. A relatively new music theory book, *Makam: Turkish Music Guide* (Aydemir, 2010), written in Turkish and translated into English, does also not suggest a translation for *makam*. However, similar kind of modal systems are called ‘*raga*’ in Indian music (Özkan, 2003), ‘*dastgah*’ in Persian music (Nakhjavani, 2010), and ‘*mode*’ or ‘*tonalite*’ in Western music (Öztuna, 1969: 53-4 in Akdoğan, 1999a). Similarly, according to Salvucci, Öztuna (1969) attributes both modal and tonal qualities to *makam*, stating that ‘*tonality*’ is largely used as equivalent to *makam* (in Salvucci, 2016). Moreover, according to Altun and Egermann (2020: 4), *makam* is usually compared with the concept of a scale. Signell argues, however, that ‘the closest counterpart in Western music would be the medieval mode’ (Signell, 1977: 16).

Even though ‘*mode*’ and ‘*tonalite*’ have similarities with ‘*makam*’, they do not express the same nuances of meaning inherent in *makam* (Özkan, 2003). Thus, the present research applies an approach similar to that adopted by Salvucci (2016) who states that ‘although *çeşni* is referred to as the direct English translation ‘*flavor*’, I shall refer to this term in its original Turkish. Likewise, the term for a makam’s finalis, *karar* (alternatively *durak*), will be used. It is customary to refer to the pitches in the *makam* system as *perde* (literally ‘*curtain*’’) (Salvucci, 2016: 46). Therefore, thinking methodologically, I will simply use *makam* (neither with a trans-

lation nor as *maqam*), in order not to refer to something *makam* does not express (for a similar approach, Ergür and Doğrusöz, 2015).

2.5.3. Musical Definitions

There are two general ways of defining the concept of *makam* with musical terms. The first way is the literal definition, and the second is to explain the components of *makam*. Principally, just as it is in its definition as a word, *makam* in a musical composition stresses the *perdes* on which being pursued more than others (Turabi, 2005). For Altun and Egermann (2020: 4), a *makam* is a melodic texture consisting of progressions, directionality, tonal and temporary centres and cadences. In this regard, *makam* is basically defined as a modal-tonal complex (Salvucci, 2016) or it is a term used to encode the internal frames and melodic characteristics in Turkish music (Aker, 2014). Signell states that ‘the makam system is a set of compositional rules by which the melodic component of a piece of music is realized’ (1977: 16). For Stubbs, *makam* is ‘a practical melody theory, grouping melodies by families or categories that are distinguished by the use of careful microtonal inflections of certain tones according to custom, together with idealized notions of melodic contour’ (1994: 1). Because the many definitions of the concept of *makam* make it difficult to reach a consensus (Turabi, 2005; Özkan, 2003; Yahya Kaçar, 2008); I will try to explain the key components of this concept.

Signel (1977) has identified five fundamental characteristics of the *makam* system: intervallic structure, tessitura, melodic progression, stereotyped phrases, and modulation. Not all of them are distinctive, but at least one of them should have a distinguishing feature. Each *makam* has a distinctive *seyir* [progression] (Salvucci, 2016: 47, from where the square-bracketed translations of this section were also cited). The melodic path of makams might be ascending [*çıkıcı*], descending [*inici*], or descending – ascending [*inici-çıkıcı*]. Each *makam* has its own pitch level in relation to the other makams. Each *makam* has associated commonly recognised characteristic motives and phrase such as the main tonal centers, including the finalis, dominant, entry pitch, temporary stops (Salvucci, 2016:

47; Touma, 1978; Albright, 1978). These features are attributed to the set of rules for composition and improvisation (Bozkurt, 2008).

In a similar way, Özkan (2003) has firstly criticized the *makam* definitions of Hüseyin Sadeddin Arel, Mehmet Suphi Ezgi, and Rauf Yekta Bey as lacking in clarity. He has listed the terms that are necessary for the full definition of *makam* as: *Dörtlü* and *beşliler* [Tetrachord/Pentachord], *dizi* [scale], *seyir* [melodic path of makam: ascending/descending], *güçlü* [dominant], *durak/karar* [makam's finalis/final pitch/tonic tone]. In the same vein, Reinhard et al. (2011) define the concept as:

The term makam ... might be usefully described as composition rules. Today makams consist of scales comprising defined tetrachords (dörtlü) and pentachords (beşli) governed by explicit rules concerning predominant melodic direction (seyir: 'path'). The seyir indicates prescribed modulations and the general shape of phrases, understood as either predominantly upwards (inici), predominantly downwards (çıkıcı) or a combination of both (inici-çıkıcı). There are terms for the 'opening note' (giriş), 'tonic note' (karar), a significant tonal centre other than the tonic (güçlü: 'dominant').

2.5.4. *Makam: An Historical Perspective*

It is clear that the concept of *makam* has been evaluated from different perspectives throughout history. It has also been subject to changes of nomenclature. As mentioned above, before al-Marāghī in 15th century, *makam* (as a term) was not used in music theory, whilst *adwar* (or 'edvar') and *shadd* (or 'şed') are used to express that concept. Urmawi (13th century), for example, had '*Kitab al-Adwar*' in Arabic (Wright, 1995), while Hızır b. Abdullah (15th century) and Dimitrie Cantemir (17th century) had '*Kitab al-Edvar*' in Turkish (O'Connell, 2005; Wright, 1992). In that time, a *makam* was being explained on a *devr* [circle] in those books. *Adwar/Edvar* is the plural form of *devr*. Then, '*Kitab al-Adwar*' literally means 'The Book of Makams'.

In Urmawi, there are 12 makams as 1. Uşşak, 2. Nevâ, 3. Bûselik, 4. Râst, 5. Irâk, 6. Isfahân, 7. Zirefkend, 8. Büzürk, 9. Zengüle, 10.

Râhevî (Rehâvî), 11. Hüseyinî, and 12. Hicazî (Wright, 1995; Uygun, 1996; Levendoğlu Yılmaz, 2002). These makams are also called *Edvâr-ı Meşhure* (famous makams) (Can, 2001). Similar to the methodological decision on using Turkish original names for terms, mentioned at the beginning of this section, I used the *makam* names in Turkish such as Uşşak, Nevâ, and Hicaz. Contrarily, Nakhjavani (2010), for instance, calls these makams as Ushagh, Nava, and Hejaz. Furthermore, Ibn Sina indicates the *makam* names regarding their efficiency in relation to a specific time slot of a day (Turabi, 2002). Before him, in the *Kitab al-Musiki al-Kabir*, the makams are theoretically explained and classified by al-Farabi (Turabi, 2006). However, there is no special name for makams in al-Kindi. He shows 8 makams and their counterparts in the Greek music (Turabi, 1996: 79-84).

It must be remembered that, while all of them eventually called as *makam* in time, there was a classification for different terms such as *makam*, *âvâze*, *şube*, and *terkîb* (Küçükgökçe, 2010; Özkan, 2003; Yahya Kaçar, 2008; Akdoğan, 1999a). In different theories, these patterns have differences in number, classification, formation, and characteristics (Küçükgökçe, 2010). The list below showing the numbers on the classification of *makam*, *âvâze*, *şube*, and *terkîb* in different eras may give an insight into how these concepts have been evaluated (Oransay, 1996: 91 in Yahya Kaçar, 2008):

Urmavî (13 th century)	12 Makam	6 Âvâze	----	----
Fâtih Anonimi (15 th century)	12 Makam	6 Âvâze	24 Şube	----
Yûsûf b. Nizameddîn (15 th century)	12 Makam	7 Âvâze	4 Şube	50 Terkîb
Hızır b. Abdullah (15 th century)	12 Makam	6 Âvâze	4 Şube	194 Terkîb
Mehmet Çelebi- Lâdikli (15 th century)	12 Makam	7 Âvâze	4 Şube	30 Terkîb
Dimitrie Cantemir (17 th century)	27 Makam	----	----	22 Terkîb
Nâyî Osman Dede (18 th century)	12 Makam	----	24 Şube	48 Terkîb
Abdulbâkî Nâsır Dede (18 th century)	14 Makam	----	----	136 Terkîb
Haşim Bey- Edvâr (19 th century)	94 Makam	----	----	----

Beyond that list, it is possible to observe different numbers. According to Levendoğlu Yılmaz, Hızır b. Abdullah presents 201 terkibs, the highest number for terkibs, whereas, for Kazim Uz, for instance, there

are 207 makams without a classification (2002: 46). Throughout Turkish music history, there were about 550 makams, 100 of which were roughly in usage and popular in their time (Akdoğan, 1999a; Kalender, 1987). Despite the fact that the number of the makams is estimated up to 600-650, while having the recorded examples for only half of them (Özkan, 2003; Yahya Kaçar, 2008); Levendoğlu Yılmaz (2002: 221) provides 650 *makam* names which are used since Urmawi. In her ground-breaking work, Levendoğlu Yılmaz studies makams from the 13th century starting with Urmawi up to date on 31 manuscripts and books in Turkish, Arabic, and Persian resources (2002). This study includes *makam* descriptions, classifications, and compositions with notation.

According to Levendoğlu Yılmaz (2002: 221), there are at least 22 makams which have existed and been used since the 13th century. They are listed below (in alphabetical order):

Table 2: The Makams, continuous since the 13th Century

1. Bûselik	2. Büzürk	3. Gerdâniye	4. Hicâz
5. Hisâr	6. Humâyun	7. Hüseyinî	8. Irâk
9. Isfahân	10. Mâyê	11. Muhayyer	12. Nevâ
13. Nevrûz	14. Nikrîz	15. Nühüft	16. Râst
17. Rehâvî	18. Selmek	19. Şehnâz	20. Uşşâk
21. Zengüle	22. Zirefkend (Kûçek)		

Furthermore, Küçükgökçe (2010) argues that, in the 15th century, 284 makams were known, whereas it is supposed that 2117 compositions in 117 different makams were recorded for 17th century (Meriç, 2012). Similarly, another study (Yeprem, 2007) illustrates the changes in 48 makams in comparison to the earliest written examples in Dimitrie Cantemir (17th century). Currently, TRT Turkish Art Music Repertoire includes compositions in 257 distinct makams (Sarısaray, 2010: 103-109). These kinds of resources are invaluable not only to find the examples of a *makam* in a certain time, but also to observe how the popularity of any *makam*, or its historical roots have changed, since the 13th century. Eventually, it is argued that the reason why Turkish music is quite fertile

for different kinds of makams might be to facilitate the way by which people's emotions will be reflected with all their details (Özkan, 2003). I will use the term *makam* again in the literature review (Chapter 3.2), in connection with special emotional attributions. For this reason, the concept of *makam* serves a significant perspective for the present study.

2.6. Studying Music in a Broader Sense

Finally, I will end this section by discussing current educational research approaches to Turkish music and why this approach is also meaningful. First, 'Turkish' does not mean here merely either a nation or a language. While they have a profound influence on 'Turkish' music, it is not always helpful to ask whether the contributors to that music such as Farabi, Ibn Sina, and Urmawi were Turkish or not. If the multicultural and multi-ethnic cultural resources of the Ottoman heritage are taken into account (Salvucci, 2016), it will be easy to comprehend what kind of contributions are welcomed coming from e.g., Ali Ufki (1610–1675), a Polish convert to Islam (Ayangil, 2008; Kut, 1989; Signell, 1977), as well as Dimitrie Cantemir (1673-1723), a Moldavian musician (O'Connell, 2005; Wright, 1992; Yeprem, 2007).

Furthermore, on account of the fact that authors were writing their books in the language of their own environments, the source of 'Turkish' music might also be found in books in Arabic, Persian, Turkish, and Western languages. I therefore refrain from a nationalist declaration that 'Turkish music belongs to Turks'. Similarly, for this study Islam is understood not only as a religion but also as a culture and civilization. The Islamic tradition of culture and civilization is, of course, not independent from Islam as a religion, but it is also different. In this regard, it is not hard to see that the musical traditions of ancient civilizations became integrated into the Islamic culture (Nasr, 1976). That kind of differentiation allows me not to speak on behalf of 'God' (or of religion itself; theologians can do this) but of people and culture. On these grounds, I mostly prefer to use 'Islamic thought', rather than 'Islam' in this study.

After all, one of the propositions for the current research is to include the discussion of music in the [religious] educational agenda. With these various perspectives, the book adds one more lens to the study of music in Islamic thought; that is the perspective of education. In this section, (not by ignoring the religious interpretations of music in the Islamic thought but by embracing), I critically evaluated different perspectives of scientific disciplines that give a quite fruitful account to contemplate music. After this brief introduction on the ways in which music has been understood in Islamic thought, it will be easier to explain how such a complex concept like '*makam*' could be attainable for Muslim thinkers. The intention, in the current study, is to merge these layers of thought so that RE will benefit.

3. Values Education in Turkish Religious Education System

3.1. Introduction

The Republic of Turkey is a state which is constitutionally 'democratic', 'laic' (secular), and 'loyal to the nationalism of Atatürk' (Constitution of Turkey, 1982: 2). One of its oldest laws is the *Unification of Education Act 1924* (a year after the foundation of the state) which placed all educational institutions (state and private) under the control of the Ministry of National Education (MoNE or MEB). So, in contemporary Turkey, there is no school and course (including religious ones) out with the state's control.

RE in Turkey has three main agencies. First, the Council of Higher Education (CoHE) operates undergraduate, master, and research level RE at theology faculties for those who wish and have relevant qualifications. Next, the Presidency of Religious Affairs (PoRA) is responsible for the management of all the mosques and their staff in the country. It arranges religious courses (not as part of school education) like Quran, Islamic morality, and catechism in its premises (not in the schools) for those who wish to attend. School students can attend these kinds of courses out of school time, while their participation does not qualify for 'official' certificate, degree, or credit for school education. The last is RE taught by MoNE as a part of school education.

The Turkish education system adopts a so-called 4+4+4 system: This refers to three sets of 4-years of compulsory education: primary (aged 6-9), secondary (aged 10-13) and high school education (aged 14-17). RE operated by MoNE, again, should be examined in 3 different contexts. First is a kind of vocational RE delivered in Imam-Hatip schools at secondary and high school levels (Aşlamacı and Kaymakcan, 2017). Second is the optional RE courses at secondary and high school levels. These courses were listed as Quran, Life of Prophet Muhammed, and Basic Religious Knowledge: these are part of a list of around 20 optional courses. Each course has 2 classes in a week, been opened by request of the parents at the beginning of the year. Last and maybe the most controversial one is the compulsory RE courses. There is no RE course in the first three grades of primary schools; while from 4th grade of primary to 12th grade of high school, attending RE classes is compulsory for all ‘Muslim’ students, and optional for ‘others’. In a week, RE has 2 classes at primary and secondary levels, and 1 class at high schools. A class lasts 40 minutes in all schools.

General Structure of Turkish RE System						
Grade		Public and Private	Public			
-		Pre-School (for 3-5 years old)				
1	Compulsory	Primary		No Specific RE Course		
2						
3						
4						
5		Secondary		Secondary Imam Hatip School	2 hours p/w compulsory (Religious Culture and Moral Education) courses	Optional RE Courses: - Quran - Life of Prophet Muhammed - Basic Religious Knowledge
6						
7						
8						
9		Vocational & Technical High Schools		Imam Hatip High School	1 hour p/w compulsory (Religious Culture and Moral Education) course	
10						
11						
12						
		Higher Education (Undergraduate – Graduate - Research)				

Figure 1: General structure of Turkish RE system

For RE, in the context of ‘freedom of religion and conscience’, the *Constitution (1982, Article 24)* states that:

Religious and moral education and instruction shall be conducted under state supervision and control. Instruction in religious culture and morals shall be one of the compulsory lessons in the curricula of primary and secondary schools. Other religious education and instruction shall be subject to the individual’s own desire, and in the case of minors, to the request of their legal representatives.

Accordingly, RE is a compulsory curriculum subject, as enshrined in the *Constitution*. In the Turkish original, the subject is named by the Constitution as ‘din kültürü ve ahlâk’ which literally means ‘religious culture and morality /ethics’. The compulsory RE course in the Turkish education system is currently called as ‘Din Kültürü ve Ahlâk Bilgisi’. However, there is always confusion for translating the subject’s name into English, even in the publications of the Ministry. In its English publications, the Ministry calls the subject as ‘*religious culture and ethics course*’ for high schools (MEB, 2018d), while as ‘*education of religion and ethics*’ for primary and secondary levels (MEB, 2018c). In the present study, ‘religious culture and moral education’ has been used as of the translation of the compulsory RE course in the Turkish education system.

In accordance with the Constitution, RE conducted by CoHE and PoRA is not compulsory. In MoNE operated RE, the optional RE courses of secondary and high school levels are, as they are named, subject to parents’ demands. However, matters such as admissions and attendance to Imam-Hatip schools, and compulsory status of RE classes from 4th grade to 12th grade are still under debate (For further discussion, see Oğretici, in press; Hendek, 2019; Genç, 2018; and Aşlamacı and Kaymakcan, 2017).

For the compulsory RE classes, the curriculum is not only designed to teach religion from a perspective of faith, worship, study of the Quran (not to read in the original Arabic but for its principles), and the life and teaching of the Prophet Muhammed; but also to include morality and cultural interpretations. Although values are not directly stated as a learning

domain in the Secondary level RE curriculum, due to the nature of the subject they are always part of the RE curriculum (MEB, 2010a, 2010b).

3.2. Values Education in the Turkish Education System

There is a rising awareness of values education in Turkey as well as globally, relative to the last decades (Kaymakcan and Meydan, 2016). At the 18th National Education Council-2010, values education was among the main discussion topics. The final report states that, for values education, schools are responsible for its implementation: there is a need to improve both the knowledge and skills of the teachers and the range of available teaching materials (MEB, 2010c). Therefore, in the same year, MoNE demanded, in the 'first course' circular, that all schools make efforts to strengthen national, spiritual, social, moral, and cultural values (Kaymakcan and Meydan, 2011).

The compulsory RE course in Turkey is not the only school subject for which the discussion on values is highly pertinent. The Turkish (Language and Literature) programmes, for instance, consider values as assessable outputs of the education process as they include the teaching of national, spiritual, moral, cultural, and universal values, for primary and secondary levels (Kaymakcan and Meydan, 2016: 219). In addition, for the Social Science programmes, there is always a link to the teaching of values (Kaymakcan and Meydan, 2016: 218). Yet, the new Social Science curriculum directly mentioned values education in 2005 for the first time for Turkey (Öğretici, 2011). In this programme, there are about 20 values, such as aesthetic, justice, patriotism, respect, and responsibility etc., to be connected to the teaching subjects (Akbaş, 2008). Moreover, in the Science and Technology programme, there is a value list containing justice, honesty, responsibility, and self-confidence etc. (Akbaş, 2008). Similarly, in the Mathematics programme, the values and attitudes have been attached to affective characteristics and self-management competencies (Akbaş, 2008). Furthermore, Yükrük and Akarsu (2016) state that Music textbooks (for 5-8 grades) reflect

values such as love and patriotism 230 times within the lyrics in accordance with the current understandings of values education promoted by MoNE. But, many other values, like justice, humility, and doing favour, have never been stated in the music textbooks (Akarsu, 2015).

Arguably, school subjects such as Social Sciences (including Citizenship and Democracy Education) and Turkish (including Media Literacy) have a relatively more suitable context for values education. Although, other subjects like Physical Education, Visual Arts and Music have a potential for values education; the curriculum does not offer inspirational guidance to teachers they may need in practice for values education (Kaymakcan and Meydan, 2016: 220). Therefore, that potential remains only theoretical.

From another perspective, the above-mentioned connections between values and education are just related to the written and visible 'rules' in the curriculum, teaching materials, and teaching activities. However, the hidden curriculum, which highlights the educational experiences in contrast with the formal statements about curricula (Sambell and McDowell, 1998), possesses a crucial role for values education (Kaymakcan and Meydan, 2016: 221). According to Taylor (1996), school 'ethos' encompasses the nature of relationships within a school, the dominant forms of social interaction, the attitudes and expectations of teachers, the learning climate, the way that conflicts are resolved, the physical environment, links with parents and the local community, patterns of communication, the nature of pupil involvement in the school, discipline procedures, anti-bullying and anti-racist policies, management styles, the school's underlying philosophy and aims, and the system of caring. For Halstead and Taylor (2000), all of these have a rich potential to influence the developing values of students. Moreover, the 'hidden' curriculum sometimes may indicate a different direction than the 'written' curriculum does (Sarı, 2007). In this context, because just examining the curricula might not represent the whole picture, there is a need for a broader perspective.

After this brief introduction to values education in the Turkish education system, I will now highlight the link between RE and values education in order to ascertain what kind of improvements might be possible in the promotion of values education.

3.3. Values Education in Religious Education

There is no reason to think that values education is the subject of one single domain of knowledge. School ethos, various applications and activities in teaching practice, teachers' attitudes, and teaching materials, strategies, and methods all create possibilities for active values education. Yet, even though RE has a potential being a vehicle for values education owing to its purposes and its subject matter, this opportunity has been almost ignored for a long time in Turkey. With the RE curriculum developments of 2005 and 2006, 'values education' was manifestly highlighted for the first time in the history of RE in the Turkish education system (Kaymakcan and Meydan, 2011). These curricula were updated in 2010, but with the same words of the previous programmes regarding values education (MEB, 2010a; MEB, 2010b). In this context, in the 18th National Education Council (of Turkey), RE was recognised as having an undeniable role in values education (MEB, 2010c).

Both programmes have emphasised the close alignment of educational approaches and religious studies with values, in order to explain the purpose of the curriculum. In addition, for the high school level, there is a 'learning domain on values' for each year group in the curriculum (MEB, 2010b: 65). Furthermore, in both programmes, there is (i) a list of values students are expected to comprehend (Table 3) and (ii) suggestions on methods to be used by RE teachers in values education. Briefly, it might be said that these statements of 2005 and 2006 curricula (and as it is repeated in 2010) made manifest the relationship between religious education and values education, which is always accepted in practice (Kaymakcan, 2007).

The methods suggested in these programmes are compatible with inductive approaches such as value analysis, value clarification, and

moral development, rather than deductive approaches like inculcation (Superka and Johnson, 1975; Superka et al., 1976). At this point, however, an inconsistency emerges. While the inductive values education approaches seek to help the students to build up their values to reach general comprehensions, these programmes have a 'value list' to be taught. These values are attached to class subjects and activities in the curriculum. In addition, these lists are quite comprehensive, while some of these values are the same or similar in the lists (Table-3). There are over 60 values for primary and secondary level (MEB, 2010a), and over 30 values for high school level (MEB, 2010b).

Eventually, with the renewed curricula of 2018, the comprehensive value lists and suggestions on values education methods were renounced for all school levels. Instead, it is clearly stated that (MEB, 2018c: 5; MEB, 2018d: 3; MEB, 2018a: 3; MEB, 2018b: 3):

... our values have not been considered as a separate program or teaching area, unit and subject etc. in the Curricula. Contrarily, our values that are the ultimate goal and spirit of the whole education process have been included in each and every unit of Curricula.

Then, the curricula state just ten root values: *justice, friendship, honesty, self-control, perseverance, respect, love, responsibility, patriotism, and helpfulness*. The curricula suggest studying these values independently and in connection with their sub-values and other root values. Then, it is stated that education system is not such a structure that makes students get certain academic knowledge and behaviours. But rather, it works to assist all of its partners in the process of moral decision-making and acting. Therefore, the primal duty of the education system is to raise individuals with the root values, to affect their values, habits, and behaviours (MEB, 2018c; MEB, 2018d). Furthermore, one of the objectives of the RE curriculum is to make students to know and internalize ethical values (MEB, 2018c; MEB, 2018d).

Table 3: Value Terms of the RE Programmes

Root Values) (2018)	Secondary Level-Value Terms (2005-2017)	High School Level-Value Terms (2005-2017)
Helpfulness	Helpfulness; Sacrifice; Sharing; Generosity; Solidarity; Hospitality	Helpfulness; Sacrifice; Sharing; Generosity; Solidarity; Hospitality
Patriotism	Patriotism; Independence; Love of the nation; Awareness of democracy; Peace; Respect for the Turkish Flag and the National Anthem; Veteran; Martyrdom; Courage; Respect for Turkish elders; Consciousness of national unity	Independence; Patriotism
Self-control	Diligence; Hygiene; Chastity; Moderation; To give importance to being healthy; Frugality; Uprightness	Diligence; Uprightness; Hygiene; To give importance to being healthy; Moderation
Honesty	Sincerity; Honesty; Accuracy; Reliability	Being reliable; Accuracy; Honesty; Confidence; Sincerity
Justice	Justice; Forgiveness; Mercy	Being fair
Responsibility	Responsibility; Keeping the promise; Protect the trust; Goodwill; Scientific thought; Sensitivity to historical heritage	Responsibility; Keeping the promise; Protect the trust; Scientific thought
Respect	Respect; Shame; Aesthetic; Sensitivity to the natural environment; Having manners; Respect for places of worship; Kindness; Appreciation; Humility; Sensitivity	Respect; Sensitivity; Humility; Aesthetic sensitivity
Love	Love/Compassion; The love of nature; The love of truth; Tolerance; <i>Hakseverlik; Müriüvvet</i>	Love/Compassion; The love of truth; Tolerance; Soft-temperedness
Friendship	Friendship; Brotherhood; Fidelity; Giving importance to family institution and unity	Giving importance to family institution; Brotherhood
Perseverance	Being abstinent; Thankfulness (to God); Patience; Simplicity	Being abstinent; Patience

While the curricula do not clearly indicate what the ‘sub-values’ are, it was not a substantial curriculum change for RE. The class subjects and activities of the previous curricula, which were attached to

value terms, were generally preserved in the new curriculum. Hence, there are natural and quite frequent connections between the teaching units and values. Consequently, the sub-values can be still identified in the programme in connection with the teaching subjects. Moreover, even though the value lists of the previous curricula are RE-specific, the root values of the new curricula are same for all curriculum subjects. Therefore, the root values should be considered as a framework for values education; they are not a replacement of the previous lists. Based on this, the value terms of the previous curricula were grouped and aligned to the root values, in this study by the researcher (Table-3). In the previous programmes, these value terms were just alphabetically listed without any thematic groupings.

On a theoretical level, it is not that simple to assess these values (Table-3) by questioning whether they are explicitly religious or not. Namely, the programmes attribute national, moral, and spiritual sources about values, but not explicitly religious sources. Nevertheless, while a neutral/official language is employed throughout the curricula, values are labelled as '*our values*', under the title of 'The Perspective of the Curriculum' (and in the sub-title of that section). Hence, it may be deduced that the curriculum has a culture-centered interpretation of values. Therefore, the relevant question is 'by whom was the values list prepared?' (Metindoğan, 2018). In other words, regarding the depth of these values, it should be asked whether the curriculum reflects the values of the society (if yes, is it inclusive for all members?) or if the curriculum produces values for the society (if yes, will it be acceptable for all?).

In a practical level, the value lists were also criticised on the grounds that, given the multi-dimensional nature of values education, the inclusion of all these values within limited RE time (in a week, 2 classes at primary/secondary level and 1 class at high school) is not realistic (Kaymakcan and Meydan, 2011). Additionally, another concern arises in connection with the language of the lists. A couple of terms within the list might be obscure for younger generations (Table 3

contains the accurate translation for the value terms, to the best of my knowledge. However, there is no translation provided for *hakseverlik* – being in favour of justness, and *mürüvvet* – a happiness in a family because of one child’s happiness with birth, marriage, or advancement). Even though these values have a place in Turkish culture, the curricula do not provide sufficient guidance on teaching these kinds of values.

3.4. A Gap in the Research: Music?

With the curriculum changes in 2018, the discrepancy of previous programmes between the inductive approaches and value lists has been revised. Namely, the new curricula have a structure limited with the root values, but do not suggest an approach of values education. In fact, RE teachers do not (cannot) discern the difference between inductive and deductive approaches for values education and do employ both from time to time in their classes (Kaymakcan and Meydan, 2011). At least, the importance of both approaches has been recognised by the new curriculum. According to academic literature, both approaches together offer a comprehensive understanding, leading to a potentially more efficient values education (Halstead and Taylor, 2000; Herman, 2005; Halstead and Xiao, 2010). This is because we choose to take a particular approach to promote distinct values, in addition to which values we choose to impart (Herman, 1997: 154).

Previous RE programmes have included a range of educational activities for teaching values (Arslan Parlak, 2011). However, both new and old curricula do not refer to music as a way to advance values education. Music was stated once as a part of movies to create a more efficient learning environment by including different components such as movement, colour, and hearing (MEB, 2010b: 93). In addition, in the list of competencies of the new curricula, music is praised as being a creative way to recognise cultural differences, experience, and emotions (MEB, 2018a: 4; MEB, 2018b: 4). While music was many times explicitly attributed to teaching values in schools and class activities by Kaymakcan and Meydan (2011),

there is no ground-breaking study answering how that should be. Therefore, it is uncertain how music should be included in teaching for RE.

The question, at this point, might be whether music should be included in RE. Yet, the proposition of the current study is to use music in RE due to both its emotional power and its role in the meaning-making process. For the research-informed systems, this is a moral duty to include something with which (if) the system works better than others (Muijs, 2018). Since activity-based values education cater with the pupils' need better (İbiş, 2017; Kapkın, 2018), music in the present research is an activity that requires students' involvement, not (only) by singing and listening but also by active thinking for meaning-making and feeling through music. In this regard, this study does not propose a collaboration between RE and Music Education. The proposition is rather an inclusive RE environment containing music. Music is here to enhance values education for the students' educational benefit, owing to its capacity of emotional triggering on listeners and promoting the meaning-making process.

There are a couple of preliminary studies on music in the context of RE. Yorulmaz (2012), for instance, states the importance of religious music for RE in terms of developmental and cognitive approaches. For him, hymns might be a teaching material in the class activities for religious and morality subjects. In addition, in an experimental study, in the Turkish context, Babacan (2019) reports the positive effects of musical materials on students' academic achievement, knowledge retention, and attitudes towards the RE course. In addition, Berglund has analysed (2008; 2014) the musical activities in Islamic independent schools, in Sweden. Similarly, her analysis has a focus on how music supports the themes discussed in the class and gives variation to the education (Berglund, 2008). At the Swedish Islamic schools, the use of singing and music is connected to the enhancement of learning, the celebration of holidays and holiday-related religious narratives, and the attempt to make Islam relevant to youth culture (Berglund, 2014).

While music with its power to induce emotions is mostly considered in the context of music education (Hallam, 2010), it should be stated that RE is widely neglected in this context. On the contrary, the present research prioritises students' responses to music owing to both its emotional power and its role in the meaning-making process, for RE.

This chapter has provided clarification of, and context for the key concepts that will be used in a particular way for the present book. Musical emotions, music in Islamic thought, and values education in RE were conceptualised. This framework has influenced both the literature review, which now follows, and the methodology adopted to conduct the study.

Chapter III
Literature Review

1. Introduction

This chapter provides a critical review of the existing relevant literature from two broad perspectives: music-emotion studies and the value of musical emotions in the context of Religious Education. There are two sections for music-emotion studies: the Turkish environment and the Western world. Within the Turkish context, this chapter offers a critical analysis of the emotional qualities of the musical material that will be used in the experimental part of the research. Then, within the Western context, the methodological concerns of the music-emotion investigations will be evaluated. In this regard, the first part of the chapter addresses the concerns for the experimental (quantitative) part of the research. The focus of these sections is on the question ‘how are musical emotions experienced by listeners?’

The second part of the chapter presents an insight into the intersection of music and emotion and what this means for RE. Regarding the values and meaning-making processes, the conceptual and practical issues will be reviewed for the educational implications of musical activities in the context of RE. Accordingly, both educational studies and the music-emotion field will support this perspective to stress the emotional power of music to enhance the learning and teaching experience of stu-

dents and teachers. In this perspective, music is regarded as an educational resource, and RE in the Turkish educational system is the school subject that hosts values education. Therefore, music is not always evaluated for its aesthetic value, but for its pedagogical value. In other words, it is an invaluable tool for the present research to the extent that it supports educational outcomes. Similarly, for the present research, RE provides the context of a rewarding implementation area as long as values are embedded in it. Subsequently, values education in RE is supposed to be enhanced with musical interventions. Consequently, these sections might be considered as a reflection of the consistency among knowing, feeling, and doing, or cognition, emotion, and behaviour.

2. Music-Emotion Studies in the Turkish Environment

Once upon a time, according to traditional story, there was a meeting of the nobility at court. Then, someone dressed poorly was invited by the King to sit in the best corner of the hall, while others marvelled at this. To justify his act and to show that person's worth, the King asked the strange visitor to present his talents. So the visitor took out a couple of pieces of wood from his pocket (or bag) and assembled them to conduct an instrument. At his first performance, he made the audience laugh. Then he dismantled the instrument and assembled it in a different shape. While playing the second time, the listeners began to cry. Finally, when he formed the instrument with another new shape and played, then the audience found themselves in a deep sleep. When they awoke, the strange visitor had already disappeared.

While this story is told to glorify al-Farabi's skill in music (Akpınar, 2001; Çetinkaya, 1991; Bardakçı, 1986; Kalender, 1987), it is of course not seen as strange that 'music affects humankind's mood'. This might be because Islamic thought accepts the power of music in inducing emotions, in music therapies, and for religious purposes. Islamic studies on the effect of music on humankind, and animals, date back to the 9th

century. In *Kitabu'l-Hayevan* [The Book on Animals], written by Cāhiz (d.869), it is stated that music might influence the listeners due to its *makam*, regardless of lyrics (Akdoğan, 2002). In this regard, Ibn Sina indicates that what makes musical compositions feel pleasant for us is not the sense of hearing, but the power of wise perception (Turabi, 2009). Hence, it is meaningful that there are many *makams* reflecting the many ways by which listeners' emotions might be expressed (Özkan, 2003).

In this part of the research, I will explain the understandings of the emotional qualities of music, in Turkish-Islamic thought. To assess the emotional attributions to music in line with the concept of *makam*, I will evaluate the literature within three perspectives: first, I will analyse the historical claims of the *traditional* writings. From this perspective, the claims will be criticised of suffering from an inevitable lack of scientific methods. Then, in the second, contemporary studies on the emotional effects of *makams* on the listeners will be discussed. For this perspective, scientific considerations will shed light on the discussion. Thus, I will present music-emotion studies in the recent Turkish scientific environment. Finally, from the third perspective, I will integrate my critique on the literature with the limitations of translation possibilities, the methodological considerations, and the need for clearer purposes in these enquiries. This section will create the base for the *makam* selection process to be used within Geneva Emotional Music Scale (GEMS). That is presented in Chapter 4.

2.1. Historical Claims in the Traditional Writings

What I call '*traditional*' is the basis of this section. Traditional resources might be extended from al-Farabi (10th century) to contemporary studies (if they follow the same methods as the 'old' resources/manuscripts). In the *traditional* materials, the critical scientific reading may not be appropriate to examine the *makam*-emotion relationship even though they possess a reasonable argument for their musical theory. In

other words, for Urmawi, for example, it is quite easy to comprehend how his music theory is mathematically established in *er-Risaletü'ş-Şerefiyye* (Arslan, 2004) and *Kitabü'l-Edvar* (Uygun, 1996). By following his steps, his theory may be criticised or be improved; just as he studied al-Farabi and Ibn Sina (Arslan, 2004: 10). If he made a mistaken calculation, it should reveal itself. However, for his claims on the makam-emotion relationship, it is not possible to follow his steps since he gives no explanation about how he reached his results. What he said in *Kitabü'l-Edvar* (Uygun, 1996), for instance, is that 'Makam of Rast, Irak, Nevruz, and Isfahan induce excitement'. Since it is not clear how he gained these results, there is no way to reproduce his study with his methods. If he had explained the underlying mechanism behind such an emotional response, it would be more comprehensible. This is why these studies do not fit well with the contemporary scientific context. In this regard, if a study attributes emotional response to makams but without providing an explanation, I consider it as *traditional*, even if it is a relatively contemporary study like that of Güvenç (2006). Those studies approaching the makam-emotion relationship from a modern scientific perspective will be discussed after this section.

Within the *traditional* views, it is reasonable to make a distinction between the original works and their later commentators. The originals include Farabi, Urmawi (*er-Risaletü'ş-Şerefiyye* and *Kitabü'l-Edvar*), Meragi (*Makasidu'l-Elhan* and *Camiu'l-Elhan*), Şirvânî (*Mecelletun fi'l-Musika*), Haşim Bey (*Edvar* cited in Uygun, 1996), Hızır Ağa (*Tefhimu'l-makamat fi teolidi'n-nagamat* in Uslu, 2019), Mehmed Çelebi (*Zeynu'l-Elhan*), Ezgi (1933-53), and Güvenç (2006). Likewise, Akdoğan (2007), Akpınar (2001), Yiğitbaş (1972), Kalender (1987), Somakçı (2003), Ak (1997), Uygun (1996), Güvenç (1985), Altınölçek (2013), Karabaşoğlu (2010), and Sezikli (2007) are all treated as secondary resources. As expected, the 'data' from the original studies are repeated in the secondary resources. Nonetheless, the advantage for the reader is reaching the originals in

the medium of a different language –Turkish. In addition, most of these secondary studies also include copies of the original manuscript. Given that the only *English* source among the originals is Güvenç (2006), the value of the secondary resources is always appreciated.

Drawing on this older *traditional* literature, I highlight three points: (i) emotional attributions to makams inducing certain feelings in listeners, (ii) using music for therapeutic purposes owing to these special effects of makams, and (iii) employing music in religious practices to induce religious feelings. From this perspective, the emotional attributions were evaluated within a philosophical context, recognising these older claims provide no explanations of the underlying mechanisms for the emotions induced by certain makams. Furthermore, using makams for their therapeutic effects and using music in Sufism for triggering religious feelings have highlighted specific objectives for using music.

2.1.1. *Makam-Emotion Attributions*

In the literature, it is argued that many makams, *but not all of them*, excite special emotions in listeners. In the *traditional* writings, makams are said to induce specific emotional responses. For example: ‘Neva gives relief and happiness; Saba induces religious feelings’ (Güvenç, 2006). Another way to signify the makam-emotion relationship, especially in Urmawi, Meragi, and Şirvânî, is making groupings when more than one *makam* has similar effects. For instance: Büzürg, Zirefkend, and Rehavî induce sadness. Table 4 shows the makams that have emotional effects on listeners, to my most up-to-date knowledge. There is no measure of the quantity and range of those attributions across different authors. Acemaşiran, for example, is mentioned once (Güvenç, 2006). Yet, *Edvar-ı Meşhure* (famous makams: Uşşak, Nevâ, Bûselik, Râst, Irâk, Isfahân, Zirefkend, Büzürk, Zengüle, Râhevî, Hüseyinî, and Hicazî) are referred to frequently in those lists (See, Appendix-1).

Table 4: Makams with Emotional Attributions

Acemaşiran	Arabân	Nevaşiran	Buselik	Bûselikaşiran
Segâh	Segâh, Irak	Zengüle	Rehavi	Zirgüle
Ebuselik	Hicaz	Hicazi	Dûgah	Uşşak
Hüseyni	Hüzzam	Irak	Isfahan	Kuçek
Uşşak, Beyati	Neva	Zirefkend	Zirefkendküçek	Mâhur
Nihavend	Nihavendkebir	Nişabur	Nişaburek	Rahatfeza
Rahevi	Rast	Rast, Büzürk	Rast, Çargâh	Saba
Rast, Irak, Isfahan	Rast, Hüseyinî, Isfahan	Rast, Nevruz, Irak, Isfahan	Suzinak (Hicaz+Rast)	Hicazî, Zengüle, Irâk
Büzürg/Büzürk	Uşşak, Neva, Bûselik	Şehnaz, Hisar, Sabâ	Büzürg, Rehavî, Zirefkend	Bestenigar (Saba+Irak)
Nevruz, Zavil, Pençgah, Gerdaniye	Büzürg, Rehavî, Zirefkend, Zengüle, Hüseyni	Büzürg, Sabâ, Zirefkend, Râhevî, Şehnaz, Hisar	Zirefkend, Zengüle, Hicaz, Büzürg, Rahevi, Hüseyni	Hicazî, Mâye, Evc, Hüseyni, Zengüle, Dûgâh

It must be recognised that there is no coherence throughout the literature in the sense that a *makam* might be linked to diverse kinds of emotional arousal by different authors. The makam of Neva, for instance, is attributed to bravery in Urmawi (Akdoğan, 2007), whilst it is ascribed to taste and spaciousness in Haşim Bey (Uygun, 1996). Similarly, the makam of Hüzzam is linked to enthusiasm and rejoicing in Hızır Ağa (Altınölçek, 2013) but to severe sadness in Suphi Ezgi (Kalender, 1987). There are also contradictions between the sources. Farabi (Kalender, 1987; Güvenç, 1985) and Urmawi (Akdoğan, 2007) consider the makam of Büzürg's effect to be fear; although, that *makam* is assumed to be an antidote to fear in *Gevrekzade* (Turabi, 2005). However, there is a near consensus in the literature on Hicaz for humbleness, Hüseyni for relaxation, Rast for joy, enjoyment, and comfort, Uşşak for a sense of laughter, and Zengüle / Zirgüle for sleep.

In the *traditional* resources, there are unique arguments on makam-emotion relations for which we have no other touchstone to gauge their validity. Akdoğan (2002), for example, claims that it is revealed in his interviews that the Adhan (the call to prayer) in the *makam* of

Saba stimulates people and makes them awake. Yet details are not given by Akdoğan about the interviews, or when and where that Adhan was called. In the same regard, Yaşar gives examples on makam-emotion relations, by making inference from his 60 years career. For example, 'Saba and Bestenigar induce peace and dynamism; Hüseyini and Mâhur induce excitement; Hüzzam induces sadness and hope; Rast induces steadiness; and Nihavend induces romance' (Yaşar, 2009: XV). For those who have not accompanied Yaşar through his career, these claims are quite ambiguous. Additionally, I will also cite Güvenç (2006) for the methodological shortcomings. While he indicates that Turkish music is used for its therapeutic effects in Berlin Urban Hospital and Vienna Meddling Clinic, it is not elucidated how this experience helps in understanding makam-emotion attributions. To sum up, these kinds of anecdotal evaluations consistently underline the absence of scientific evidence in the *traditional* speculations.

Next, what is salient for many of the secondary resources for the makam-emotion relationship is referring to Farabi, but without scholarly citations from his work (Turabi, 2018). Altınölçek (2013), Somakçı (2003), Akpınar (2001), Kalender (1987), Güvenç (1985), and Yiğitbaş (1972) have referred to each other about Farabi, whereas none of them directly engages with his books. This might be because the second half of *Kitab al-Musiki al-Kabir* is not known at the present time (Özkan, 2003), and the missing part may have such attributions. However, there is almost a consistency in these sources on what Farabi stated about makam-emotion relations. Yet, it does not mean 'repeating something makes it credible'. Hence, that kind of manner applied in the secondary resources undermines the reliability of the *traditional* claims on the makam-emotion assertions. Hence makam-emotion claims reaching back to Farabi must be always carefully examined and compared with other attributions.

The last point regarding the *traditional* resources on music-emotion relations examines the factors that are not directly linked to and limited with *makam* itself. One of them is the harmony between composi-

tion and lyrics. Akdoğan, for instance, states that because the makam of Saba makes the listener sad, the lyrics of joy and love should not be composed in this *makam* (2002). From another perspective, the features of the locations where listeners listen to music have effects on listeners' responses, according to Meragi (Karabaşoğlu, 2010). It is important, therefore, to choose the right *makam* that fits with the venue and the context where music will be performed. Hatip Zakiri Hasan Efendi (d.1623), for instance, has composed *temcid*, *salat-ı ümmiye*, and *naat* (*religious music forms*) in the makams of Segah and Irak. Those makams are said to induce piety and awe (Kalender, 1987; Özcan, 1997: 319). Similarly, Buhurizade Mustafa Itri (d.1711) has composed *tekbir* and *salat-ı ümmiye* in the makam of Segah (Özcan, 1999: 221). Furthermore, Meragi states that listeners' musical knowledge should be taken into account by musicians. Even if particular compositions, hard to understand for everyone, have been regarded within the 'science' of music, this kind of performances may not be appreciated by everyone (Karabaşoğlu, 2010).

In the next section, I discuss the role of makams in music therapy.

2.1.2. Music Therapy Research with Makam

Though music therapy has a long history in Turkish-Islamic medical practices (Ak, 1997), the resources dedicated to this field are relatively new. It should be remembered that philosophers like al-Razi (d.932), Farabi, and Ibn Sina were considered as doctors and therapists as well as musicologists (Uludağ, 2004). Similarly, it is claimed that al-Kindi cured illnesses with music (Turabi, 1996); and al-Razi advised keeping melancholic patients busy with music listening (Çoban, 2005; Güvenç, 1985). Moreover, it is known that Ibn Sina, as a psychologist, used music in practice (*'Inter omnia exercitia sanitatis cantare melius est'* by Ibn Sina. Shehadi, 1995: 75). Eventually, the established scientific bases for the therapeutic nature of music in the Islamic world developed in the medical and educational establishments of the Seljuk and Ottoman eras (Çoban, 2005; Erdal and Erbaş, 2013). In these institutions, mentally ill patients were actually cured with music therapy (Somakçı, 2003).

Despite its long history, a book entirely focused on music therapy through Turkish music makams was not written until the 17th century. As Turabi stressed (2015), in classical music theory books/manuscripts, there is no single study of music therapy. Instead, when analysing a *makam*, the author records a couple of sentences about which disease that *makam* might cure. The first exception to that tradition is Hekim (Doctor) Hasan Şuûrî Efendi's (d.1694) '*Ta'dilii'l-emzice fi hifzi sıhhati'l-beden*' (which literally means '*the removal of diseases for protecting the health of the body*'), written in 1677 in Ottoman Turkish. The second section of that book is on music therapy and a Latinised version of that section is available (Turabi, 2011), but not a translation to any other language, yet. In this book, rather than saying, for example, that 'the makam of Rast is beneficial against paralysis', the effects of makams are expressed in poems with a brief explanation.

Additionally, '*er-Risâletü'l-mûsikiyye mine'd-devâi'r-rûhâniyye*', written by Gevrekzade Hafız Hasan Efendi (probably in 1798), is the first and the only book that is devoted entirely to music therapy, in traditional Ottoman medical literature (Turabi, 2005). The manuscript is in Ottoman-Turkish, while the Latinised version is available (Turabi, 2005). *Ta'dilii'l-emzice* (of Hasan Şuûrî Efendi) is one of the main resources for Gevrekzade. In his book, Gevrekzade directly quotes the poetic phrases from *Ta'dilii'l-emzice*, whilst he makes corrections and extensions on makams' supposed effects on diseases. In a chapter of another book, '*Neticetü'l-fikriyye ve tedbir-i veladeti'l-bikriyye*' (1798), which is on child diseases, he repeats mostly the same details. For him, the only dominant aspect is not exclusively the music itself in music therapy, but also the combination of the expertise of the doctor, the makams, and the time music is used (Turabi, 2005).

Furthermore, Güvenç (2006) is a relatively new resource in music therapy with Turkish music makams. Since 1976, with *The Group for the Research and Promotion of Turkish Music* (TÜMATA), Güvenç has studied the theory and practice of music therapy. Table 5 compares the claims of makams' effects in music therapy within these three resources.

To sum up, it should be said that, regarding the concept of *makam*, music therapy is less represented in the literature in comparison to the general emotional attributions explained in the previous section. Nevertheless, there is a shared feature for both perspectives: neither has given any explanation about the background of their claims. In other words, how Güvenç (2006), Gevrekzade, and Hasan Şuûrî have reached their conclusions is not obvious; hence it is not possible to judge their credibility.

Table 5: Therapeutic Effects of Makams

Makam	Hasan Şuûrî (Tura- bi, 2011)	Gevrekzade (Tura- bi, 2005; Aker, 2014)	Güvenç (2006)
Rast	paralysis	paralysis	head, eyes, paralysis
Irak	fever	meningitis, fever	stubborn, vulgar characters
Isfahan	intelligence, cold	mind, inflammatory disease, cold	gynaecological illnesses
Zirefkend	facial paralysis, back pain	paralysis, facial pa- ralysis, back pain	back, muscle, acute abdominal pain
Hicaz	urinary tract disea- ses	urinary tract disea- ses, the prurience	urogenital system, kidneys
Buselik	eye burring, hip pains	headache, hip pain, hematic diseases	abdominal area, muscles, blood ten- sion and circulation
Uşşak	Insomnia, leg pains	leg pain, insomnia	gout pains, feet
Hüseyni	constipation, pyre- xia, heart inflam- mation	heart, liver, hidden fiver, seizures	internal organs, liver, heart, stomach
Neva	sciatica, hip pain	hip pain, bad tho- ughts, memory	waist, hip pains, gynaecological illnesses
Nihavend			abdominal area, blood tension and circulation, muscles
Segah			heart, brain
Saba			relaxation

I focus now on how music is praised in Sufism because of its pre-
sumed power in stimulating the emotions.

2.1.3. Music in Sufism for Religious Purposes

“*Pes gezay-i-i âşikân âmed semâ’*”

Ki der’û bâşed hayâl-i ictimâ’”

Rumi

(Music is the nutrition of the soul for those who are the lovers of God/As, in it, there is a hope for joining to beloved.

Rumi, 1925, V.4, distich: 740)

Turkish religious music is divided into two categories. One is called ‘music of the mosque’ (*cami musikisi*), and another is as ‘music of the Sufis’ (*tekke/tasavvuf musikisi*) (Özcan, 1993, 2011; Akdoğan, 2008). One of the most evident differences is not using instruments in the mosque. While music in the mosque is oriented around worship using the human voice only, there are many musical forms performed in the Sufi lodges (Özcan, 1993, 2011). Hence it is easy to see why the primary interest of music in the Muslim world largely comes from the Sufi groups (Çetinkaya, 2011). However, this music still has a vital religious character (Nasr, 1976).

Recognising that music is not ‘just for enjoyment’ in Sufi groups stresses the role of Sufi music in religious thinking. In other words, the purpose of music is to care for souls and nurturing the ‘*nafs*’², well beyond mere entertainment (Kalender, 1987; Akdoğan, 2011). Hence, music in Sufism is not an aim in itself, but a tool that helps people practise *dhikr*. It is, thus, worth remembering that ‘Sama’ [the *dhikr* of Mawlawism] means one’s finding of Allah in the soul under the influence of music, feeling the excitement’ (Çetinkaya, 2011: 82).

In Sufi groups, the music of the *dhikr* is controlled by the Zâkirbaşı, who is (literally) the leader of the people in the *dhikr*. To be in that position, he must have, among other things, several musical qualifications such as having a broad musical culture, an expertise of hymns, and a

2 For information about the terms (*nafs*, *dhikr*, and beyond), see Picken, 2005; Glassé and Smith, 2001; Gibb and Kramers, 2001.

smooth voice. The makams of the hymns are under his control. Additionally, he determines the hymns to be performed, in the sense of whether the stimuli are proper to specific kinds of *dhikr* (Özcan, 2011).

As there are different types of hymns with a connection to certain months of Hegira Calendar, like *Ramadan* and *Muharram*, or according to special historical incidents like *Karbala*, it seems that using music in Sufism is also related to the perceived emotions associated with these occasions. However, it does not mean that Sufi music is less effective for inducing emotions in listeners. Along with that, the special musical forms of the Hegira calendar (Uzun, 2005; 2007), and especially to laments, reveal that these have an emotional power when they are played in the right context. Their lyrics affect the listeners to the extent that they have a relation to a certain time of the year, an event, or a celebration. In other words, to perform an elegy about Karbala, the best month is Muharram, in which Hussein³ and his family's martyrdom occurred. In another time, it is expected that an elegy on Karbala will be less effective. From another perspective, a listener who has less information about the lyric and its relation to its context, can access only a limited meaning from that music. In this context, it is not strange that 'Jalal al-Din Rumi, the founder of the Mawlawî order, often took songs from taverns of Anatolia and converted them into vehicles for the expression of the profoundest yearning for God' (Nasr, 1976). Furthermore, Kılıç (2012) has argued that because of its symbolic language, Sufis may interpret the lyrics differently from others.

To develop this point of view, we recognise the relationship between being informed about music and its role in emotional response. Whether valid or not, this kind of approach is different from the positions taken in the previous two sections on how makams create emotions in listeners. For the *traditional* views, it may be stated that the listener's position is mostly ignored. In other words, the emotional arousal is often attributed to the characteristics of the *makam*, in which the music is composed. However, in Sufism, the situation of the lis-

3 The grandson of the Prophet Muhammed and son of the 4th Caliph Ali.

tener is often recognised equally with the musical characteristics. At least, there is a rationale for how music might be beneficial through the emotions to support something that is independent of the music itself. Accordingly, music is not the only determinant for the intended emotional arousal, but also non-musical features such as time, place, venue, and audience are also active. Such an insight might also be considered in employing music for RE purposes and with regard to students' positionality. This will be discussed further in Chapter 6.

2.2. Contemporary Studies with Scientific Method

From this perspective, I will now examine some relatively new approaches, pursued generally in Turkey or in Turkish. The reason why these kinds of 'scientific' studies are quite new is not a coincidence. They may be related to two further factors in Turkey: the non-affirmative attitudes for RE in academia and for Turkish classical music in the State Conservatory. The first advanced RE institute in Turkey (Faculty of Theology at Ankara University) was established in 1949, one of the departments of which is 'Turkish Religious Music' (Ayhan, 2004). Similarly, debates on these matters date to 1975 for the opening the Turkish Music State Conservatory, where postgraduate programmes commenced in 1986 (Internal Evaluation Report, 2017). Subsequently, the quantity and the quality of the academic studies on Turkish music have increased in these institutions.

Nevertheless, the reason for these various studies' inclusion here is not their publication date, but an appreciation of the methods and perspectives that they applied. Figures such as Akdoğan (1996; 2002; 2007), Arslan (2004), Uygun (1996), Somakçı (2003), and Kalender (1987), are strongly associated with *traditional* views, despite their status as contemporary figures. They are discussed among the *traditional* views by virtue of their methods. Furthermore, the theoretical studies on the concept of the *makam* do not align well with the objective of this current section of my argument. Studies of emotional arousal by

music in specific *makam* are reviewed throughout this section. Since the methods of contemporary approaches make them different from the *traditional* views, the methodological pitfalls mentioned in the previous section are not relevant here. Consequently, the contemporary *scientific* approaches, employed for examining the makams' emotional effects, define the main roots of this modern perspective. For this aim, I first discuss the methods within these studies. Then I interrogate the relationship between the *makam* selection process and the overall purposes and outcomes of these studies.

Institutional Boundaries: The research domain in which a study is conducted is significant in affecting the study's characteristics, in terms of methods, purposes, implementation possibilities, etc. To my best knowledge, the contemporary works on makams' effects on listeners have been conducted in fields such as health sciences, psychology, biomedical engineering, and theology; but not in education. In Conservatories and the departments of Islamic History and Arts, there are theoretical studies on the concept of makam undertaken, despite the paucity of works on makams' effects (Signell, 1977; Can, 2001; Özkan, 2003; Yeprem, 2007; Yahya Kaçar, 2008; Salvucci, 2016). Indeed, it might have been expected that there would have been more empirical studies on makams' effects in these areas.

The Methodological Encounter: With the present research, Arman (2015), and Arman and Tekman (2015) are similar, in terms of their methods (self-reports via GEMS) and aims (investigating emotional effects of Turkish music makams). In fact, as they are published versions of a single study (Tekman, 2018), I focus chiefly on Arman (2015), which includes 11 makams (Hicâz, Hüseynî, Hüzûzâm, Kürdîlihiczâkâr, Mahûr, Muhâyyerkürdî, Nihâvend, Râst, Sabâ, Segâh, and Uşşâk). It was conducted with Turkish sample (n=184) and uses the Turkish translation of GEMS-45.

Having Turkish-translated version of GEMS-45 is well appreciated for the current research. However, a couple of points, among oth-

ers, must be carefully considered. First, there is no detailed account of information about both the translation process of GEMS and effects of this on the results. Second, the *makam* selection process for the study is not clear. The chosen makams are famous and popular in Turkish music (Levendoglu Yilmaz, 2002), hence their study is predictable. But a reader needs more detail on the actual research process. Third, we need clarification on how analysis of GEMS data was linked to and compared with the historical emotional claims of makams.

A recent study (Altun and Egermann, 2020) also assesses the relationship between the induced emotions and Turkish music makams (Hicaz, Hüseyinî, Mahur, Saba, and Müstear) with self-reports via GEMS-25. Rather than the makams, this paper deals with the effect of ear training and temperament systems with a sample of 19 music students in the UK. Moreover, Altun and Egermann report the results according to the higher-order-categories of GEMS (sublimity, vitality, and unease), rather than 9-GEMS-factors (as the present research does). For these reasons, the present research is not comparable to this work.

Beyond these assumptions, studies on the effects of the Turkish music makams tend to be based on a process where participants listen to the music and then respond to it in several ways. These studies are differentiated from each other principally through the responses and the measurements on which they focus. In Aker (2014), for example, the principal technique shaping the structure and the methods of the study is the use of EEG waveforms to measure the emotional responses. Conversely, in Erciyas (2014), the response to music was measured through skin temperature, skin conductance, and blood volume pulse signals. Nevertheless, Aker (2014) and Erciyas (2014) use the same stimuli, before-after measurement procedures, within laboratory conditions with student participants, and without control and experimental groups.

However, there are studies that require testing the hypothesis with a control group. In the experimental studies, music in a certain *makam* as an independent variable is expected to cause a change of dependant vari-

ables. The study by Karışman (2017), examining the effect of makams on memorisation (not emotional), is such that it needed an experiment-control group type research design. The purpose of that study was to find the effect of the recitation of the Quran with *makam* (and without *makam*) on memorisation of the verses. In an equivalent way, but with a different purpose, Ertekin Pınar (2013) has examined the effect of Rast music on auditory hallucination and the quality of life of schizophrenic patients. Participants in the study group have listened to Rast music when they experienced an auditory hallucination. Similarly, Arslan (2016) has studied the effect of Turkish religious music in the makam of Hüseynî. To measure the level of cortisol hormone in the saliva samples and the level of anxiety, the study group was asked to listen to music in the makam of Hüseynî, while the control group was resting with no stimulant.

There are a few more studies on Turkish music makams' roles in e.g., patients' anxiety and sleeping patterns. In this context, for the makam of Acemaşiran, Parlar-Kılıç, et al. (2015) worked on the effect of music on pain, anxiety, and patient satisfaction in an emergency department. For Nihavend and Buselik, Bekiroğlu, et al. (2013) studied the effects of music on blood pressure and anxiety levels in elderly patients, while Toker and Kömürcü (2017) examined the effect of music on anxiety and satisfaction in pregnant women. For Uşşak, Altan's thesis (2011) was conducted on the sleeping quality of the elderly. For Hicaz and Zirefkend, Lafçı (2009) worked on the effect of music on the sleeping quality of cancer patients.

Whether we endorse or not their results, these studies have methods that might be repeatable. Furthermore, they are under the ethical oversight of authorised bodies because of human participation. These are the reasons that might make the contemporary claims more acceptable. Hence this is the broadly scientific approach that is taken for the empirical dimension of the current research.

The Stimuli Selection Process and its Link to the Outcomes: By questioning makams/stimuli selection processes and comparing the results obtained through this process, I now examine the rationale be-

hind these studies. Arman (2015), for example, gives no explanation as to why those particular makams are included. In other words, saying ‘frequently used 11 makams’ needs justification. While Arman (2015) refers to historical emotional attributions to makams, these claims are not mentioned throughout the *makam* and stimuli selection process. Hence, it is assumed that these factors were not highlighted during the selection process. This is, of course not necessarily wrong, but it is different from the current research. Conversely, Aker clearly stressed why the makam of Kuçek (for sadness) and Rast (for joy) were selected by referring to al-Farabi (Somakçı, 2003 in Aker, 2014). Hence in this experiment, it was meaningful to see that the participants’ (EEG) beta power was higher while listening to music in Rast (Aker, 2014). Similarly, in Erciyas (2014), the makam of Kuçek and Rast were selected because of their opposite effects. It was then reasonable to conclude that listening to music in Kuçek caused a reduction in heart rate, while Rast increased it (2014).

What is often observed in the music therapy field in selecting the makams is accessing help from experts. Ertekin Pınar (2013), for instance, selected the makam of Rast, because of its effects of joy, enjoyment, and comfort –after consulting the Music Department of Cumhuriyet University (Turkey) and TÛMATA (Güvenç, 2006). Her conclusion is that listening to Rast music helps in reducing mental disturbance and increasing life quality (Ertekin Pınar, 2013: 48). Parlar-Kılıç, et al. (2017) have also consulted TÛMATA (Güvenç, 2006) and Turkish Music State Conservatory, before choosing the makam of Acemaşiran that is considered helpful against physical pain. In this study, listening to music in Acemaşiran has caused reduction in the severity of pain and levels of anxiety (Parlar-Kılıç, 2017: 50). Since Bekiroğlu, et al. (2013), Toker and Kömürçü (2017), and Altan (2011) were also inspired by TÛMATA for their excerpt selections, this underlines the dominance of that group in the music therapy field.

The best example in Turkish literature on how the theory and the expertise in the field ought to be combined is Arslan (2016). Since she

did work on hormones and the workings of morning cortisol, she selected the makam of Hüseynî with recommendations from key academicians (2016: 28). For Hüseynî, Gevrekzade Hafız Hasan Efendi stated 'that *makam* is more effective around morning times' (Turabi, 2009: 123). Furthermore, for this study, the excerpts were performed by Turkish music experts and live recorded. Overall, the study reported that listening to music in the makam of Hüseynî might positively affect the stress level and reduces cortisol levels in the morning (Arslan, 2016: 48-53).

To sum up this section, it should be said that contemporary studies of Turkish music makams' effects on listeners are more comprehensible in terms of the scientific approaches employed; this is different from the *traditional* claims. In other words, it is unknown how Urmawi reached his proposals about the makam-emotion relationship, though we can easily interrogate the conclusions of Arslan (2016) by following her research footprints. However, it should also be highlighted that, in contrast to the *traditional* resources, the focus of contemporary studies into music and makams is *not*, for the most part, on the emotional response –though concepts such as reducing anxiety and stress, balancing sleeping quality etc. are out of the present research's scope. Hence pursuing the objective of this research, I will evaluate the emotional responses to certain makams, then compare them with historical emotional attributions. In support of this aim, I will identify the makams in Chapter 4, for use within the experimental part of the research via GEMS (Chapter 5). However, before this, I shall conclude my critique of the existing Turkish literature by spotlighting its shortcomings.

2.3. Evaluating the Turkish Literature

Scientific Methods and Purposes: One of the objectives of the current research is to test via GEMS the historical claims made for the makam-emotion relationship. For generalizability, this is to determine whether music can arouse certain emotions through the *makam*. Yet without discussing the underlying mechanisms behind emotional evocation thro-

ugh music, we risk implying that the listener can feel the intended emotions, due to the *makam* by which the piece of music is composed. Hence that kind of approach should be contemplated in connection with the *felt emotions* experienced through the music, rather than *perceived emotions*.

For the emotional response to *makam* music, there are studies applying self-report measures through GEMS (Altun and Egermann, 2020; Arman, 2015). In these works, as the interest is not in the historical attributions applied to the makam-emotion relationship, there is no reliable ground to interpret these attributions. Although Aker (2014) and Erciyas (2014) explained their *makam* selection process by referring al-Farabi, Arslan (2016) made the most convincing comparison between her results and the literature. The inconsistencies of methodology and objectives also reflect the drawbacks in this literature.

The reason for dividing the literature on makam-emotion relationships into *traditional* and contemporary studies lies in their respective methods, not the publication dates of those studies. The contemporary literature has produced relatively more testable results because contemporary studies have employed scientific methods that can be understood and criticised. Nonetheless, the volume of contemporary studies is not sufficient to examine thoroughly makams' supposed emotional influences on listeners. Consequently, rather than completely abandoning the *traditional* claims, this research eventually adopts a hybrid method. Thus, it employs GEMS, the well-established scientific emotional response measurement tool, to understand the value of *traditional* claims made for the makam-emotion relationship.

The methods favoured in contemporary Turkish literature on the effects of music might be evaluated with their key purposes in mind. Karışman (2017) is the only study conducted in relation to specifically educational implementation. It evaluates the recitation of the Quran with *makam* for enhancing memorisation. The effects of music in certain makams for sleeping (Lafçı, 2009) or to reduce anxiety (Bekiroğlu, et al., 2013) represent very clear purposes. Yet, I am in doubt about

its value for educational interventions. Arman (2015), for example, explores makams' emotional effects without any specific context of implementation. It would be more pertinent if her study had been conducted with a more explicit context in the sense that its outcomes could then be assessed with regard to particular purposes and implementations. Just as I will touch on similar perspectives present in Western literature on the music-emotion connection, this is not actually a problem at all, but an inconvenience for the present research. By contrast, in Sufi tradition, music serves practical needs, for the elevation of religious sentiment. Similarly, in classical resources on music therapy's understanding of makams' effects, there is a clear purpose behind the use of the music. Even in the *traditional* resources, there are many suggestions on how music should be used for its assumed emotional effects (Akdoğan, 1996; Uygun, 1996; Karabaşoğlu, 2010).

Language-Translation Issues: The last thing, which might negatively affect the current research, is directly related to language issues. As stated above, the *traditional* resources on the makam-emotion relationship have been primarily written in Arabic and Persian and the secondary resources (translations and comments) are in Turkish. There are also a couple of studies in English. Furthermore, the trouble of translation is not only limited to this research, as the Turkish translation of GEMS was used for the Turkish sample in measuring the emotional responses to the stimuli. However, the GEMS tool was originally developed in French and translated into English. As Zentner and Eerola (2010) pointed out, language and response formats may affect self-report measurements. Zentner, et al. (2008) have also shown possible limitations regarding the translation of the emotion terms in GEMS. Similarly, Vuoskoski and Eerola (2011), in their Finnish study, admit that some nuances of GEMS might have been lost in translation. Moreover, the *makam* selection process of this research is strongly linked with the GEMS structure and its translation. Chapter 4 (Methodology) gives more detail about the relationship between the

makam selection and translation processes of the present research.

To sum up, this section on music-emotion studies in the Turkish-Islamic context started with the critical evaluation of the *traditional* thoughts, continued to contemporary scientific studies, and completed with the critique. I reviewed the perspectives concerning the *makam* music with its intended emotional effects. The recurring problem throughout the *traditional* resources is essentially not having an acceptable system to justify their arguments and, therefore, not having an explanation for the emotional response to music. By contrast, among the contemporary studies, there are many investigations conducted with scientific considerations examining the emotional effects of *makams*. These hence provide grounds to judge, to discuss, to replicate, or to implement the findings of these studies. However, the objective of the present research differs from contemporary studies. For the sake of implementation possibilities in the field of education, the current research could not benefit fully from the previous studies. Furthermore, current research is beset with translation issues, affecting both traditional and contemporary approaches. Now, in the next section, I will evaluate the Western perspectives of the music-emotion studies that will enlighten the methodological considerations of measuring emotional response to music listening for the present research.

3. Music-Emotion Studies in the Western World

Science is objective by its nature. However, precisely how science can study such an absolutely subjective phenomenon like ‘emotional response to music’ remains controversial. The question then arises, ‘to what extent we can rely on scientific explanations of these emotional responses so that we can make use of them in educational contexts?’.

First, it is widely agreed that making music is behaviour that includes an emotional component (Welch and Adams, 2003: 5). Typically, for motion, dynamic forces, human character, personality, social conditions, religious faith, and emotions, music might be expressive, reflec-

tive, or representative (Gabrielsson and Lindström, 2010). Since many people report using music to regulate their emotional state (Aselton, 2012), the emotional accompaniment to music listening is often regarded as 'reward' for the listener (Zentner, et al., 2008). This is such a powerful reward that Maslow coined the term 'peak experience' (Maslow, 1969) for what is readily accessible through music (Maslow, 1968: 75).

There has been serious attention on the emotive qualities of music since ancient times (Budd, 1985; Zentner, et al., 2008; Liljeström, et al., 2012). In ancient Greece, for instance, music was habitually seen as an imitation of nature, human character, or states of mind: as a form of mimesis, that would be automatically imitated by the listener (Scruton, 1997; Gabrielsson, 2001-02). Due to its power to affect the emotions and the soul, for Plato music could educate and elevate the human spirit, but also to encourage the degraded human nature (Garofalo, 2010). For Plato, music in the Dorian mode, for example, ought to be used for its manly, strong features in moulding a firm character. However, he also believed that the Ionian and Lydian modes should be banned because of the soft and relaxing character (Plato, 2012: 101-2). Considering that 'when modes of music change, the fundamental laws of the state always change with them' (Plato, 2012: 134), for Plato music has such a subversive potential that it is even enough to undermine the state (Portnoy, 1949: 240).

Similarly, Aristotle gives relatively detailed explanations of the varied emotional effects of musical moods. He explicitly states that:

Music has a nobler power than providing pleasure, namely it contributes to character. The proof is that music makes us take on certain qualities of character... Consequently, music must also be used to educate the character of the young (Aristotle, 1997b: 168).

In his moral development theory, 'the continent' should listen to the 'right' music to reach 'the naturally virtuous' state. Therefore, he argues, citizens can be trained to feel appropriately by listening to the right kind of music (Curzer, 2012: 347).

Moving beyond the ancients, the earliest experimental works on emotional perception in music began in the 1890s, although were not frequent until the 1930s (Gabrielsson, 2001-02). Yet the music-emotion studies have since been broadly extended by philosophers, psychologists, neuroscientists, anthropologists, and musicologists etc. especially in the last decades (Robinson and Hatten, 2012). There are highly relevant works as well in sociology, political economics, communication, ethnomusicology, and cultural studies (Garofalo, 2010). This is because music consists of many integrated components, such as composer, performer (songwriter, singer, and player), instrument, sound, listener, and listening environment, the music-emotion domain is correspondingly broad and multi-faceted (Konečni, 2010). Hence, it is possible to extend the field from the musical structures that may affect the emotional response (Gomez and Danuser, 2007; Gabrielsson and Lindström, 2010) to the underlying mechanism behind the emotional arousal (Juslin, et al., 2010); and in diverse settings from the industry of film music (Cohen, 2010), to marketing (North and Hargreaves, 2010), and music therapy (Bradshaw, et al., 2015; Thaut and Wheeler, 2010), and even to the individual differences that may affect the response (Kreutz, et al., 2008; Liljeström, et al., 2012).

Accordingly, it is quite reasonable to read this varied literature within an interdisciplinary framework by borrowing the concepts of several fields. It is then possible to detect the central themes in music-emotion studies. In summary, those themes are chiefly:

- music studied for its internal emotional effects,
- the listener whose emotional reactions are being measured,
- the situation that might have affected the emotional response,
- the interactions between these 3 elements.

Consequently, in the present section, the music-emotion research literature is briefly reviewed from the perspectives of its possible implications for the place of music in education beyond its current cur-

ricular confines. To these ends, I first look at musical genres studied in the field in order to highlight what might be alternative accounts of musical preferences (if any). Secondly, I stress the similarities and the differences of participants in music-emotion studies. Third, I discuss the 'environmental' issues, namely situational and cultural effects, to understand the possible impact of external components beyond music and listeners. Lastly, I highlight the interactional issues between these themes, to project the methodological and theoretical factors involved in the measurement of emotional response to music. In the end, I present my evaluation of the existing literature by developing the rationale for the current research. Following this section, the last part of the chapter is concerned with the connections between emotion, values, and meaning-making through music in the context of a rationale for enriched musical interventions in RE.

3.1. Music Itself: re-considered

Music is, of course, naturally the main factor in music-emotion studies. Many people report using music to regulate their emotional states (Juslin and Sloboda, 2010a). While it is not agreed how to represent emotions in music (Zentner, et al., 2008), it is suggested by many commentators that listeners tend to respond to specific emotional 'tones' conveyed by music, especially in laboratory studies (Kreutz, et al., 2008: 103). However, there is no agreement on the best musical stimuli for music-emotion studies of this kind (Eerola and Vuoskoski, 2013). To capture the layout of the current research into Turkish music, this section highlights some key aspects of the stimulus selection in music-emotion studies –that is, of the music itself.

The very first question for this section is to interrogate the concept of *genre* (classic, pop, rock etc.) in the music-emotion studies. Music-emotion researchers employ a wide variety of musical genres, including classical, rock, pop, and folk music (Västfjäll, 2001-02; Gomez and Danuser, 2007; Kreutz, et al., 2008), film music (Vuoskoski and Eerola,

2011), jazz, Latin American, and techno (Zentner, et al., 2008), new age (Egermann, et al., 2011), and religious music (Bradshaw, et al., 2015; Miller and Strongman, 2002). While the majority of studies have been conducted with recorded music (Kreutz, et al., 2002; 2003 in Kreutz, et al., 2008), there are also valuable reports on the effects of live concert music (Zentner, et al., 2008), maternal songs/lullabies (Trehub, et al., 2010), and specifically performed (Nair, et al., 2002) or composed music (Gabrielsson and Lindström, 2010; Webster and Weir, 2005). In other words, musical emotions may be induced by *any* musical genre (Liljeström, et al., 2012; Gabrielsson, 2001-02).

Performances in certain musical styles (opera, blues, baroque) and of certain performers may be more effective in emotion expression than others (Juslin and Timmers, 2010). Classical music, 'the great classics', for instance, might lead the listeners to a 'peak experience' (Maslow, 1968: 168). This might be because of both the listener's disposition to that music and the musical structure itself (Hargreaves and North, 2010). Attending to other determinants of the emotion-inducing process, some studies repeat stimuli employed in previous studies, because of their seemingly proven effects (Tesoriero and Rickard, 2012; Zentner, et al., 2008). Nonetheless, as in the case of the so-called '*Musical Mood Induction Procedure*', many excerpts have been used only once (Västfjäll, 2001-02).

It is important to note that the music-emotion research domain is dominated by commercial recordings of Western instrumental classical music (Västfjäll, 2001-02). As a kind of limitation, the concentration on Western 'high-art' music (Zentner, et al., 2008) is observable in the philosophical literature (Davies, 2010) and in music-psychological studies (Juslin and Timmers, 2010). This might be confirmation bias because many compositions of that genre were expressly designed to induce emotions in ordinary listeners (Kreutz, et al., 2008). However, while this may be a convenience for carrying out research in Western contexts (Thompson and Balkwill, 2010), it may leave unanswered questions on the generalizability of findings to other cultures. Even

though a couple of studies have been conducted to investigate the emotional expressions of Hindustani ragas (Balkwill and Thompson, 1999), that is not enough given the imbalance towards Western evidence in the field. Mathur, et al. (2015), Mittal and Singh (2018), and Singh and Mittal (2018) at least give hope for the contribution to the field from different and neglected cultural and musical traditions.

The second emerging question in the field concerns the use instrumental music (so called *pure, absolute* music, or music *alone*) in contrast to music with lyrics. The contention between these has existed since Plato (Portnoy, 1949). Plato was concerned that instrumental music might not be sufficient to create appropriate moods and behaviours (Plato, 2012: 100; Garofalo, 2010). Though the discussion about the expressiveness of music regarding emotions is voluminous (Robinson, 2005; Davies, 1994, 2010; Meyer, 1956; Kivy, 1990), any argument in favour of, or against '*pure*' music must be considered in relation to a presumed '*impure*' music (Kania, 2017), which is to fall deeper into Plato's trap. Even though most studies use non-vocal classical music, on the tacit assumption that instrumental music is more effective for emotional induction (Kreutz, et al., 2008), there are also many recent studies using '*impure*' music (Västfjäll, 2001-02).

One of the points to consider here is the number of musical excerpts used in music-emotion studies. It is hard to create a general rule for the field. However, it might be more plausible to evaluate the number of pieces and duration according to the purpose and the conditions of the study. In musical mood induction studies, for example, a single musical piece might be used to induce a certain mood across many studies, whilst a study with 45 stimuli is also reported (Västfjäll, 2001-02). In similar terms, to represent 5 basic emotion categories with 5 excerpts, Kreutz, et al. (2008) use 25 musical stimuli. Moreover, adding noise (Gomez and Danuser, 2007) and '*fade in-out time*' (Tesoriero and Rickard, 2012) after-before excerpts affects the duration of each item. In addition, a study can apply either standardised (Zentner, et al., 2008) or varied duration for

excerpts (Liljeström, et al., 2012). Since the number of musical excerpts is also related to the study procedures, the aim and the feasibility conditions must be considered as well as the musical resources employed.

The last point in music-emotion studies is about the *expressive* qualities of music (Gabrielsson and Lindström, 2010). Here the question is whether the emotional reactions to certain kinds of music are predictable, because of structural clues in the music itself. For some music theorists, the expectations, created by the structure of music, are considered as the principal source of emotional responses to music (Meyer, 1956; Trehub, et al., 2010). According to Västfjäll (2001-02), there are key clues helping listeners to perceive an intended emotional expression (also look, Juslin and Timmers, 2010: 462). Such music-structural factors such as ‘tempo, dynamic markings, pitch, intervals, mode, melody, rhythm, harmony, and various formal properties’ may enhance emotion perception (Gabrielsson and Lindström, 2010: 368). However, it may not be that simple to reach emotional arousal only through the intrinsically musical properties of the piece (Liljeström, et al., 2012), given that the relationship between felt emotions and musical features (Gomez and Danuser, 2007), and perceived emotions (Gabrielsson, 2001-02) has not really been comprehensively studied. Moreover, music is not the only agent in emotion induction. Emotion induction occurs on the interplay between musical, personal, and situational factors (Liljeström, et al., 2012; Gabrielsson, 2010). Otherwise, there is a likelihood that a piece of music would have caused the same emotional response for everyone in all situations, laboratory and otherwise. By ignoring the personal and situational features, we obstruct the pursuit of full understanding.

3.2. The Human Factor

The second central theme in the music-emotion research area, after music-related questions, concerns the role of human beings in the studies. This section hence reviews the interplay between musical and personal factors. Because of the idiosyncratic character of the experi-

ence of music, an emotional response is always experienced by a subject (Vuoskoski and Eerola, 2011; Robinson and Hatten, 2012). Then, the key question becomes 'who is doing the perceiving or feeling?'. In this regard, the current section interrogates the role and impact of participants and other individuals on music-emotion studies.

The person-related issues have been linked to 4 agents in music-emotion research domain: composer, performer (singer or player), researcher, and listener. It would be proper to argue that studying the role of composer and performer has been neglected in favour of the position of listener (Davies, 2010). As is true for the musical structure, several cues helping emotional perception are also relevant for the composer. Indeed, listeners routinely suppose that their emotional responses are in accord with the composer's intention (Simonton, 2010). Their intentions might be studied by applying historiometric perspectives, content-analytical and biographical information about their works and lives (Simonton, 2010).

Regarding the performer, it should be acknowledged on the one hand that music comes to our ears via the musician. However, it is also commonly reported that specific emotions experienced by performers might be communication channels to listeners (Juslin and Laukka, 2003). Yet expressing emotions may be more common for certain performers than others (Juslin and Timmers, 2010). On the other hand, the emotional rewards of music-making might have a hedonic motive which is generated by emotional experiences through performance (Woody and McPherson, 2010). Conversely, of course, performance anxiety represents the role of negative emotions in music-making (Kenny, 2010). Briefly stated, emotional communication via music performance and performers' emotions might represent a necessary perspective in music-emotion studies.

Next is the researcher him/herself in music-emotion studies. First, by selecting the methodology, the researcher may set the limitations, because each method enjoys its advantages and suffers from its drawbacks (Scherer, 2004). Using an adjective list for ratings, for example, assumes that additional adjectival terms are not required

(Gabrielsson, 2001-02). Similarly, ‘experimenter-selected stimuli’ is another preference against ‘self-chosen stimuli’. Moreover, the researcher may create a ground for *demand characteristics* and *strategic responding* within participants’ answers. *Demand characteristics* are cues conveying the experimental hypothesis to the subject; therefore, may induce hypothesis-consistent behaviour (Zentner and Eerola, 2010). In *strategic responding*, even though responses do not represent reality, subjects strategically respond to the music for a self-enhancing experience and social acceptance (Västfjäll, 2010). As these issues are not only bonded with the researcher but also with method and listener. I discuss them also in the section for ‘interactions between music-person-situation’.

Finally, the most prominent questions in music-emotion studies for the person-related issues are gathered around the listener. In the method section of any study, there might be information about the participants of the study. For example, Vuoskoski and Eerola (2011: 162) record,

‘The participants were 148 Finnish university students aged 18–49 years (77.1% females)’.

Before continuing, I will highlight a couple of points about that methodology.

In fact, there is nothing to be fixed. Hence these points do not imply any weakness. Yet, these are listed to make my analysis more concrete regarding the position of the participants:

- number of the participants,
- nationality and language,
- study level and subject,
- age,
- gender.

Even if it is not directly related to the quotation, other issues related to the listeners are:

- health status of the participants,
- initial mood and emotions,

- idiosyncratic relationships of the participants to music,
- cultural and religious beliefs,
- musical preferences,
- income and social status,
- musical training and music listening habits.

It is accepted that individual differences significantly contribute to musical emotion induction (Kreutz, et al., 2008). This effect is present in the quality, intensity, and frequency of emotions (Liljeström, et al., 2012); which makes the emotional reaction to music an individualised process (Gabrielsson, 2001-02). The response could vary according to the listener's age, gender, health, occupations, income, musical training, prior music consumption, music preference, personality, initial moods/earlier experiences, social status, religious belief, and nationality and culture.

In studying the musical emotions, listeners are expected to assign emotions to musical excerpts (Trehub, et al., 2010). This is the 'qualified listener/participant', and the unprepared listeners may miss, or misidentify, music's emotional character (Davies, 2010). In this approach, appropriate and inappropriate participants are discerned. Young listeners who are not capable of that assignment, for example, will be inappropriate. As Zentner and Eerola indicate (2010) one's limited awareness of own emotions and of the verbalization of emotional experience can alter the intensity of emotions at least for measurement. For instance, the rule of 'the right music for the right person in the right situation' (Gabrielsson, 2010: 569) perfectly suits with Aristotle's thought: 'If *the continent* properly listen to *the right music*, then they may acquire habits of *virtuous passion*' (Curzer, 2012: 13). Therefore, according to the age, there may be a need for developmental insight in emotion induction with music as well (Trehub, et al., 2010; Hargreaves and North, 2010). Similarly, the listener's health situation must be taken into account, especially when it affects hearing (Gomez and

Danuser, 2007). In addition, musical training (Zentner, et al., 2008; Egermann, et al., 2011), music consumption in daily life (Gomez and Danuser, 2007), and occupation, income, and 'social status' of the listener (Ok and Erdal, 2014; Gabrielsson, 2010) do have an impact on emotion induction. In addition, recognising the listeners' musical preferences (Rentfrow and Mcdonald, 2010), and initial mood and earlier experiences (Robinson and Hatten, 2012; Gabrielsson, 2001-02) may help the researcher, because of the idiosyncratic character of the emotional response. Hence, the listener's goals and motives become a part of the emotional response too (Sloboda and Juslin, 2010).

These kinds of differences require us to consider the personality of the listeners. In other words, the listener's identity and his/her memories, experiences, qualifications make each response unique. The effects of personality on the emotional response to music have been measured (Vuoskoski and Eerola, 2011; Rentfrow and Mcdonald, 2010; Shiota, et al., 2006), for example, by using the 'big five inventory' (Saucier and Ostendorf, 1999; John and Srivastava, 1999). Then, personality traits have been associated with emotional responses towards distinct types of excerpts (Liljeström, et al., 2012; Vuoskoski and Eerola, 2011). Similarly, music preferences are often linked to social class, age, and gender differences (Rentfrow and Mcdonald, 2010; Ok and Erdal, 2014). If emotion and personality are regarded as of cultural construction, it is reasonable to argue that culturally-inflected listening may arouse different emotions in different listeners (Becker, 2010). In return, there is a base for (re)constructing self-identity and a variety of feeling states through music (Denora, 2010). This base indicates the external dimensions of emotional response to music.

3.3. Environment-related Issues

The third emerging area in music-emotion studies, after music and person-related questions, represents the external effects, namely the situational perspectives. In a broader sense, it is the culture where the

study is situated, whilst, in a narrow view, it is the conditions that influence the experimental results. In this section, environment-related issues are contemplated in terms of the long-term cultural (or cross-cultural) understandings and the experiment-based settings.

Emotional responses are, for anthropologists, culturally specific and socially constructed (Garofalo, 2010). This is the reason why the 'cultural' background in music-emotion studies is so influential. In response to that, there is a need to consider both the cultural construction of music and the cross-cultural differences in uses, purposes, and meanings of musical expression (Becker, 2010). Just as the concept of 'qualified listener' assumes the participant's ability to rate his/her emotional response to music (Davies, 2010), a particular music listener image (the silent, still listener, paying close attention to a piece of music) is assumed by Western scholars (Becker, 2010). There is nothing wrong with this if it is intended to capture a Western listener's response. However, a piece of music may be evaluated in another way by different kind of listeners in accordance with, for example, their nationality and religious faith (Miller and Strongman, 2002). Therefore, if we are to measure the response, for example, to non-Western music, researchers must be aware of non-Western conditions.

As related to the social-psychological processes, preferences for certain types of music might be affected by the social representations of musical styles and situations. The link between the person (listener) and the environment (where listening happened) may reinforce the essence of the emotional response (Rentfrow and Mcdonald, 2010). Hence, conducting psychological, ethnomusicological, and sociological research in music-emotion topics may overcome a study's shortcomings by drawing upon diverse perspectives (Thompson and Balkwill, 2010).

In a restricted meaning of the musical representation, the conditions of the experiments should be regarded for measuring the emotional response. One of the tensions that experiments reveal is between 'natural' and laboratory-based settings. For music-emotion research,

many studies call the participants to a laboratory, designed by the researcher (Lepping, et al., 2015; Liljeström, et al., 2012; Vuoskoski and Eerola, 2011; Hargreaves and North, 2010; Gomez and Danuser, 2007; Kreutz, et al., 2008). While *other* studies collect data in concert halls, outdoor stages (Zentner, et al., 2008), and during daily life activities (Sloboda, 2010) including driving, shopping, eating (Liljeström, et al., 2012), and attending church (Miller and Strongman, 2002). Musical emotions, of course, are not dependent on specific locations –except for special concert experiences (Gabrielsson, 2011)– and occur in a variety of locations (Liljeström, et al., 2012). However, situational factors might affect the listeners' responses by altering the intensity of the response (Juslin, et al., 2008; Hargreaves and North, 2010). Hence it is necessary to have representative samples of these situations (Juslin, et al., 2010).

Next, it might be questioned whether participants listened to music alone or with someone. In other words, participants in music-emotion studies are tested either individually (Vuoskoski and Eerola, 2011; Kreutz, et al., 2008; Gomez and Danuser, 2007) or in a group (Zentner, et al., 2008; Miller and Strongman, 2002). It is often argued that music listening was more stimulating alone, possibly on account of concentration on the music and lack of social feedback (Egermann, et al., 2011). Moreover, it is also reported that *happiness*, *pleasure-enjoyment*, and *anger* occur more frequently during social interaction among friends; although, *nostalgia-longing* and *sadness-melancholy* manifest often in solitary settings (Juslin, et al., 2008).

The measurement procedures of emotional responses are also another matter. It is a variable for the listeners receiving the musical stimuli via earphones, loudspeaker, or in an acoustic room. This is not only about technical equipment and standards but also related to how music listening is evaluated by the listener by means of situated hearing (Becker, 2010). Using CD players operated by the listeners themselves (Kreutz, et al., 2008), presenting instructions visually and aurally (Lepping, et al., 2015) are simple but effective methods of experimental design (Harg-

reaves and North, 2010). However, aligned with the variety of listening experiences, it should be accepted that artificial conditions may produce an artificial emotional response (Hargreaves and North, 2010).

Specific methods are needed therefore to measure differentiated emotional responses (Juslin and Sloboda, 2010b) in terms of the sub-components of emotion (Chapter 2.1). Retrospective emotion ratings, real-time ratings, physiological measures, interviews, free descriptions, and diary studies are just a couple of the methods for the many contexts of music-emotion studies (Juslin and Sloboda, 2010a; Gabrielsson, 2001-02). However, since each method has its strengths and weakness, it is crucial to use the right method for the study (Sloboda and Juslin, 2010; Scherer, 2004; Juslin, et al., 2010). So we might conclude that a researcher is not free to choose whatever methods s/he would like to use, but is restricted by the requirement to find the proper tools for the research. In short, this demonstrates the dominance of 'situation' during the research process.

3.4. Interactions between Music-Listener-Environment

The last question of the current section is about more comprehensive issues than music, listener, or situational aspects. This is the broad and multi-faced aspect of *music-emotion studies* seen in relation to the integrated components of music (Konečni, 2010). For any experience of emotions through music, the interplay between the music, the person, and the situation must be considered (Gabrielsson, 2010). In this context, this section highlights the discrepancies in much music-emotion research, attributable to the varied study domains. By highlighting important concepts like *demand characteristics* and *strategic responding*, the section reviews the relationship between emotion theories and the measurement of emotions.

First, it must be recognised that music-emotion studies are interdisciplinary –for instance, spanning philosophy to neuroscience. Many researchers from different disciplines investigate the musical emotion induction and perception (Västfjäll, 2001-02). Though emotion is pri-

marily regarded as a psychological concept, with its focus on mental processes and behaviour, music-emotion researchers often also speak the languages of philosophy (Davies, 1994; Robinson, 2005), musicology (Meyer, 1956), psychology (Sloboda and Juslin, 2010), neurobiology (Peretz and Zatorre, 2005), anthropology (Racy, 2003), and sociology (Denora, 2010) within specific historical, individualistic, social, and cultural perspectives (Juslin and Sloboda, 2010b).

Considering the practical value of music-emotion studies, there are varied enquiry methods in the interrelated fields of religious studies (Bradshaw, et al., 2015; Miller and Strongman, 2002), music education (Hallam, 2010), music therapy (Thaut and Wheeler, 2010), health and well-being (Hanser, 2010), film music (Buhler, et al., 2000), and even marketing (North and Hargreaves, 2010). Moreover, within the various scientific disciplines and emotion models, there are prevailing methodological approaches in music-emotion studies such as self-report, biological, music analytic, theoretical, clinical, and developmental etc., (Eerola and Vuoskoski, 2013). Accordingly, the 'Interdisciplinary field of popular music studies borrows variously from a number of fields such as sociology, political economics, communication, musicology, ethnomusicology, and cultural studies' (Garofalo, 2010: 726) and this requires to be familiar with the nomenclature of many disciplines. More concretely, it might be reasonable for 'neuroscientists to use functional neuroimaging to investigate the neural correlates of emotion with music' (Koelsch, et al., 2010) for brain structures (Koelsch, 2014; Perlovsky, 2010). Even if it has a potential for using music in the treatment of e.g. neurological disorders (Koelsch, 2014), its value remains, however, uncertain in educational settings. However, it does not mean there is a problem for neuroscience. Contrarily, it is meaningful in its paradigm. It means, there is a need for a perspective to understand the research properly in terms of its field.

Furthermore, the theory of emotion which dominates the measurement of the response is one of the factors in the music-emotion studies today (Sloboda and Juslin, 2010: 188). How emotion is con-

ceptualised is crucial in a study, because of the absence of consensus on the definition of the term of emotion (Chapter 2.1). The present research, for instance, is designed with the 'musical emotion' of the 'component process model' (Scherer, 2004), sub-components of which are cognitive evaluation process, behaviour preparation, physiological arousal, motor expression, and subjective feelings (Egermann, et al., 2011). Hence, measuring the emotional response to music might be built upon these sub-components (Juslin and Sloboda, 2010b).

The discrete emotion model (Ekman, 1992) and the two-dimensional circumplex model (Russell, 1980) are commonly used in music-emotion studies (Eerola and Vuoskoski, 2013). However, employing these models to assess music-induced emotions is sometimes criticised, because these models were not developed in the fields of music (Vuoskoski and Eerola, 2011). Given the disadvantages of applying 'everyday' emotion theories to an aesthetic context, like music, Zentner, et al. (2008) launched the Geneva Emotional Music Scale (GEMS), domain-specific emotion model, for the measurement of music-induced emotions.

It seems that finding the proper methodological approach for the purpose of any study in the field of music-emotions is the key. Self-reports, for instance, might be more relevant for psychological studies (Västfjäll, 2001-02), whereas they could be less suitable for physiological investigations (Hodges, 2010). Measuring emotions with verbal descriptions is sensitive to limitations like demand characteristic, self-presentation bias, one's limited awareness of emotions, and difficulties in the verbalization (Gabrielsson, 2001-02; Zentner and Eerola, 2010). Demand characteristics may convey the hypothesis to the participants, and direct their answers and behaviours (Västfjäll, 2001-02; Västfjäll, 2010). Similarly, self-presentation biases are affected by participants' tendency to feel uneasy about reporting states, which may lead to strategic responding to what they believe is desired (Gabrielsson, 2001-02). Moreover, with inter-individual differences in vocabulary, linguistic capacity, and one's difficulty in awareness of

emotions, verbal feeling reports are regarded as the approximation of the listener's experience (Zentner and Eerola, 2010). These limitations may be tolerated in psychological studies, while not advantageous for physiological research. In addition, the neurobiological approach, for instance, might be better for understanding brain functions and their limitations (Peretz, 2010); just as the ethnographic approach is more appropriate than other approaches for interpreting the cross-cultural differences of musical expression from anthropological perspectives (Becker, 2010). The dilemma of which method is proper for what kind of study is precisely outlined by Scherer (2004: 250):

It is essential that researchers in this area realize the complexity of the underlying issues and attempt to develop and choose research instruments that are up to the task, rather than choosing convenience or tradition. Many of the established techniques have serious shortcomings [...]. Inappropriate measurement instruments not only carry the danger of missing essential aspects of the phenomenon or obtaining biased data, they also prevent accumulation and comparability of results in a domain that critically depends on coordinated efforts for its further development.

The current research conceptualises these issues within the 'interactions between music-person-situation' framework, since this is not limited to one aspect of the study at a time but involves more than one element simultaneously. So this section implicitly asks: How can Religious Education benefit from the insights and findings of music-emotion research? This question is further discussed in Section 3.4 below. To my knowledge, music has not been studied with regard to its possible emotional locus in RE. In music education studies (Hallam, 2010), RE receives negligible treatment. Similarly, the religious studies perspectives in Miller and Strongman (2002) and Bradshaw, et al. (2015) do not accord education adequate attention. There are a couple of works on how music might be part of Islamic RE (Berglund, 2008; 2014; Babacan, 2019), however, their focus is not on the emotional power of music. Accordingly, any attempt to use music in relation to its emotional power in

RE ought not to accept previous conceptions developed out of other disciplines. A new conceptualisation must be created in accordance with the principles of effective RE: that is the purpose of the present research.

3.5. Evaluating the Western Literature

Up to this point, I have discussed the role of musical, personal, situational, and interactional factors in the music-emotion research field. Rather than simply assimilating these themes into the present research as they are presented in the field, I will discuss the relevance of the enquiries in the music-emotion research field for educational theory and practice. I will stress the connection between the context of research and its possible implications for educational settings, with a specific focus on music-emotion-situation relationships. Then, I will reflect the rationale of the research by correlating the trends in the literature with the purposes of this research. The review of music and its emotional functions can help to locate music as a powerful language for engaging students in complex thinking-feeling processes, that can be directed, I believe, towards non-musical functional-educational ends (Thaut and Wheeler, 2010).

Research and Education: First, I restate the lack of proper objectives in the music-emotion research field for educational purposes. Before illustrating that claim, I must state again that there is nothing misguided in the aims of the music-emotion studies. What I would like to highlight, however, is that the objectives of that field may not be appropriate for educational applications. Studies of emotions in education are infrequent and relatively new (Zembylas and Schutz, 2016), and musical emotions are mostly considered in the context of music education (Hallam, 2010). Consequently, any study examining musical emotions in the context of Religious Education needs a different kind of rationale, one which stems from the theory and makes connections between methods and data in relation to that subject (Kuby, 2016).

In other words, the findings within the existing literature may be beneficial for my 'research design' because many studies are related

to generic methodological (Kreutz, et al., 2008; Vuoskoski and Eerola, 2011; Nair, et al., 2002) and theoretical issues (Juslin, et al., 2008; Västfjäll, 2001-02; Juslin and Laukka, 2003), though these results may have a limited effect in the shaping of educational research and the interpretation of its findings. However, just as Liljeström, et al. (2012) frame emotional reactions to music in relation to their selected musical, situational, and individual factors, so might similar steps be taken for classroom-focused enquiries. Zentner, et al. (2008: 513) offer further reassurance when they argue that 'a measure that provides a nuanced assessment of music-induced emotion may be useful to all professionals interested in evaluating the emotional effects of music'. In the educational area, therefore, that general attitude might be also beneficial to the assessment of music's emotional effects in educational environments.

Existing studies tend in general to highlight recommendations for future scientific enquiry, rather than elaborating practical implications and uses (Lepping, et al., 2015; Tesoriero and Rickard, 2012; Webster and Meir, 2005; Juslin, et al., 2008). Nevertheless, there remain some perspectives in the literature by which specifically educational research might be furthered. In Gomez and Danuser (2007), for instance, the roles of musical structures in the affective space are examined to modify behaviours for therapeutic purposes. Similarly, religious music as a socioemotional resource (Bradshaw, et al., 2015) and music functioning as prayer (Potvin and Argue, 2014) have been studied in relation to the promotion of mental health and wellbeing. The potential importance of music-emotion research for wider society is illustrated in aspects of music education (Hallam, 2010), music therapy (Thaut and Wheeler, 2010), general health (Hanser, 2010), film music (Cohen, 2010), and marketing (North and Hargreaves, 2010). Hence the current research could see RE as the new link in the chain of addressing real-world questions related to the possible benefits of music-emotion research for contemporary society.

Music-listener-situation restrictions: Another divergence between the present research and the existing literature (without preju-

dice to either) can be seen in looking at the previous studies of music, listener and environment settings. In music-emotion studies, as we have suggested, the dominance of Western music is widely accepted (Västfjäll, 2001-02; Zentner, et al., 2008). This may be methodologically proper in the Western context; however, it is not diverse enough for conducting a study within a non-Western context. This research uses Turkish stimulus material. Thus, there might be questions on the generalizability of any findings that emerge from it. Furthermore, the current research is not aspiring to be innovative in terms of the questions on pre-selected and participant-selected excerpts, and the quantity and duration of the chosen stimulus experiences.

In relation to person-related issues in music-emotion studies, the current research prioritises listeners' positionality and receptivity against composer and performer positionality (Davies, 2010). One of the assumptions of the present research is that emotional response to music varies according to listeners' cultural background. Hence, it measures the emotional response of two typical groups from Turkey and Scotland. Other independent variables (gender, health, musical training, music consumption, music preference, initial moods, social status, and religious belief) are out with the researcher's control and this might be regarded as a weakness for the present research. Likewise, most music-emotion studies have 'samples of convenience' (predominately, student populations from Western universities) and a narrow selection of musical genres (i.e., classical, jazz, and film soundtracks) (Eerola and Vuoskoski, 2013). This may also reflect the researcher's role in the study.

The researcher's effect in any study, including this work, might be questioned, inviting us to think about interactions between music, listener, and setting. The main methodological approaches in the music-emotion field are recognised to be (but not completely limited to) self-report, biological, theoretical, clinical, and developmental studies (Eerola and Vuoskoski, 2013). Moreover, discrete, dimensional, and music-specific emotion models are used in the field (Zentner, et al., 2008). Additionally, music-

emotion studies are divided into laboratory designed and fieldwork contexts. One of the conceptual distinctions in music-emotion research is that between perceived and felt emotions (Gabrielsson, 2001-02). Hence, there are many sub-classes in the field. For instance, a study applying the biological approach, with a discrete emotion model for perceived emotions in laboratory conditions, may have not replicable for a study that uses self-reports with a music-specific model for felt emotions in a fieldwork context. This may be to observe that the music-emotion field is too broad, and its sub-classes too strict. These features might be beneficial for a detailed account of information, but not for generalizability. In the existing literature, it is not possible to find a study that covers *all* aspects of music-emotion research. This is neither feasible nor desirable. Furthermore, it is so far unfortunately not possible to talk about an 'educational' approach in the field to any significant extent (Hallam, 2010). Thus, a study analysing musical emotions for their educational implications and impact needs to invent its own methods by selecting suitable components from projects conducted in fields other than education.

4. Religious Education, Music, and Emotions

One of the propositions for this research is that Turkish music can arouse certain pre-determined feelings in listeners. In Chapter 2.3, I explained that the Turkish RE system is in need of improvement in relation specifically to the inclusion of emotions in classroom activities that better facilitate teaching and learning processes for values education. However, I am of course not able yet to convince the reader that (Turkish) music, with its emotional power, can provide this for the Turkish RE system. The literature reviewed within the previous sections cannot vouchsafe such claims. This may be in part because the focus of that literature of course is not on educational experiences, except perhaps in the context of Music Education itself. It is also clear that there is no research or professional consensus on the function of emotions in values education within RE.

Unfortunately, in contrast to emotions in the context of education (Zembylas and Schutz, 2016; Pekrun and Linnenbrink-Garcia, 2014) and particularly Music Education (Hallam, 2010), the field of RE suffers from the scarcity of studies on music and emotion. Yet, in a restricted context, there are a couple of preliminary studies examining the role of music in RE. With an empirical approach, Berglund (2008, 2014), for instance, presents the role of music in Islamic Religious Education in Sweden, through classroom observations and interviews with teachers. Similarly, Babacan (2019) reports the findings of his experimental study on using music as a teaching tool in RE, and its effect on academic achievement, attitudes, and retention of knowledge, in the Turkish context. Conversely, from a theoretical perspective, Yorulmaz (2012) supports using religious music as a tool for RE. Likewise, Abraham (2015) discusses the pedagogical aspects of Christian hip-hop music in the South African context. Similarly, Power (2007) indicates the place of music for the education of Muslims in the context of values education in an Australian Islamic School. In particular, Brown (1991) highlights the potential of music in RE for pupils with special educational needs. Furthermore, Stern (2004) provides a practical overview of using music to create inclusive RE.

In the discussion of the value of music in the context of Religious Education in schools, there are two ways of framing the questions; one is conceptual, the other is practical. The conceptual question asks ‘what is the connection between music and the moral and *spiritual* life, and what does music contribute to it, regarding the qualities of music?’ The answer to this question reaches beyond the subject of school-based RE. Thus, the question is paraphrased for the current research as: Why music is important for RE and whether such *qualities*, embedded in music, are at all appropriate for the teaching of RE? Accordingly, any school subject which considers *moral education*, should regard the potential music may serve. (As a reminder, RE courses are named, for example, Religious Culture and Moral Education, in Turkey; and Religious and Moral Education (for non-denominational schools), in Scotland.) Hence, RE is one of the primal areas to interrogate the implementation opportunities.

For the practical question, in a strict connection with the conceptual question, then the related query is to interrogate what part music might play in the practice of RE for teaching and learning? Similar to the conceptual question, these practical considerations are not specific to RE, but the underpinning principles of using music in RE are also of value for any school subject. Yet, for the purpose of the present research, the context is limited to the perspectives of musical interventions in RE. Regarding music and RE for practical concerns, three further areas emerge for additional study: music for learning and teaching, music for feeling, and music for psycho-motor development.

Accordingly, there is a definite need to explain how music and its emotional qualities facilitate the education processes for teaching and learning in RE. Indeed, there is no reason to believe that music is the only way to access (and to study) emotions in schools since studying, experiencing, and appreciating emotions for meaning-making are present across various disciplines (Solomon, 2008: 204). However, because of the present research's understanding of 'musical emotion', which comprises cognitive, affective, motivational, physiological, and expressive processes (Scherer, 2004), music is thought as one of the ways for incorporating thinking and feeling in the context of RE. This integration might be also observable between emotion and cognition (Mercer, 2019; Yob, 1997) and between feeling and reason in the context of moral development (Ferrari and Okamoto, 2003). Furthermore, even though studying cognition and feeling separately might be theoretically rewarding, students' intellectual, affective, or behavioural responses to the musical material in the context of RE are practically intertwined. Consequently, the concept of emotion is used to incorporate all these three areas in the present research.

4.1. Conceptual Question

There is a long discussion on the effects of music on moral development and character, and on the moral implications of music, since Plato (Carr, 2006a). In the *Republic*, Plato (2012) argues for the effects of the various Greek musical modes for moral superiority in promoting co-

urage and self-discipline. Plato simply says that music is a kind of ordered affect-charged auditory experience and some musical forms are more conducive for soul; and a healthy human character should reflect the harmony of an appropriate form of music (Carr, 2006a). That is to say, music has a moral educational significance (Portnoy, 1949).

Music is widely credited as an experience/activity that comprises moral/spiritual value, because it is regarded as having a powerful formative influence on soul and sensibilities (Carr, 2010a, 2010b). The capacity to move the listeners emotionally, *feeling through music*, is the moral power of music. The moral virtues can be influenced by such emotional experiences: understanding moral situations by empathizing, comprehending by exposure to feeling, or granting insight into meaning by the emotional encounter (Carr, 2006a). As music can appeal so directly to sensibilities, RE should use this opportunity (Stern, 2004).

While the concept of 'music alone' (pure or instrumental music) is philosophically acceptable, musical works and activities exist in a context. This context includes individual and collective experiences within a social, cultural, and historical background, personal memories, state of mind at the moment, and interpretations. These contexts with moral and spiritual potentials are integrated with the experience of music (Yob, 2006). Furthermore, rather than considering thinking/cognition and feeling/emotion as separate concepts, contemporary neuroscience suggests integrating them (Mercer, 2019). With the interconnected role of emotions and cognition in learning processes such as memory, decision making, motivation, and creativity (Immordino-Yang and Damasio, 2007), musical interventions in RE might be the response to Immordino-Yang's call, who invites teachers to find ways to empower the emotional aspects of learning in education (Immordino-Yang, 2016). Thus, religious educators may establish the emotional connections between students' own experience and the teaching subject, that facilitates reflection and learning (Mercer, 2019).

In the Islamic understandings of music in a Western context (Sweden), music is an important part of RE, but not an uncontested element;

regardless of that it supports RE themes thought in the classroom and it gives variation to the education (Berglund, 2008). In Islamic RE, using music in singing to enhance students' learning experience is esteemed (Berglund, 2014). Even those who, oppose the use of music in schools because of their religious convictions, admit its power on listeners. As they argue, music distracts people from religious duties. However, this is not an intention specific to the music itself. Conversely, music may be used in the religious realm for the benefit of RE (Berglund, 2008).

The religious interpretations might be discerned through the teachers' attitude to music-making in the classroom conditions. Their attitudes widely range from a complete ban of all musical instrument and genres to the employment of various instruments and genres such as hip-hop and pop. In Sweden, for instance, some Muslim schools use a range of musical instruments, while in another school 'worldly music' and guitar-like instruments are forbidden (not only for RE but also for all student activities) (Berglund, 2014). Thus, due to the various religious attitudes to music in Islam, some teachers can experience difficulties in teaching RE with music to Muslims. Therefore, for Muslim students, it is necessary to find sensitive approaches to teach with music, that are sympathetic to Muslim cultures and values (Power, 2007). However, most non-Muslim teachers are unaware of these issues (Harris, 2002).

The lyrics of a song, for instance, is the most crucial aspect in the Islamic context to decide whether a song should be part of the school context. The lyrics must be 'permissible' in terms of the religious rules. In this regard, the genre has a minor role in this decision process. A genre would not be promoted if the lyrics are not beneficial for the students. The values and knowledge expressed in the lyrics are a major concern. Yet, for religious musical forms such as hymns, prayers, and chants, lawfulness or permissibility may not be discussed in the classrooms because of the endorsed traditional Islamic principles in these forms (Berglund, 2014). However, the pedagogical concerns still must be valid for these musical forms.

It can be argued that, to exploit this advantage, a relatively new musical form has emerged among Muslims: Halal-pop. This conceptualisation clearly implies that pop music is not halal. Halal-pop is a musical genre that uses Islamic messages and themes in its lyrics, in contemporary and popular Western-style music. It highlights the relevance of Islam to contemporary Western-youth culture in various modern musical genres such as hip-hop, rap, pop, rock etc. It might be seen as the effect of customer culture in the everyday life of Muslims (Morris, 2013). For Morris, there are three necessary features of such music: made by Muslim musicians; containing self-conscious Islamic or Muslim subjectivities; and has a singular, or at least significant, orientation toward a Muslim audience and consumer market (2013: 133).

In a similar vein, hip-hop music in South African Christian culture is utilised to communicate beliefs and values to young audiences in a form of religious pedagogy. Due to hip-hop's pedagogical elements such as encouragement of creative verbal self-expression, stressing individual experiences and commenting upon society, and the mimetic aspects of hip-hop culture, this music presents musicians as role models and expresses religious identities of various social communities (Abraham, 2015). However, it does not mean musical works in these forms (religious genres and halal-pop) are always pedagogically apt for educational practices.

Apart from general musical practices of RE, the role of music in RE is also discussed in the context of pupils with special needs (Brown, 1991), and students who learn better with aural activities (Yorulmaz, 2012). Music at least supports the communicative dimension of RE, where music allows all members of the RE community to engage in a form of dialogue (Stern, 2004). In addition, unfortunately, music is often regarded as a subject for the 'able child' (Brown, 1991). However, when working with musical material in RE, students' emotional and intellectual responses to music challenge the determination for ability in musical practices (Stern, 2004). As musical expression extends both

emotional and intellectual experiences, music can help students to know, to express, to communicate, and to extend their sensations and feelings, regardless of their ability. Moreover, music, as a factor of sensory development, an emotional outlet, as a way of socialisation, and as encouraging awareness of cultures and religions, supports students in RE. Therefore, musical experiences in RE can contribute to the pupils' integration of mind, emotion, and body in various ways (Brown, 1991).

Musical practices are not only relevant for the context of RE, but also used with numerous purposes in religious rituals, cultural transmission, communication, advertising, and marketing (Babacan, 2019). However, while moral and educational aspects of music are recognised (Carr, 2006a; Yob, 2006), the religious pedagogical uses of music have been understudied in the field of educational studies (Abraham, 2015). As the influence of music is well evidenced in many fields including education subjects (Babacan, 2019), the objective of the present research is to discuss its benefits in the context of RE.

4.2. Practical Question

In practice, listening to music, singing, and music-making are the most preferred activities in the RE classrooms (Berghlund, 2008). Musical materials in RE can open new paths in the experience of religion. In this regard, music does not only facilitate deeper understandings of religious material, but also provides opportunities to express feelings and thoughts (Babacan, 2019).

For celebrating *mawlid* (the Prophet Muhammad's birthday), for instance, pupils have an opportunity to perform religious music, for which they must spend weeks in practice. During these works, they do not only learn to perform well, but also learn the knowledge (expressed in the musical extracts), build an emotional connection with the subject (Prophet Muhammed), and rehearse for presenting (to be familiar with the behaviours) (Berghlund, 2014). In other words, it brings the intellectual, affective, and behavioural responses of stu-

dents to the musical activities. By singing about Ramadan as well, pupils' religious and cultural identity is consolidated by Ramadan. Hence, using songs is not only about learning concerning Ramadan in a joyful way (offering different ways of learning), but also about making religious knowledge relevant to youth culture (Berglund, 2008).

When music takes part in the classroom for celebrating festivities, music and singing are connected to the telling of narratives, to which Islamic history is related. By using music videos (of popular singers) in RE, the teacher assumes that the musical material is a bridge between the content of the RE subject and the life situation of the pupils, therefore this material and method support students' Islamic identity (Berglund, 2008). In this regard, musical activities are not only for teaching history, but also for pointing towards the future. The aim is making the students concerned about good behaviour.

Apart from the role of music in celebrating festivities, complementing narratives connecting to Islamic history, and being part of worship; both teacher and students get benefits in RE by means of musical activities. Singing is a way of giving variation to the teaching of RE, therefore it enhances the learning processes of students. (Berglund, 2008). Besides, as music in RE offers an effective learning and teaching environment, it enhances teachers' effectiveness as well as students' experience of understanding of the educational material (Babacan, 2019). Hence, musical materials should be adequately used in RE. Even in some cases, when students do not understand well the meaning of a musical extract of a foreign language, it is not a problem to learn the text by heart. The repertoire of the songs to be used in RE must be sufficiently wide for all pupils to find a song to sing and listen to (Berglund, 2008). Thus, rather than having a complete list of musical extracts, the teacher must have the flexibility to adopt different material for RE.

Beyond the Islamic perspective, using music in connection with particular occasions, times, and festivals of religions can improve RE skills, in relation to cultural and spiritual development (Stern, 2004). With appropriate musical material, a lot of cultural and religious knowledge can

easily be brought into the RE classroom and singing is an effective way of transmitting this knowledge. Culturally sensitive musical material can provoke students' thoughts when they are engaged with the task (Power, 2007). The lyrics of the chosen material, for example, are crucial for teaching, and even make the musician a role model in the eyes of students. As long as music helps students to learn cultural and religious matters (Berglund, 2008), teachers should include music in their teaching.

Stern (2004) provides a practical overview of the use of music in RE by which he merges the activities and the expected outcomes. According to Stern, for *investigation*, RE classes should employ relevant questions about musical activities to gather information for the evidence of religious traditions. For *interpretation*, music can strengthen the meaning of the class subject for the pupils. For *reflection*, music can address feelings, relationships, experience, beliefs, and practices. For *empathy*, considering the thoughts, feelings and values of others, pupils may explore the links between values and commitments by analysing unfamiliar music. For *evaluation*, RE can utilize 'positional music', promoting a particular viewpoint, to discuss the issues of religious significance. For *analysis*, exploring distinctions and common themes, and comparing the music of different traditions might be used to distinguish opinions, belief, and facts of different religions. For *synthesis*, students can select, or compose, and perform music for a particular situation or classroom subject so that they can bring ideas and feelings together for linking features of religion in a coherent pattern. Ultimately, using music in RE is a kind of *application*, that students make an association between religious thoughts and individual, social, and situational perspectives (Stern, 2004: 109-111).

For a method inviting learners to care about the teaching subject of RE, by integrating feeling and learning, Mercer (2019) calls religious educators to engage emotions in teaching-learning context, rather than emotional manipulation. Which method can grant this experimentally? According to Brown (1991), in the classroom level, the role of music in RE for learning is inseparable from students cognitive, affective,

and behavioural responses. For learning, this role provides involvement (willingness to become engaged in a task), awareness (understanding of some elements of the activity), responding (experiences with emotional and intellectual investment), discriminating (ability to make judgements and evaluations), and communicating (using music to 'speak' to others). Similarly, according to Babacan (2019), students' academic achievement level is better with the use of musical material in RE, in comparison to teaching without music. Furthermore, when students learned with musical activities, their knowledge retention period is extended. Additionally, this group has a more positive attitude for RE. Consequently, using music in RE directly influences students' interest, participation, and motivation in the course (Babacan, 2019). Since music contributes to the intellectual, mental, emotional, cultural, social, and psycho-motor development of children (Yorulmaz, 2012), there is no reason for RE to ignore it as an educational method.

In establishing a quality learning environment in RE, musical activities should reflect and express the values of cultural and religious knowledge, background knowledge (readiness of students), inclusivity, connectedness, and communication (Power, 2007). As music is present in students' lives, using music in RE is the teacher's response to students' learning needs (as well as to the community where the school is located). However, further curriculum and pedagogical development is needed in order to using music creatively in RE. For the musical material, for instance, there must be a connection to expected outcomes of the themes discussed in the classroom. Moreover, the material must be appropriate for the developmental and educational level of the pupils (Babacan, 2019).

Music is one of the methods that can make RE lessons more effective, enjoyable, and productive. In particular, pupils in the early years are inclined to learn through melodic patterns (Yorulmaz, 2012). Accordingly, using music to teach religious concepts can increase student concentration and promote relatively easier and more lasting learning. Moreover, music in RE may provide a more enjoyable teaching-learning environment and enhance positive attitude development for

the teacher and the RE course. This is because musical activities support students with both the intellectual and affective experiences of education (Berglund, 2014; Yorulmaz, 2012). Thus, music in the classroom conditions is operational for RE, because it facilitates learning owing to its capacity to communicate knowledge; it enables emotional connectedness of students to the RE subjects through the affective responses, the celebration of religious festivities, and related narratives.

5. Meaning-Making Through Music

*'As cognition without emotion is vacuous,
so emotion without cognition is blind'*
(Scheffler, 1991: 4).

Even if Turkish music *can* persuade the listeners to feel certain emotions, for the current research this is not enough to justify the inclusion of music in RE, unless 'emotion' is conceptualised within the meaning-making processes, and linked to the life of listeners (students), within this distinctive subject area. Hence, the current section will examine the roles of musical emotions for students in the meaning-making processes of education.

Meaning-making is a process of understanding that people experience a dynamic relationship with their social and cultural environments (Gustavsson, 2020). That means meaning-making develops and changes according to the time (life) and experience of the individual. It is strictly connected with teaching and learning because new experiences and knowledge are meaningful in terms of our present reality (Ignelzi, 2000). Accordingly, meaning-making involves two aspects: intentionality (aboutness) and normativity (correctness):

Intentionality is sometimes called 'aboutness' and signifies the fact that things that are meaningful extend beyond themselves by referring to or pointing to something else. Normativity refers to standards of 'correctness', which is to say that meaningful actions are subject to normative appraisal (Zittoun and Brinkmann, 2012: 1809).

This brings to the fore the role of emotions and identity in the learning process: when students actively engaged in making sense of the situation, material, or relationships, they interpret these *objects* with the help of cultural resources and similar situations they experienced (Zittoun and Brinkmann, 2012).

For analysing the role of emotions in the meaning-making process, Nussbaum (2001) highlights that as an individual's emotions have a particular object, the person has an *intentional* relation to the object. In view of that person, therefore, the object is *connected* to certain characteristics and beliefs. Hence, these intentional perceptions and beliefs hold a value or a judgement of the object for the person (2001: 27–31). In evaluative judgements, a particular emotional reaction to the object reflects its 'aboutness' (Manni, et al., 2017). For Nussbaum, emotion judgements are a sub-class of value judgments (2001: 30). Hence, emotions are relevant and an inseparable part of students' meaning-making processes and a foundation for values (Manni, et al., 2017), because emotions and values are part of complex, coherent cognitive –evaluative processes.

To this end, now I will first identify the personal and social dimensions of emotional experience. Secondly, I will evaluate the musical emotions in order to understand and communicate their significance in general meaning-making and cognitive processes. Third, I will explain the importance of music for learning and behaviours, according to its connection between feeling and cognition. In this way, this project intends to show how music might be meaningfully situated in values education practices of RE teaching, harnessing its emotional and cognitive power to students' meaning-making endeavours.

5.1. Emotional Experience within Personal and Social Dispositions

Although emotions are subjectively experienced, the conceptualisation of emotion is theoretically crucial for the present research. As it is clearly presented within the component-process model, emotions

are multi-dimensional phenomena (Scherer, 2004). Even though felt emotions (and self-reports of feelings) were prioritised in the previous sections due to the practical convenience to the study, the components of emotion are affective, cognitive, motivational, physiological, and expressive processes –all of which may be reflected onto students' excitement about/responses to learning (Pekrun, 2016). In this regard, component-process modelling is dominant for the present research. Accordingly, self-reports for feeling experiences of students (Chapter 5), the cognitive aspects of perceived emotions in teachers' views (Chapter 6), and implication of the current research (Chapter 7) are grounded within this theoretical conceptualisation.

Musically induced emotions, namely *felt emotions*, may be an experience of a single individual, whereas *perceived emotions* and the connections between emotions and meaning-making, identity, culture, and society encircle listeners. This is known as the 'bio-cultural approach' (Davies, 2011: 30), highlighting emotion to access the link between the body and the social world (Lyon and Barbalet, 1994). It is similar to Lazarus's 'rational-motivational-cognitive theory'. For Lazarus, emotions emerge through person-environment interactions; but they are not exclusively produced by the environment or by individuals (Lazarus, 1991). In this context, musical emotions might be regarded as socially responsive phenomena, rather than as something that starts and ends exclusively within the individual (Kullenberg and Prambling, 2017). This is not to diminish the role of the listener in emotional response, but moves beyond an individualistic paradigm, highlighting the situatedness of emotional experiences in complex and systematic relationships. Thus, multiple and interconnected factors co-create individual and collective experiences in specific environments (Day and Harris, 2016). Accordingly, it might be argued that the relationship between the listener and society forges the identity of a person from biological individuality and social values (Davies, 2011).

The elevation of socially constructed emotions helps to clarify the social-historical contextual constraints and affordances of emotions in education by representing them within classroom transactions. With personally enacted emotions, the personal goals, standards, and beliefs of education-stakeholders emerge during transactions (Schutz, et al., 2016). In music-emotion studies, regarding the social construction of emotion and identity (Garofalo, 2010; Becker, 2010), 'environment' affects the listeners –even, for instance, for musical preferences and the disclosure of emotional response (Thompson and Balkwill, 2010; Denora, 2010). Rentfrow and McDonald (2010) claim that music preferences and personality are related. They argue that knowing the types of music to which subjects prefer to listen to may contribute to understanding their characteristics and potentially signify their status, social class, sex, gender, and age in certain groups. Similarly, because of the social representations of various musical styles, and the fans of a style, listeners see themselves (or would like to be seen) in the ways that confirm they have the same values, attitudes, and beliefs as other listeners and fans. Briefly, it seems that both the personal (the psychological qualities associated with music) and the social (specific attributes to music in culture) factors are at work in music preferences (Rentfrow and McDonald, 2010: 683). Therefore, response to music listening, including meaning-making, is simultaneously a matter of personal impression and interpersonal relationship (Kullenberg and Prambling, 2017).

In the context of religious experience, it has been argued that religious music can trigger that kind of experience –but this is, at least partially, a culture-dependent phenomenon (Demmrich, 2020). In terms of neuro-psychological explanations, specific musical features do seem to be transcultural triggers of religious emotions and experience (Schumaker, 1995 in Demmrich, 2020). In other study, however, thinkers from the cultural-psychological position argue that it is music originating from the cultural-religious context of the listener that elicits religious experience (Miller and Strongman, 2002). Moreover, it seems also to be the case that the listener must cognitively appraise

his/her subjective feeling as a *religious* experience for this to happen. For the interpretation of the musical experience as a religious experience, the individual should be informed about the meaning of his/her emotional response, before music listening occurs (Demmrich, 2020).

These views are similar to the internal and external explanations for musical emotions in the extensive music-emotion literature. The internal perspective aims to explain the affective properties whereby music activates the underlying mechanism and generates emotions in listeners. The external perspective, by contrast, is concerned with perceived emotions as 'expressed by', 'possessed by', 'attributed to' or being 'located in' the music itself (Schiavio, et al., 2016). However, even if all situational issues are controlled, listeners are of course free to feel any emotion, due to their idiosyncratic and retrospective experiences, regardless of the intrinsic features of music (Robinson and Hatten, 2012). In consequence, these perspectives are not always mutually exclusive in practice and sometimes inform each other in various ways.

5.2. Significance of Musical Emotions for Meaning-making

In terms of heteronomous listening, music is a reference for meaning-making and inseparable from personal, social, and cultural factors (Meyer, 1956), whereas, for musical autonomy, music has an autotelic meaning with its properties (Scruton, 1997). In the combination of these views, the musical meaning-making is informed by musical and extra-musical factors, an interaction between perception, cognitive, and affective phenomena (Gabrielsson, 2010). This process is conjoined with the social-cultural, developmental, and musical factors (Herbert and Dibben, 2017). Correspondingly, the key inquiry is how the listener *evaluates* the perceived and felt emotions of musical activities in a class and how this process is attached to meaning-making, remembering, and encoding information.

In line with the component process model discussed above in Chapter 2.1 (Scherer, 2004), emotions are not only responses to the environment,

but also part of active participation, which includes a range of interactive strategies. Thus, musical actions, including listening to and emotionally responding, are motivated and essentially affective. That is to say, the emotionally motivated cognitive individual actively participates in his/her own meaning-making process within the dynamic interplay between an organism and its environment (Schiavio, et al, 2016). In other words, emotions do not only fit into the listeners' life but also have a role in shaping it (Solomon, 2008) through the *intentionality* of emotions (Robinson, 2005).

Given the physical, psychological, cultural, habitual environment of the individual, it might be misleading labelling some emotions unconditionally 'right' or 'wrong', since environmental aspects assign the situatedness of emotions. Feeling angry, for instance, may not be appropriate emotion against an infant's infractions, but it might be desirable against injustice (Yob, 1997). Accordingly, there is a relationship between emotions aroused by music and the meaning promoted by those emotions.

In contrast, without engagement, just by feeling and perceiving, Turkish music would be suitable for any kind of listener's identity and social construction. This is what is missed by Haddad (2011), in suggesting the use of Arabic music moods in German music curricula. Since each tradition favours a particular repertoire of emotions and values as the medium for expressing its worldview (Davies, 2011), even if perceived and felt emotions were cross-culturally similar, their meaning for the listeners will be dissimilar according to the identity/belonging of the individuals. Therefore, predicting the emotional response to the pre-selected musical stimuli is crucial for educational interventions to the extent that the emotional response is evaluated in that context. In this regard, musical activities in a class might be intertwined with particular religious narratives, incorporating part of the children's cultural identity. For pupils, musical activities are not only a way of conveying cultural/religious knowledge and identifying themselves, but also of eventually learning with the help of emotions (Berglund, 2008).

Just as possessing knowledge does not mean that students will

use it appropriately outside of school (Immordino-Yang and Damasio, 2007), having musically perceived or felt emotions does not imply that students' meaning-making processes will be automatically activated. Accordingly, for the current research, in line with Solomon (2008), Turkish music with its emotional and cognitive promises in a RE class is a tool by which students can engage with their own world –a bridge, we might say, between their biological body and their social roles. Since emotions occur in a cultural context, recognising the interplay between an individual and his/her social environment may foster *the connectedness of students*, with the help of their own emotional experiences. Additionally, this also indicates how musically accessible emotions can be utilised for meaning-making within the teaching/learning process. Such an approach recognises that students are not passive learners (Kerchner, 2013), nor just *manipulated* by music without their conscious experience, during the musical activities in RE or anywhere else. This is why a mentality like the '*Mozart effect*' is not relevant for the current research.

The term of the '*Mozart Effect*' was coined by Rauscher, et al. (1993) to label the supposed temporary enhancement of spatial performances after listening to a piece of music of Mozart. Later the term was used to refer both to the claims for the beneficial effects of listening to Mozart-like music on improvement in spatiotemporal performance (Črnčec, et al., 2006) and to reports of any cognitive enhancement associated with listening to Mozart (Ivanov and Geake, 2003). In its origin, the Mozart Effect indicated that spatial reasoning performance was improved in conditions where participants listened to Mozart before the task compared to listening to a relaxation tape and having silence. With the '*translation*' of this difference into IQ scores, music listening condition has 8-9 points higher scores respectively compared to the other two conditions. This enhancement was temporal and could be extended to 10-15 minutes period spatial task engagements (Rauscher, et al., 1993). These findings proved technically hard to replicate and led to conflicting results (Pietschnig, et al., 2010).

The discussion on the Mozart Effect is still not over. Although Rauscher (1999) made no such claim (he insisted that the effect is limited to spatial-temporal tasks), the Mozart Effect was widely criticised for its supposed role in the enhancement of intelligence (Chabris, 1999; Steele, et al., 1999). Moreover, while the Mozart Effect was demonstrated in college students' spatial ability, popular media misrepresented it as enhancing the general intelligence of children by listening to Mozart's music. With the misconception of 'Mozart makes you smarter' (Črnčec, et al., 2006), the commercial industry produced and sold many records, CDs, and books on the ground arguing that exposure to Mozart's music stimulates the minds of children and has a positive impact on their IQ (Pietschnig, et al., 2010). The term of 'Mozart Effect' was thus used without a scientific base to signify long-term benefits in improving health, creativity, and intellectual abilities (for example, by Campbell, 1997).

Ivanov and Geake (2003), however, report some evidence of the Mozart Effect with school-aged children in a school setting within experiment-control group design. Additionally, a similar result was obtained in their study with Bach's music. Moreover, in this experiment, children listened to music during the task, not prior to the spatial tasks. Hence, these findings have different standards than the original Mozart Effect research. Conversely, it is still argued by sceptics that the Mozart effect is an artifact of arousal and mood (Thompson, et al., 2001), therefore not specific to Mozart. In this regard, it is also suggested that listening to either Mozart or popular music may result in better performance response, but only for those who enjoy what they listen to (Chabris, 1999). Additionally, it is also important to differentiate the discussions of the Mozart Effect and the more general effects of music on children's education. Overall, there is some support for the Mozart Effect (Steele, et al., 1999), but it is small and not substantially different from the effects of other kinds of music (Pietschnig, et al., 2010). Given the paucity of evidence for school-aged children (Črnčec, et al., 2006), there is a definite need for much more research on the pedagogical implications of the Mozart Effect.

Even if everything related to the Mozart Effect is scientifically proved, the current research does not favour using music in such a way that puts listeners (students) in a passive and unconscious position. In other words, for the Mozart Effect, the listener must do nothing but listen, while not even knowing why he is listening or to what. This is because the basis of the Mozart Effect denies the listener's conscious and intentional awareness of his/her own emotions and response to music. Whatever happens with the Mozart Effect happens without listeners' active engagement and involvement.

By contrast, the current research seeks to conduct a study *with* children, rather than *on* children, with the idea of promoting their emotional response and their self-evaluation during class activities (Kullenberg and Prambling, 2017). Conscious, deliberative experience is central to emotion and its relation to thought and knowledge (Winans and Dorman, 2016). Accordingly, for this research, students are required to be active listeners, active participants in class activities to facilitate the learning environment. Consequently, this research does not expect that listening to a piece of music of Mozart (or any kind of music) incidentally makes the listener smarter and the classroom/teaching/learning environment better than it was. However, the role of music in classroom activities for the present research is contemplated within the meaning-making processes.

5.3. Linking Musical Emotions to the Education Process

Emotion and cognition are interrelated in a complex system of co-regulation, in the educational context (Meyer and Turner, 2006). While it might be theoretically favourable to distinguish emotion and cognition for studying learning, they are deeply intertwined within the total experience. Given that this separation does not represent the cognitive and sensory aspects of emotions, 'rational passions', 'perceptive feelings', 'theoretical imagination', 'cognitive emotions' or 'emotional cognitions', 'informed expression' (Yob, 1997), and 'emotional tho-

ught' are the terms used to encompass both affective and cognitive domains (Immordino-Yang and Damasio, 2007).

Some emotions have essentially cognitive aspects. Cognition is the focus, while emotions revolve around it (Yob, 1997). According to Scheffler (1991 in Yob, 1997), emotions contribute to the task of cognition. Even though feeling and reason remain separate, the process of reasoning normally involves emotional factors (Yob, 1997). This is not to say that emotions and cognition rule each other (Immordino-Yang and Damasio, 2007), nor that emotions and learning are antagonistic to each other (Mercer, 2019).

From emotional to intellectual, a range of human experience might be discerned in musical expression and in the emotional response to music (Brown, 1991). Thus, studying musical emotions in educational settings is complex and challenging because of the multidimensional context (Schutz, et al., 2016). Moreover, rather than separating thinking and feeling (or cognition and emotion), emotions as a part of social and intellectual life are deeply involved in e.g., building memories, engaging with complex thoughts, and making decisions. Correspondingly, emotions, distinct from cognitive skills, become a dimension of the skill itself (Immordino-Yang, 2016: 18-9 in Mercer, 2019). As long as human subjects continue to learn to make sense of their emotional reactions from developing experience of various situations, educational contexts must be a potential ground for the integration of emotion and cognition (Mercer, 2019).

The role of feelings in education might be stressed anew with the connections between emotion, social functioning, and decision making becoming more obvious. Teachers, at least, recognise that students' academic performance is impacted by their emotions (Mercer, 2019) because the cognitive aspects of education, including learning, attention, and memory, are affected by the processes of emotion. Furthermore, the adaptation of skills and knowledge from the school environment to real-world settings is also oriented by the emotional processes (Immordino-Yang and Damasio, 2007). From a different perspective, Yob

(1997) uses the term 'informed expression'. This term highlights the convenience of cognition to guide feelings and emotional responses.

Emotionally directed reasoning works within systems of knowledge that are relevant to the current situation (Immordino-Yang and Damasio, 2007). This argument has an advantage for Religious (or Moral, or Values) Education: 'Morality is not solely a matter of reason nor solely a matter of feeling but does in fact involve both' (Yob, 1997: 44). It is however important to stress that this is not a call for emotional manipulation, but a call for finding ways to enhance the emotional aspects of learning in education (Immordino-Yang, 2016: 18 in Mercer, 2019). It is, for religious educators to invite learners to care about RE content, which again involves making connections for reflection and learning between the students and the work of teaching and learning (Mercer, 2019).

Recognition of the moral significance of music in shaping character is far from new (Carr, 2010a). What is learned through emotional experience [of art] is not only theoretical knowledge, but also practical understanding of the motivations, vulnerabilities and achievements of human beings (Robinson, 2005). This is a way of thinking about music and emotions with two principal functions: the imitation or transformation of an external reality (mimesis), and the purification of the soul through affective experience (catharsis) (Cook and Dibben, 2010). Hence one of the reasons music attracts people might be the opportunity it affords for exploring the emotional life of others and for understanding our own emotions. Appreciating social groups' clustered values and emotions, imitation of others can help children to learn their identity and absorb the values of the group (Davies, 2011). Lyrics, for instance, might be the way to present role models in the classroom, if the lyrics succeed in connecting the cultural and societal circumstances of religious tradition to contemporary students. In this way, beyond teaching language or intellectual behaviours, the music reminds students of their identity and belonging (Berglund, 2008). Consequently, emotions have benefits and costs for students in relation to nurturing their identity and their learning opportunities (Lewis and Crampton, 2016).

Since music is a mode of expression, it produces, forms, transforms, transfers, and creates values. Hence, with the help of emotions, music may promote the values of the culture (Kramer, 2009). Music can also facilitate the encoding of information in RE when the emotional state caused by music is compatible with the content of the classroom (Tesoriero and Rickard, 2012). While the internalization of information and meaning is experienced by individuals, that process has been given a direction by the environment (Wertsch, 1998) in accordance with the social and cultural strands of cognition and feeling (Nias, 1996). Moreover, we now recognise that 'meaning' occurs within the entire 'being' of learners. Mental abilities and affective states are equally responsible for creating and interacting with meaning in the environment (Kerchner, 2013). Because students can know and feel through musical activities, their ability to address and construct values while engaging with the musical material must be recognised (Kullenberg and Prambling, 2017).

Furthermore, theoretically and methodologically integrating emotion to cognition for classroom conditions may promote students' emotional experience around the motivation to learn. Then emotions' central role emerges in the learning environment itself, where emotions arise and, at the same time, construct and alter the environment (Meyer and Turner, 2006). As emotions are a way of evaluating the current situation and possible reactions to it (Scherer, 2004), they are bound to their contexts of production and reception. In sum, 'the cognitive processes are sensitized, focused, invigorated, directed, broadened, and sharpened by the emotions; the emotional processes are informed, selected, communicated, appreciated, enhanced, and cultivated by reasoned analysis and judgment' (Yob, 1997: 55). Ignoring students' emotions means failing to value a critical motivation for learning. Even if students somehow instrumentally acquire knowledge and reasoning skills, these are not enough unless they can employ these skills in out-of-school conditions. Because emotions reverberate throughout learning and accessing knowledge, RE professionals must take seriously

this relationship between emotion and cognition in effective learning environments (Immordino-Yang and Damasio, 2007).

Education is concerned with emotions that require perception of an emotional trigger, evaluating or imaging a situation, and the resultant physiological changes in body and mind. Knowledge divorced from emotional implications and learning suffering from lack of meaning have little chance of being applied in out-of-school contexts (Immordino-Yang and Damasio, 2007). Similarly, religious formulations are spiritually dead when their emotional connection is lost (Yob, 1997). For Heelas, et al., (2005), this perspective is the reason for declining traditional religious adherence and for the rising number of alternative and New Age spiritual practitioners in Britain.

In line with mainstream constructivist theory (Kerchner, 2013), this research supposes that High School and post-High School students are in many respects experienced learners with their prior knowledge, skills, beliefs, values, and emotions. Students are by this stage ordinarily expected to interpret the perceived and felt emotions that promote their own learning. These might be introduced, taught, and supported by teachers, but cannot be generated on behalf of students. Just as there is no absolute relationship between felt and perceived emotions (Gabrielsson, 2001-02), there might be multiple interpretations of the musical emotions in classroom activities. Hence, the students' affective and cognitive responses must be accepted and evaluated in their unique conditions. For RE teachers, the objective is to lead the students to interpret those emotions for students' own meaning-making purposes.

Two fundamental aspects of human inner life were highlighted in this section: cognition and emotion, or reason and feeling, or cognitive and affective, or mind and heart. There are mutual empowerment and enrichment between them –as most of the world's great religious, spiritual and philosophical traditions teach. Human thought rarely excludes one for the other (Yob, 1997). Accordingly, there is no desire to separate cognition from emotion in educational theory. Hence the present research offers to promote and strengthen the connection be-

tween emotional and cognitive faculties by means of music in RE classroom interventions. On these assumptions, the pedagogical model of the current research (similar to St John, 2006) proposes, first, to begin with the child. The teacher must recognise students' current level of knowledge and their conscious engagement with the musical material for teaching and learning. Students should be allowed to study along with the musical material, applying the cognitive and emotional skills to create meaning for themselves. The role of the teacher is to help students to bring their experience into practice within the social context.

On these grounds, this research highlights the role of musical emotions in RE in promoting children's learning, especially in terms of linking musical emotions and meaning-making practices with the formation of values. This interaction is conceived in terms of two ways of connecting to the modes of musical emotions: 1. *Emotional connectedness to the teaching subject*: musically triggering relevant emotions for the teaching subject; for example, inducing joy during the teaching of friendship. The key is to be able to determine the felt emotions in response to music before conducting classroom activities. This will be evaluated in Chapter 5 through students' emotional responses to musical listening. 2. *Cognitive engagement with the teaching subject*: stimulating the mind with the perceived emotions for the subject; for example, musically conveying information related to the subject (supporting readiness, attention, and memory). The point is to deepen students' familiarity with the expression of music. This will be examined in Chapter 6, with RE professionals' views duly considered. Thereafter, the extent to which these perspectives might be combined in RE by means of musical interventions that can foster valid educational outcomes will in Chapter 7 be subject to detailed discussion.

I started this chapter with the arguments on makams' specific emotional effects on the listeners in the context of Turkish music culture; in association with the *traditional* works, contemporary studies, and my evaluation of the relevant literature. After that, I reviewed the music-emotion studies within the Western context. In this section, four

perspectives have led the discussion: the music itself, human factor, conditional/situational effects, and interactions between these factors. With my response to the Western literature, this section expressed the rationale for using Turkish music excerpts, selecting school-age participants, the experimental design of the study, and the educational approach of the current research. Next, this chapter evaluated the intersections between music and emotion in the context of Religious Education. The conceptual and practical queries were reviewed around the values and meaning-making processes in relation to musical emotions. Regarding the rationale for the educational implementation, this chapter has benefitted from both music-emotion field and educational studies by stressing the role of music with its emotional capabilities to facilitate the education process for teaching and learning.

Chapter IV
Methodology

1. Introduction

The purpose of the current chapter is to present the methodological approaches taken throughout the research and to explain the decisions that may affect the way that it is conceptualised. This chapter therefore describes the data collection methods and analysis processes in accordance with the philosophical framework of the research. In addition, it elaborates the perspective from the literature that informs the research and refers to ethical issues as well as pointing out the role and responsibilities of the researcher.

This research aims to open a discussion on a theory of whether music can serve a base for religious education (RE) in order to improve the quality of the values education domain in RE. Thus, the current research was conducted firstly to assess listeners' emotional response when they listened to Turkish music; then to evaluate RE professionals' views on the place of music in RE. Subsequently, both perspectives are combined to discuss the value of music in RE to empower values education.

2. Conceptualisation

To avoid producing 'second-rate' educational research (Evans, 2002), it is vital to reach the exact meaning of the key terms of the research

(Coll, 2008). That is not only important for the researcher but also for those who engaged with it, such as the participants and the readers. This is a way of ensuring that there is a constancy between that which the researcher was studying and what others understand about it.

Presenting detailed meanings of the main concepts of the current research is the reason for having the relatively large chapter, 'The Conceptual Framework'. In Chapter 2, it was stipulated how this research ascribes the term of emotion, the understandings of music in Islamic thought, the concept of *makam* in the Turkish music system, and the limits of values education domain in the Turkish RE system. These concepts may be differently described according to the purposes and field of any research.

However, the above-mentioned chapter clearly states why the researcher preferred the description of 'musical emotions' among the many definitions and qualifications of emotion. In the same way, it is necessary to explain how music is praised or vilified in different Muslim traditions. There would be no need for that kind of explanation if this research were about a different concept such as 'story' rather than 'music'. This is because story-telling, story-making, or story-writing is less controversial in Islamic thought than music. This explanation may also serve as a reply from the researcher to the implied question in the reaction of some people to the purpose of the research: *'Oh well, it is good you to try to empower RE. However, I do not understand why you would like to empower RE with something that is forbidden in Islam'*. Similarly, '*makam*' might be defined from many different perspectives, whereas, in this study, the focus is on its capacity to induce emotions. In addition, values, and values education, may be explained with varied insights. Yet, the main purpose of adding that title in the 'conceptual framework' is to highlight the role of emotions in values education for which lack of awareness is quite apparent in RE. Appropriately, the researcher highlights the fact that this study was conducted for educational purposes. To sum up, skipping to the 'findings', 'discussion', or 'conclusion' may

miss the bigger picture. Therefore, it is recommended to read the conceptual framework of the research to grasp the overall idea.

3. Research Design

There are two main methods of data analysis in empirical research, known as quantitative and qualitative. The term 'mixed methods' is usually taken to mean using both within one research project (Denscombe, 2010; Padgett, 2017) and this was adopted here as an overall design in order to triangulate the findings. The data used to address the first sub-question of the research, to measure emotional response, was analysed quantitatively; that for the second sub-question, about the RE professionals' experience, was analysed qualitatively. After that, answers/findings of both questions were merged into for implementation possibilities for RE within thematic analysis procedures. Accordingly, in this research design, there is a need to clarify the use of the literature and the positionality of the researcher.

3.1. Quantitative Method

Since the first sub-question of the research is an inquiry to assess how listeners emotionally respond to listen to music, this research begins with quantitative investigation. In order to measure the listeners' emotional response to music listening, Geneva Emotional Musical Scale (GEMS) with Likert-type ratings has been employed. Among many other ways to capture emotional arousal towards music, GEMS is one of the self-report instruments to evaluate listener emotional response. This method is primarily developed and introduced by Zentner, et al. (2008).

The procedure in the current studies of musical emotion induction is to ask participants firstly to listen to music and then to rate predetermined affect terms to describe their feeling in response to the music. The rating terms reflect either basic (or discrete) emotion theory (such as angry, fearful, surprised, happy, and sad) or alternatively the terms

derived from the affective circumplex and its variants (such as bored, alert, hopeless, energetic, sleepy, and satisfied). Discrete or basic emotion theory (Ekman, 1992; Izard, 2007) focuses on a small number of basic emotions (Zentner, et al., 2008). However, the circumplex model regards emotions as having a mixture of two core dimensions, valence and arousal, representing pleasure-displeasure and activation-deactivation continuums (Sloboda and Juslin, 2010; Zentner and Eerola, 2010).

Beyond the theoretical context, it is argued that previous studies have several limitations such as (1) having a focus on emotional characteristics of music as perceived by the listener (Rigg, 1964), (2) not having critical information about the criteria of selection for musically relevant affect terms, (3) the procedures used for data processing and validation, and (4) a lack of interest in looking at the findings on music-related emotion from the broader context of general emotion theory and research (Zentner, et al., 2008).

However, GEMS does not suffer from those conceptual or methodological pitfalls that undermined its reliability (Zentner, et al., 2008). Its list of music-relevant emotion terms, suited to describe felt emotions, was compiled from across five groups of listeners with distinct music preferences. By having a larger and more representative sample of listeners and examining emotion ratings; GEMS also examines the differentiation, or structure, of musical emotion ratings based on confirmatory factor analytic procedures. In addition, the basic and dimensional emotion models were compared with the domain-specific framework. In this regard, it was questioned whether (1) listeners more frequently choose emotion terms in the musical emotion model rather than the other two, (2) the musical emotion scales provide higher agreement across listeners than the scales of the other two models, and (3) emotion ratings based on the musical model provide a better discrimination of the music excerpts than the discrete and dimensional models. By the ratings of the domain-specific checklist, these challenges were affirmatively answered, and the most powerful discrimination of musical excerpts was

obtained (Zentner, et al., 2008: 511). Therefore, the GEMS model was applied as a measurement device for studying the musically induced emotions, to address the first research sub-question.

Rather than that of GEMS-33 and GEMS-45 (Zentner, et al., 2008), the participants were supplied with a shorter GEMS-25 emotion checklist with special permission of the author of the scale (Zentner, 2017). Since the only Turkish study in the literature using GEMS-45 is that of Arman (2015), the scale was translated to Turkish. Upon special request (Zentner, 2017), the Turkish translated version of GEMS-25 was shared with Prof. Zentner as well.

The musical excerpts participants listened to were selected after the literature review was completed (a detailed account of information on the selection process of makams and the stimuli was also given in the section '5.2.3. Materials'). This part of the research is typically based on listening to the excerpts and rating the emotional response. Participants must rate their felt emotional reaction to musical excerpts. In this part, participants were recruited from two domains, UK and Turkish based, to make comparison according to cultural and environmental differences. In order to measure to what degree their understandings and cultural backgrounds have an impact on the results of emotional response, it was questioned whether their previous conceptions of the music are meaningful. Thus, before starting the listening sessions, GEMS-25 was also accompanied by a survey of participant music listening habits and educational, religious, and demographic background questions, etc. for detailed analysis.

In Turkey, the participants used a paper version of the questionnaire in Turkish (Table 9, 10, and Appendix-3.1). The potential participants were approached through their schools and no individual participation was accounted for. Suitably, ethical rules and local permissions governed the recruitment progress. For paper-based questionnaire sessions, schools' halls/rooms and the electronic devices to listen to music were used. Simple instructions on how to complete the

questionnaire were briefly given to the participants by the researcher, especially when young participants who might be unfamiliar with the method were involved in the research.

In Scotland, the participants reached the online version of the questionnaire in English (Appendix-3.2). The link for the questionnaire was only shared with the schools interested in being part of the research project. In other words, the possible participants were only contacted via their school/ department management team. Ethical guidelines were strictly followed, and the researcher was not present during when the questionnaire was processed. Correspondingly, whilst instructions were given beforehand in the form, it was expected that the participants would complete the questionnaire with their own equipment and ability.

3.2. Qualitative Method

The current research is suitable for qualitative data analysis for the second sub-question. This is because that question is about to understand how the place of music is experienced by RE professionals, which fits well with the qualitative research paradigm, in order to offer a theory to enhance the use of music in RE. Oktay (2012) advocates qualitative analysis as appropriate for (i) a topic about which is little known, (ii) a topic of sensitivity and emotional depth, (iii) studies of 'lived experience' of practitioners, (iv) studies to understand programs and interventions, and (v) studies of complex social processes. Furthermore, 'Qualitative studies might also explore how practitioners think about agency initiatives to encourage use of evidence-based interventions, or strategies they use to avoid using them' (Oktay, 2012: 31).

As qualitative analysis was used, grounded theory was adopted to conceptualise the investigation of the second question. The research process was determined by (i) the goal of theory development, (ii) the interaction between music, subject, and situation, (iii) the multistage process of data gathering and analysis, and (iv) the key components of theoretical sensitivity, constant comparison, theoretical sampling, and theoretical

saturation (Oktay, 2012). Since grounded theory was developed for the discovery of new theories with its creative-constructivist or exploratory-seeking character (Glaser and Strauss, 1967; Charmaz, 2017), it deserves special attention for research in RE (Rothgangel and Saup, 2017). Next, I will explain the value of grounded theory for the present research.

As an interpretative research methodology, grounded theory is advantageous for generating data-based knowledge (Glaser, 1978) and widely used by social scientists (Denzin and Lincoln, 2018). One of its advantages is that researchers do not have to define the problems when the variables/data are not known (Creswell, 1994). The strength of the theory is its ability to look at the situation at a particular time in the research field (McCallin, 2003). For the present research, grounded theory has framed the approach to understand how RE professionals evaluate the place of music in RE environment, which defines the situation.

Grounded theory might be described with its basic premises. Firstly, as with qualitative data analysis, it is basically pragmatic (Glaser and Strauss, 1967). Then, the second is that generating new concepts and theories is the aim of qualitative analysis (Denscombe, 2010). It is a practical method and developed from fieldwork. As applied to RE research, 'using grounded theory to arrive at a practical theory would require constant reference to teaching practices' (Rothgangel and Saup, 2017).

The third is that 'theories' must be 'grounded' in empirical reality (Denscombe, 2010: 107), and a way to do that is to conduct data collection and analysis concurrently (Glaser and Strauss, 1967; Strauss, 1987). The fourth is, for the researcher, of being open minded (Glaser and Strauss, 1967; Denscombe, 2010). While this is required to avoid research being externally directed (whether by literature or by the knowledge, bias, and desire of researchers themselves) rather than driven the data, it does not mean that researcher is blank minded (Creswell, 1994). At the same time, the researcher still needs knowledge of general 'questions' and 'perspectives' that contribute to understand actions and interactions of the people who engaged in the research

(Glaser, 1998). As long as the researcher is willing to critically examine preconceived ideas, it is not a problem having those kinds of ideas.

Grounded theory has changed since its launch (Glaser and Strauss, 1967; Strauss and Corbin, 1998; Charmaz, 2017; 2006; Charmaz, et al., 2018), and its method steps are not to be understood as 'rigid' laws (Strauss and Corbin, 1998: 41; Strauss, 1987: 7). The concurrence of data collection and analysis is a characteristic of grounded theory. Data collection and analysis are operated by the two general techniques; constant comparison and asking questions (Strauss and Corbin, 1998: 44). Three basic coding methods (open coding, axial coding, and selective or theoretical coding) of grounded theory are frequently used in the analysis process of the current research, in a constructivist approach (Charmaz, 2017).

By starting data analysis with a fundamental openness, the researcher must abandon any preconceptions and all theoretical background that might influence theoretical sensitivity. That is an ability to detect what is really important in data and needed to give its meaning (Strauss and Corbin, 1998). Thereby, pre-conducted 'poor' analysis that is not 'grounded' in the data must be avoided. 'The balance between what researchers know and what may be found in the data' is important (Strauss and Corbin, 1998: 30) to the extent that additional data collection is required if the previous data collection and analysis have not attained a 'saturated' theory. Theoretical saturation means 'no additional data are being found whereby the sociologist can develop properties of the category' (Glaser and Strauss, 1967: 61).

In this process, the role of the literature seems to be problematic on the grounds of the idea that the researcher must delay the literature review until the end of the analysis to avoid contamination. However, using literature through analysing with the sensitizing principles such as 'theoretical agnosticism, theoretical pluralism, theoretical sampling of literature, staying grounded, theoretical playfulness, memoing extant knowledge associations, and constant reflexivity' in *'Informed Grounded Theory'* (Thornberg, 2012) may overcome its disadvan-

tages. Hence, the informed researcher should not pretend to be a 'theoretical virgin', but should be accepting of the 'situatedness' of both the researcher and the research (Clarke and Friese, 2007: 366-370; Clarke, 2005). This is because it is not possible to ignore the researcher's own expertise in the research fields, as it is for the current research. By the validity of the researcher's responsibility, there is no need for the denial of the literature, a loss of knowledge, and lack of the reflection of the researcher (Thornberg, 2012). Furthermore, for grant applications and preparing proposals, the researcher may need to read the literature before starting the research. As a result, the theory employed in this research might be called 'informed' grounded theory by using the literature in a sensitive, creative, and flexible way.

The last premise for grounded theory is not to determine all the participants of the study at the beginning of the research (Denscombe, 2010). This is a way to prevent data manipulation by pre-selected participants and any prior assumptions. In other words, as the term 'grounded' suggests the 'object-oriented' or even the 'object-based' methodology, its theories must be developed on the data gathered from the participants (Rothgangel and Saup, 2017).

By starting with the second sub-question of the research, the current research has contended with a qualitative approach which includes grounded theory. Since it is stated that 'where little theory has been developed or existing theory is too abstract to be of practical use' and 'populations or problem areas that are new are often very appropriate for grounded theory studies', Oktay's attributions (2012: 33) seem quite relevant to investigate the experience of RE professionals. The question was initially expressed as an area of interest, and it has specifically and clearly emerged as the research progressed. Questioning 'how the place of music is regarded by RE practitioners' is a query for the researcher to understand the process, the answer of which was completely unknown prior to the study. Thus, generating a theory on using music in RE classes inevitably needs the data gathered from those who have really ex-

perienced the field. Similar to most grounded theory research, which utilizes interviews and observations as the basic tools of data gathering (Oktay, 2012), this research was conducted with interviews to capture the interactions between individuals and their environments. The key point here is to allow for the techniques of constant comparison, theoretical sampling, and theoretical saturation throughout data collection and analysis. At this point, the position of the researcher will arise.

There is a phenomenon in the field of 'music-emotion research' called 'demand characteristic'. It implies that, if participants find a cue for the overall aim of the study in/during the listening-and-rating session, they might change their answers of the emotional response accordingly. From the perspective of the researcher, one of the similar issues might be the 'observer effect'. This is an effect, also called the 'Heisenberg effect', highlighting the position of researcher upon participants by conducting the study (Bogdan and Biklen, 2007: 38-39). Asking questions to participants about a specific issue may simply lead them to answer even if they have never been in a situation like that (Coll, 2008), on the one hand. In that scenario, questions may reflect what is prioritised by the researcher himself, on the other hand. In this stage, another issue to be responded to is that of subjectivity and bias. Since it is quite normal to get different results from similar studies conducted by different people of expertise, expressing the position of the researcher is valuable both for the reader and for the researcher himself (Oktay, 2012: 134).

In addition, certain personal skills are praised for grounded theory research as well as for qualitative research. Flexibility, self-reflection, and the ability to multi-work in an iterative, nonlinear way, for instance, are desirable (Padgett, 2017: 18). Moreover, 'interest in thinking conceptually, enjoyment of playing with ideas, a tolerance for uncertainty, and a willingness to test ideas and to let go of those that are not supported' might be noteworthy for the researcher (Oktay, 2012: 41). McCallin (2003) summarises the skills a grounded theory researcher needs as thinking skills, communication skills, organisational skills,

and creative ability. Apart from subject-specific suitability, one of the reasons the researcher chose to conduct his research in grounded theory is that he considered himself capable of doing it.

3.3. Thematic Analysis

The primary objective of the present research is to gain insight into the ways by which musical interventions can support RE. For this objective, Chapter 5 evaluates students' emotional responses to music listening, and Chapter 6 assesses RE professionals' attitudes on using music in classroom practices. Then, Chapter 7 is where these views are brought together to discuss implementation possibilities, in comparison with the documents including literature, curriculum, and policy guides.

Given that RE is a contested school subject (Conroy, et al, 2013), and attitudes to music vary among Muslims (Berglund, 2008, 2014; Harris, 2002), the expectation of Chapter 7 was not to provide a single answer to the question of 'how should music be used in RE?'. Regarding the context-dependant and subjective meaning of a piece of text, I anticipate there will be different and distinct views and practices in answering that question. As the qualitative and quantitative findings of the present research are built on the responses of students and RE professionals, it is hoped that this research will demonstrate the possibility of pursuing a coherent relationship between the shareholders of the educational realm. For any innovation in the field, the views of RE professionals are essential and students' understandings and expectations must be addressed. However, there is no reason to ignore others in the educational environment. Therefore, Chapter 7 also attempts to evaluate other perspectives, where possible, for creating guidance for musical activities in RE. Nonetheless, this is to indicate the ways the present research might be improved by future studies.

Chapter 7 employs thematic analysis to identify, analyse, and interpret patterns of meaning within its methodological sources (Clarke and Braun, 2017). The convenience of this for that chapter is its flex-

ibility, in that thematic analysis allows the researcher to use quantitative and qualitative analysis in a more accessible form of interpretation with rich and complex data (Nowell, et al. 2017). Apart from that, Chapter 7 requires a complex approach in addition to the quantitative and qualitative findings; therefore, it involves content analysis of policy and curriculum papers, philosophical reflections on the literature, and the analysis of learning resources of RE.

Because a part of the present research is new, namely investigating the potential of music for RE, I wanted to adopt an approach that is exploratory to some extent rather than confining music as an educational tool into the present standards and expectations. Hence, I was aware of the existing theoretical and conceptual knowledge presented by pre-existing literature, curriculum, and policies. However, Chapter 7 remains free and open in exploring the implementation possibilities promised by the previous quantitative and qualitative chapters.

During the thematic analysis process, findings of the qualitative and quantitative investigations of the research (Chapter 5 and 6) were combined and compared with the literature, policy, and RE curriculum. Thus, Chapter 7 has three *methodological sources* for its analysis: namely GEMS result for quantitative inquiry, interview findings for qualitative interpretations, and already existed documents. Along with comparison and evaluation of these methodological sources, a set of three *dispositions* has emerged as 'personal/intrinsic', 'cultural/religious', and 'situational/responsive'. Additionally, three *conceptual approaches* (affective, cognitive, and behavioural) have facilitated the analysis. Owing to the thematic analysis, the abstract and theoretical representations of the existed documents were merged with the practical considerations of quantitative and qualitative findings, for the inferences of the future. In this regard, thematic analysis was used in Chapter 7 to examine the perspectives of different research findings of the previous chapters and highlighting similarities and unexpected features for the implementation possibilities. Subsequently, as it is not

necessary to identify and interpret all key contents by thematic analysis (Clarke and Braun, 2017), the chapter is guided by the research questions for a rigorous analysis.

As thematic analysis is useful for the implications of patterns in a critical framework (Clarke and Braun, 2017), it is used in Chapter 7 to interrogate the dispositions (personal/intrinsic, cultural/religious, and situational/responsive), in line with the implementations of musical activities for RE. Furthermore, with thematic analysis in Chapter 7, the voluminous qualitative and quantitative findings were critically analysed and reconstructed in a way that attempts to capture the significant and consistent concepts that the aims of musical interventions in RE classroom such as emotional, cognitive, and behavioural engagements and responses. These engaging and activating roles, attributed to music, are indicated by a range of interview transcripts and GEMS results in the present research, and by the relevant literature. Consequently, Chapter 7 condenses the data so that the present research can have a succinct and organised closing chapter.

3.4. Use of Literature in the Research

There is a need to clarify how the present research has used the literature. Regarding the quantitative and qualitative methodologies applied in the research, *the Literature Review* (Chapter 3) was conducted in two phases. Since music-emotion studies have informed the measurement of emotional response to music listening, the first part of the literature review (Turkish and Western music-emotion studies) was conducted before the quantitative investigations of Chapter 5. In contrast, as the qualitative analysis of the interviews (Chapter 6) were designed in terms of the grounded theory research strategies, the second part of the literature review (RE, music, emotion, and meaning-making) was postponed until data collection and analysis completed. After that, for thematic analysis (Chapter 7), the relevant literature was a principal component of the discussion alongside the quantitative and qualitative findings.

Considering the quantitative analysis, the basis of the experimental part of the current research was informed by the relevant literature in a specific way: This research assesses the emotional response to listening to Turkish *makam* music. It is conducted within an experimental design with the music-specific model, in a self-report approach. To the best of my knowledge, GEMS-45 in Turkish (Arman, 2015) and GEMS-25 in English (Altun and Egermann, 2020) have been used once for felt emotional responses towards Turkish music. This research will be the first applying GEMS-25 both in English and Turkish. The participants are Turkish and Scottish students. The overall idea is to create an educational approach to assess the musical emotions for RE.

The translation process bringing together Turkish and English resources has informed the experimental settings for the quantitative analysis. For this, the translation process of the *traditional* attributions to English and of GEMS to Turkish was conducted concurrently. The rationale behind this process is to compare the similarities and conduct an alignment between GEMS structure and the traditional emotion attributions. In that respect, I did not borrow any translation without questioning it. Rather than entirely depending on the translation of GEMS-45 of Arman (2015), I reached an alternative translation of the GEMS-25 adjective list. For this purpose, I asked one of my colleagues to translate GEMS-25 to Turkish. Then, his suggestions, my translation, and Arman (2015) were compared (Table 10). Furthermore, there are in the literature about 60 makams (and *makam* groups) correlated with emotional effects (Appendix-1). However, it would be experimentally inconvenient for my research to test all of these makams using GEMS. Similarly, another group of colleagues helped me to translate the *traditional* emotional attributions between Turkish and English (Appendix-1). After that both translations were examined. While the contributors knew their own part in the translation, they were not informed about each other. Subsequently, this comparison has also enlightened the *makam* selection for the current research. In connection with GEMS

factors, Table 6 shows the selected makams with emotional attributions. This table is also referred to in Chapter 5 for the measurement procedures and analysis. Owing to this process, the *makam* selection process is strictly associated with the GEMS factors (Table-6). Consequently, I reached the set of 12 makams to be measured with their supposed emotional effects on the listeners.

Table 6: Selection of Makams for the Experiment

GEMS Factors	Makam	Attributions
1	Mâhur	Contentment, Complete Relief, Strength, Courage (Şîrvânî in Akdoğan, 2007; Urmawi in Kalender, 1987)
Wonder		
2	Irak	Relish, Zest, Flavour, Pleasure (Ak, 1997 in Somakçı, 2003; Urmawi and Mehmed Çelebi in Kalender, 1987; Urmawi and Şîrvânî in Akdoğan, 2007); Piety, Ascetism (Ezgi, 1933-53 in Kalender, 1987); Removes Exasperation and Fear (Güvenç, 2006)
3	Nihâvend	Strength, Courage (Şîrvânî in Akdoğan, 2007; Urmawi in Kalender, 1987)
4	Segâh	Piety, Religious Feelings (Ezgi, 1933-53 in Kalender, 1987); Bravery, Relaxation (Güvenç, 2006)
Peacefulness		
5	Bûselik	Relaxation (Güvenç, 2006); Power (Farabi in Altınölçek, 2013; in Güvenç, 1985; in Kalender, 1987; in Somakçı, 2003; Haşim Bey in Uygun, 1996; and Urmawi in Kalender, 1987)
Power		
6	İsfahan	Removes negative thoughts, clears the mind; increases intelligence, mobility, self-confidence (Güvenç, 2006)
7	Hicaz	Humility, Humbleness, Modesty (Farabi in Altınölçek, 2013; in Güvenç, 1985; Ak in Somakçı, 2003; Güvenç, 2006; Haşim Bey in Uygun, 1996; Urmawi in Kalender, 1987); Melancholy (Ezgi, 1933-53 in Kalender, 1987); Pleasure and Amazement (Merâğî in Karabaşoğlu, 2010; in Sezikli, 2007)
Tenderness		

8	Nostalgia	Sabâ	Grieving, Sorrow, Gloom (Akdoğan, 2002; Hızır Ağa in Altınölçek, 2013); Bravery (Farabi in Altınölçek, 2013; in Güvenç, 1985; in Kalender, 1987; Haşım Bey in Uygun, 1996; Güvenç, 2006)
9	Peacefulness	Hüseyinî	Peace, Relaxation, Tranquillity, Serenity, Comfort (Farabi in Altınölçek, 2013; in Güvenç, 1985; in Kalender, 1987; in Somakçı, 2003; in Akpınar, 2001; Güvenç, 2006; Haşım Bey in Uygun, 1996; Urmawi and Şirvânî in Akdoğan, 2007)
10	Joyful Activation	Rast	Enjoyment, Pleasure, Tranquillity (Farabi in Altınölçek, 2013; in Güvenç, 1985; in Kalender, 1987; in Somakçı, 2003; in Akpınar, 2001; Urmawi in Uygun, 1996; in Kalender, 1987; Haşım Bey in Uygun, 1996; Merâğî in Karabaşoğlu, 2010; in Sezikli, 2007; Şirvânî in Akdoğan, 2007; Güvenç, 2006)
11	Sadness	Zirefkend	Sadness, Sorrow, Grief (Urmawi in Akdoğan, 1996; in Kalender, 1987; Merâğî in Karabaşoğlu, 2010; in Sezikli, 2007; Şirvânî in Akdoğan, 2007)
12	Power (+) Tension (-)	Nevâ	Power, Courage (Urmawi in Altınölçek, 2013; in Kalender, 1987; Akdoğan, 1996; Merâğî in Karabaşoğlu, 2010; Ak in Somakçı, 2003; in Sezikli, 2007; Şirvânî in Akdoğan, 2007). Removes negative thoughts; induces relief, happiness (Farabi in Altınölçek, 2013; in Kalender, 1987; in Somakçı, 2003; in Akpınar, 2001; in Güvenç, 1985; Haşım Bey in Uygun, 1996; Güvenç, 2006)

Even though it is presented in the early stage of the research, the review of relevant literature for the qualitative analysis served less to orient the framework of the analysis. When a grounded theory strategy is adopted (as it was for this research), the concepts, categories, and theories must emerge from the data rather than the literature (Denscombe, 2010). Therefore, this research first concurrently applied data collection and analysis, in line with the 'Informed Grounded Theory' (Thornberg, 2012), then conducted the review of relevant litera-

ture. Accordingly, the researcher recognised significant knowledge he brought into this enquiry of the research, due to his experience in this field. However, this experience and the literature were used to compare with the findings of the research which are revealed through data collection and analysis processes. As the findings were reflected upon the literature, it was a kind of tool for validation.

3.5. The Researcher

For the purpose of this chapter, it is also required to introduce who the researcher is. Thereby, 'I' (hereafter) will help the reader to locate the research in the right context, as I may have transferred my bias and background into my investigations and reflections.

I am a married man and have two daughters. I lived in Glasgow during the research time with my family. I come from originally the North part of Turkey. I was born in a small village and nurtured in Islam. I have 7 years of teaching experience in Turkey as a teacher of 'Religious Culture and Moral Education' in primary, secondary, and high school level.

Before conducting the current study, I graduated with a BA in Theology-2009 (Turkey), MA in Religious Education-2012 (Turkey), and MTheol. in Religion, Literature, and Culture (UK). I am not a musician at all. Even my audience expects me to sing or to play an instrument in a conference paper-presentation, I do not have any formal/informal training in music. I can only say I am a music listener. This personal lack is assumed not to be a problem for the current research in the sense that the objective in the study is not to produce a musical product. Contrarily, music is a tool in this research for more effective RE. In other words, I am a researcher in the field of religious education. Consequently, whereas the analysis I made in the current research is grounded in the data, I recognise that it may be affected by my biases, subjectivity, and my personal identity, due to my personal experience in the field and reflection of the literature.

4. Ethical Considerations

One of the important and compulsory steps to start data collection for the research is having ethical approval. The University requires that all PhD researchers must get ethical approval from their College Ethics Committee for the research project involving human participants.⁴ Hence, a comprehensive ethics application was submitted to and approved by the College of Social Science Ethics Committee of the University of Glasgow (Appendix-2). This is not only an 'official procedure', but also a principle that protects the participants of the research and the researcher from any negative outcomes. In addition, it raises the standards for a higher quality research practice. Its effects are clearly observable through the stages of the study.

First, as it is the case for the current research, the researcher must set the standards of free and voluntary participation for recruitment. Furthermore, these standards must be clearly explained for potential participants, so that they know their rights and responsibilities. The way to accomplish this is to circulate the 'Participant Information Sheet' to potential participants. There were two versions of this information sheet in the current study in that one was for the questionnaire and the other was for the interviews. These sheets briefly introduce (1) the researcher, (2) the research subject, (3) the expectations from the participants, (4) the location of the research activities, (5) publication/dissemination of the research results, (6) how participants may reach the research results, if requested, (7) respect of confidentiality, (8) whom the research participant can contact if they are concerned about any aspect the research, and (9) the funder of the research. Then, the information sheets recognise (10) participants' right to withdraw for any reason from the research at any time, without explanation. It is also valuable for participation that (11) involving or not involving the research will not affect in any way participant's study/employment status. It was also given (12) the contact details for more information and feedback.

4 <https://www.gla.ac.uk/colleges/socialsciences/students/ethics/>, Accessed: 08/06/2021.

Apart from the 'Participant Information Sheet', research participants declare their agreement with a consent form. It is crucial to give enough time to proposed participants to read the information sheet and to sign the consent form. Similar to the 'Participant Information Sheet', two kinds of the consent form were taken for the questionnaire and the interviews. For online participation, the consent was taken online as well. With this form, participants accept that (1) they read the information sheet for the study and had an opportunity to ask further questions; (2) their participation is voluntary and they are given the right to withdraw, with no reason; (3) participants will be referred to by pseudonym; (4) there will be no effect on their grades/employment arising from their participation or non-participation in this research; (5) all names and other material likely to identify individuals will be anonymised; (6) the material will be treated as confidential and kept in secure storage at all times; (7) the material will be retained in secure storage for use in future academic research; (8) the material may be used in future publications, both print and online; (9) they agree to waive their copyright to any data collected as part of the project; and (10) other authenticated researchers will have access to the data only if they agree to preserve the confidentiality of the information.

In terms of confidentiality, there must be an agreement between the participants and the researcher on using the 'personal data'. It is also a legal requirement including retention and disposal of the data, access to data, and anonymisation for publications. 'The measures for confidentiality are to safeguard against any unwanted exposure, which could potentially harm any of the subjects' (Coll, 2008: 41), and failing to follow the ethical conduct of research, including confidentiality, may result in disciplinary action.⁵ Its bounds were clearly drawn in the 'Consent Form'. It was agreed for anonymity with every participant in the study regarding the use of pseudonyms and concealing the research locations. Because of his unique position, the exception

5 <https://www.gla.ac.uk/colleges/socialsciences/students/ethics/informationforapplicants/#/consentforms>, Accessed: 08/06/2021.

for the anonymity rules might be for the Chair of the 'Director of Religious Education' at the 'Ministry of National Education of Turkey', while his name was never directly stated.

The material related to research participants always has been treated as confidential and kept in secure storage, and just other authenticated researchers have access to the data only if they agree to preserve the confidentiality of the information. Since the interviews were only voice-recorded, and the questionnaires had no questions to obtain any personally identifiable information, there was no way to identify the participants with the research data. However, confidentiality was also subjected to legal constraints and professional guidelines in case of any wrongdoing or potential harm. For transparency, research participants were encouraged to be informed about the results of the research where they may find this information.

5. Data Collection and Analysis

Quantitative and qualitative data collection and analysis procedures were separately conducted. The data was kept in secure storage and had no access for anyone than the researcher during the data analysis process, while findings were regularly reported to the supervisors.

Data collection activities through the questionnaire were held during March-April 2019 in Turkey and June-November 2020 in Scotland. The data obtained with the questionnaires was transferred into a Microsoft-Excel worksheet (.csv). As participants were asked to answer 15 background questions and rate their emotional response with 25 (+3 additional) adjective terms for 12 excerpts and 'pre-test' condition, this document contains over 500 units of data for each participant. It includes background information (15 units); 28 adjectives for 'pre-test' ratings (28 units) and for 12 excerpts (336 units); 9 aggregated GEMS factor values for 'pre-test' (9 units) and for 12 excerpts (108 units); 9 mean values for the aggregated GEMS factor values (9 units); and 3

aggregated GEMS higher-order category values for 12 excerpts (36 units). While factor and higher-order ratings were not directly asked of the participants, the aggregated values were calculated with the adjective ratings by using R software. (More detail about aggregated GEMS factors and higher-order categories is given in Chapter 5.)

The quantitative data analysis with R Studio (3.6.1 version) was run by the researcher himself by means of statistical methods. There were two kinds of motivation in this stage of data analysis: First, to understand to what extent participants' emotional response to listening to Turkish music have been scattered or grouped into similar patterns, background variables have dominated the interpretation of the emotion ratings. Second is to compare participants' emotional response to the current research excerpts (with the help of GEMS factor values) and the historical attributions of the makam-emotion relationships (The significance of the relation between the GEMS factors and makam-emotion attributions was explained at the end of the Turkish literature review, Chapter 3.1, and discussed in the 'Discussion' part of Chapter 5). The suitability of GEMS for studying Turkish music was also an additional matter for data analysis.

Then, for qualitative investigations on RE professionals' experience, audio recorded interviews (10 face-to-face, 5 phone-call, and 5 field note-discussion) were analysed.

According to 'constant comparison' of grounded theory to generate concepts from the data through open, axial, and selective coding (Glaser and Strauss, 1967); data collection and data analysis concurrently have taken place. Hence, there was not a certain end date for data analysis, whereas the first interview was recorded in March 2019 and the last was in May 2020. Similarly, for constant comparison, interviews were conducted in three rounds (March-April 2019; December 2019-January 2020; and March-May 2020). Due to the nature of the method, there was not a single set of questions for the interviews, but each interview has its unique interpretations on the topic. This is also

because of that, in order to reach theoretical saturation, the questions were evolved as long as data analysis progress proceeded.

The data obtained through the interviews was analysed by the researcher himself without software. First, as soon as its completion, an interview was transcribed. When necessary, transcription was translated into English. On this raw data, open coding was performed line-by-line through 'substantive/in vivo' codes (by respondent's words) and 'theoretical' codes (the analyst's creation). In this stage, almost everything was coded such as emotions, action, thoughts, experience, judgements, and justifications, since it was not certain the direction the data may show. The idea was to move from a larger number of codes, through concepts, to a relatively smaller number of categories. When it seems that codes have a relation/similarity, they were combined into concepts. Then, if possible, several concepts were grouped into a category. For the first interview, for example, this process might be a bit arbitrary, as each 'code', 'concept', and 'category' should be subjected to 'constant comparison' with other interviews.

At the next stage, beyond the open coding, concepts and categories were particularly elaborated in the axial coding process in order to understand comprehensively the relationships between categories and sub-categories. Accordingly, the role of a category's properties at a time among other categories was identified. The '6 Cs' of Glaser (1978) (*cause, context, contingencies, consequences, covariance, and conditions*) led this stage. The rising notions during axial coding again were reflected to the theoretical sampling process for the next round of data collection. Therefore, the 'core' category/categories were sought for the next coding step.

At the later stage, within the selective coding process, the theory, framed through open and axial coding, was refined. For this, the core category and its relation to other categories and concepts were highlighted. Then, data collection continued until saturation was obtained for the core category. Thus, at the later stage, interviews have a strict and sharp concentration around the core category.

6. Collaboration and Consultation

One of the preliminary ideas of the current research was presented in two international academic events in the UK (Ogretici, 2018a, 2018b). These works were actually derived from the researcher's MTheol. dissertation (Ogretici, 2016), the main aim of which is to ask why music should be considered as an effective tool for RE classes in the Scottish context. Similarly, the researcher has discussed his research proposal in a PGR conference in Glasgow (Ogretici, 2019a) and in a summer school in Belgium (Ogretici, 2019b). In addition, researcher's educational perspective on how music is evaluated in Islamic thought (that is a sub-section, among others, of the 'Conceptual Framework' chapter) was presented at two international conferences in Sweden (Ogretici, 2018c) and Turkey (Ogretici, 2019c). Likewise, the values education mentality within the Turkish RE system (sub-section of the 'Conceptual Framework' chapter) was presented at an international conference in Edinburgh (Ogretici, 2019d). This view was also discussed in the context of religion and secularism in Turkish RE system (Ogretici, in press). Even though the researcher intended to share the initial quantitative and qualitative findings at three international conferences in 2020, these events were unfortunately cancelled due to the Covid-19 restrictions.

Furthermore, engaging and sharing the ideas, findings, and results with colleagues, other researchers, and interested third parties may broaden the experience for researchers on their research practice (Coll, 2008). In this regard, beyond his supervisory team, when he needs to expertise on Turkish music tradition, the researcher has found an opportunity to consult to Ahmet Hakkı Turabi (Prof. Dr. of 'Turkish Religious Music') and Yalçın Çetinkaya (Assoc. Dr. at Turkish Music State Conservatory).

7. Rigour and Trustworthiness of the Research

In order to maintain rigour and trustworthiness, the present research applies various of techniques for its quantitative and qualitative

approaches. Because of the mixed methods of the present research, internal validity, external validity, reliability, and objectivity for the quantitative investigations are explained, respectively, in relation to credibility, transferability, dependability, and confirmability of the qualitative interpretations (Oktay, 2012).

For internal validity and credibility, this research was conducted in a prolonged engagement with the research field (Guba and Lincoln, 1989). Quantitative data collection and analysis process was extended to 2 phases (Turkish and Scottish cases) in a 2-year period. Similarly, for qualitative data collection and analysis, interviews were conducted in 3 rounds over a year for a constant observation in a method of grounded theory. In this respect, a considerable time was spent in the field with the research participants to promote the accurate investigation of the research questions. Additionally, the participant recruitment strategy was explained for both quantitative and qualitative data collection process including the rationale, sample size, procedures, and settings. The researcher used multiple sources of data including quantitative questionnaire ratings, semi-structured interview records, field notes, self-reflective notes, expert views, and documents such as curriculum and policy papers. Hence, triangulation was not only valid for data collection but also for analysis. Consequently, quantitative data was statistically analysed (Chapter 5) and qualitative data was evaluated for theory development (Chapter 6) and thematic analysis (Chapter 7).

Furthermore, the data analysis process was attributed to explore opposite accounts, rather than to highlight the confirming cases (Liao and Hitchcock, 2018). In Chapter 5, exploratory and confirmatory factor analysis processes, for instance, were dedicated to investigating the rival explanations, to check if the data suggest a better explanation apart from the existing GEMS structure. Similarly, negative case analysis was conducted in Chapter 6, to search the disconfirming views after the preliminary categories were established (Denzin, 2009). In this regard, the negative cases were recognised, presented,

and explained in the discussion section (of Chapter 6), but were not ignored or treated as outliers (Morse, 2015; Padgett, 2012). In addition, due to the theory triangulation, multiple perspectives were adopted throughout the research. In this sense, a series of predicted results and actual findings were compared. To illustrate this, in Chapter 5, predictions of the intended emotional arousal were compared with the actual ratings, in Table-12. Likewise, the assumption prior to the conduct of the interviews was that RE professionals might be keen to use music with its capacity for emotional arousal. However, for the interviewees, the cognitive qualities of music were, at least, equally as significant as its affective power. Moreover, as Chapter 7 interprets both qualitative and quantitative findings with the lenses of the curriculum and RE policy, a match among the patterns of the themes was investigated in a multivocal perspective (Liao and Hitchcock, 2018).

At the end, to sustain the ambitious standards of data collection and analysis, peer debriefing and reviewing procedures (Guba and Lincoln, 1989) were regularly applied with the researcher's supervisory team. Hence, the researcher has frequently conferred with academic professionals to assure a well-balanced research design, data collection, analysis, and interpretations. In addition, outside the supervisory team and academic professionals, colleagues who were not involved in the study but have expertise on the quantitative and qualitative research were consulted for expert checking as a means of ensuring the quality of the research (Liao and Hitchcock, 2018).

For external validity (generalizability) and transferability, this research provides a thick description of its methodology and methods (Guba and Lincoln, 1989). After this methodology chapter, the chapters of quantitative and qualitative investigation have also iteratively presented a section for the detailed accounts of chapter-specific information on methods. These method sections explain the data collection methods including participants, materials, and procedures as well as the data analysis methods containing coding procedures and analytic

processes. Consequently, for someone who interested to transfer the original findings of the present study to another context, this research is resourceful enough to describe its way.

The present research provides reliability and dependability through stepwise replication and triangulation, following the strategies of internal validity and credibility. Along with the two cohorts of quantitative data, Turkish and Scottish, the data analysis in Chapter 5 was conducted in a comparative manner both between the cohorts and among the sub-groups of the participants such as gender, school type, religious belief, etc. Hence, the data was divided into groups and the data analysis was duplicated to evaluate the significance of the findings. Similarly, for the quantitative data analysis in grounded theory research strategies of Chapter 6, each interview was treated as an independent unit to be assessed, in terms of constant comparison and theoretical saturation techniques. As was established for the negative case analysis, each category and concept were questioned for every respondents' view. Consequently, analysis of the qualitative data was repeatedly organised for 3 rounds of interviews, field notes, and expert views. Furthermore, thematic analysis in Chapter 7 brought together the quantitative and qualitative findings in light of the curriculum and policy documents.

For objectivity and confirmability, the present research applied audit trail strategies along with triangulation (Guba and Lincoln, 1989). In this respect, the procedures and data of the research were systematically documented (Padgett, 2012). Additionally, the researcher has kept the progress recorded through the analytic and self-reflective notes. Hence, for the quantitative data analysis, the success of the arousal for the intended emotions is defined by means of statistical methods. Similarly, R packages, for instance, were stated as much as possible. Furthermore, for the qualitative data analysis, the process was explained to the extent of beginning from the raw data to the categories, for theory construction. In this respect, Chapter 7, for instance, illustrates the progress of analysis with tables and figures.

Consequently, decisions that might change the direction of the study were explained with their reasons.

To sum up, rigour and trustworthiness of the research were safeguarded from the very beginning of the research due to the appropriate design for the research questions. This is supported by the theory triangulation and interdisciplinarity, prolonged engagement with the multiple sources of data and data analysis, relevant sampling strategies, and embracing limitations and delimitations. In addition, a comprehensive description of procedures, materials, data collection, and analysis must be also noted as well as an audit trail. This chapter has explained the methodology of the research and analysis. This research was conducted in a mixed-method research design, where the emotional response to music listening was measured with GEMS questionnaire and semi-structured interviews in a grounded theory approach were adopted to understand RE professionals' views on the role of music in RE. Then, both perspectives were merged for the implementation possibilities, with the help of comparison of the relevant literature, curriculum, and policies. While I cannot attempt to provide a critical and broad assessment for RE, the scale of the qualitative and quantitative paradigms and depth of the data and analysis present a significant insight into the research questions. In particular, the significance of the present study lies in the premise that the quality of RE might be improved by means of the affective, cognitive, and behavioural activations of musical interventions. It is believed that this was attainable because of the reliable investigation of the research questions.

Chapter V
Emotional Responses to Turkish Music:
Quantitative Analysis with GEMS

1. Introduction

This chapter will focus on investigating whether listening to Turkish music causes listeners to feel particular emotions. The quantitative investigations of this chapter are derived from the results obtained by the application of GEMS-25, the shorter version of the Geneva Emotional Music Scale (Zentner, et al., 2008), within a questionnaire. In the music-emotion research field, while the majority of studies use commercial recordings of Western instrumental classical music (Kreutz, et al., 2008), the current research is dominated by Turkish *makam* music. As was explained in previous chapters (the conceptual framework and the literature review), both historical theories and contemporary studies claim that Turkish music can induce certain emotions in listeners because of the makams. Some of these claims are tested in the present chapter.

It has been observed that there could be a relation between the emotional attributions of Turkish music makams and GEMS emotion factors and adjective list items (outlined in Table 6, Chapter 4.3.4). This expectation has also been applied to the *makam* and excerpt selection processes (Table-8). Moreover, concerning that relation, it was hypothesised that the ratings of a certain *makam* might mirror an emotion factor associated with GEMS, with a higher score, in comparison to other factors (Table-12). From this perspective, the underlying assumption

is that GEMS is a relevant tool for studying musical emotions within Turkish music makams. This assumption is also further evaluated in the present chapter (Chapter 5.3.2.2). A second set of expectations was concerned with the relationships between the characteristics of the participants and their emotional responses to music listening. It was also hypothesised that there would be a correlation between the specificity and intensity of emotional responses and personal, social, and musical background of the participants (Chapter 5.3.2.3). In other words, what is prioritised in the current research is the musical and personal components of music-emotion research rather than the situational elements. In a broader view, the relationship within the first hypothesis is also attached to the 'value terms' of Turkish RE curriculum, elaborated in the 'discussion' section of the study (Table-14), for possible implementation purposes. In this context, it must be stated that tables and figures are an indispensable part of the analysis in the present chapter.

The main research question of this chapter is: 'how do listeners (students) emotionally respond to Turkish music to which they listen?'. In addition, the sub-questions are: 'is there a correspondence between Turkish *makam* music's emotional attributions and the GEMS response structure?'; 'is the GEMS model well-suited to study of the emotional response to Turkish makam music?'; and 'is there a specific response pattern according to respondents' characteristics?'. To sum up, the rationale behind the present research is to adopt an experimental approach in order to assess the claims for inducing pre-determined emotions via music, in favour of (religious) educational benefits. In a provocative sense, it could be argued that if one (a teacher) is required to induce particular emotions in the classroom context s/he can use musical excerpts for the sake of their educational advantages. Then, it would be comprehensible that Turkish *makam* music is (might be) beneficial for RE (and RE teachers) to the extent that it can induce expected emotions.

2. Method

2.1. Participants

The participants are 350 students (male=128, female=222), from Turkey (n=261) and Scotland (n=89) and aged from 13 to 48 (M= 15.97; SD= 3.05). Year groups ranged from Secondary-8 to High School-11, in Turkey. For Scotland, participants are from S4-S6 and a group of HE students fresh from their Secondary education.

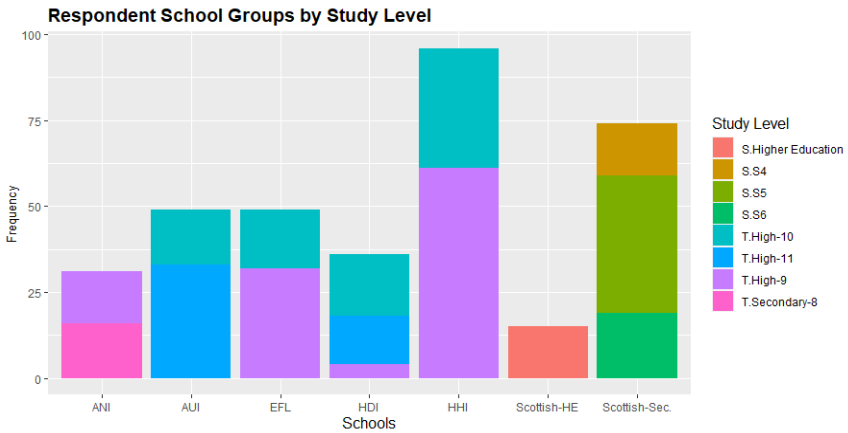


Figure 2: School Groups by Study Level (T.=Turkish, S.=Scottish)

The participants were recruited from five schools in Turkey and two schools in Scotland. The school names are encoded in the text. The first is ANI, an ‘Imam-Hatip’ school which provides vocational Religious Education at Secondary and High School levels (For Imam-Hatip schools, please, refer to the ‘Chapter 2.3’ and to Aşlamacı and Kaymakcan, 2017). ANI is in a first year launching high school level RE with an integrated musical programme. Only musically talented candidates have been accepted for the music programme of the school. This school has joined the research with 31 participants.

Similarly, HDI is an 'Imam-Hatip' high school with an integrated musical programme, while there are also other programmes running in the school. It is completing the third year in delivering its musical programme. Hence, 36 students from these three classes studying in that musically enhanced programme have been included in the current study. HDI is a 'boys-only' school and has over 850 students. However, this school accepts only musically talented students for the music programme. There were only 4 Imam-Hatip schools with an integrated musical curriculum in Turkey at the time of data collection. (For more information about the nature of the programme, syllabi, objectives, and admissions: DGRT, 2018: 80-86.)

EFL is a 'high school of science' which accepts students with high academic attainment, at the Mediterranean coastal city of Mersin (For more information about Turkish science high schools: Çolakoğlu, 2016). The school joined the research with 49 students from its over 550 students of both genders. In contrast, HHI is a 'girls-only' 'Imam-Hatip' high school in the suburb of Istanbul. It is a one-year-old school with 250 students and participated in the research with 96 students. Another 'Imam-Hatip' high school in the suburb of Istanbul is AUI with 49 participants. It is a 'mixed-gender' school with its over three hundred students.

Next is a six-year co-educational Catholic High School in Glasgow, Scotland (Scottish-Sec.). The school has about 1800 students from S1 to S6. 74 students have joined the study. The last group (Scottish-HE) is from Scotland (n=15), who are registered at the University of Glasgow in various entry-level programmes and therefore fresh from High School study.

Table 7: School Details

School	Grade	Level	Feature	Gender	City	N.	%
EFL	9 th -11 th	High School	Science high school	Mixed	Mersin	49	14
ANI	9 th	High School	Imam - Hatip with musical programme	Mixed	Ankara	15	9
	8 th	Secondary	Imam-Hatip	Girls-only		16	
HHI	9 th -10 th	High School	Imam-Hatip	Girls-only	Istanbul	96	27
HDI	9 th -11 th	High School	Imam - Hatip with musical programme	Boys-only		36	10
AUI	10 th -11 th	High School	Imam-Hatip	Mixed		49	14
Scottish-HE	-	Higher Education	-	Mixed	Glasgow	15	4
Scottish-Sec.	S4-S6	High School	Catholic	Mixed		74	21

For the participants from Turkey, the language is Turkish for the majority (96%); as well as English (96%) for the participants from Scotland. The figure is the same for Turkish nationality students (96%) in the Turkish sample. However, only 34% of the Turkish sample state that they belong to a Turkish ethnicity. 45% of the sample feel no affiliation to any ethnic background. Similarly, in the Scottish group, 97% hold Scottish/British nationality. However, only 40% declare a Scottish/British ethnicity, and 49% goes to ‘no ethnicity’. For religious beliefs, the Turkish participants predominantly consider themselves as Muslim (95%), whereas, for the Scottish participants, 64% of the answers go to ‘Christian’, 22% to ‘no religion’, and 6% to ‘Muslim’.

2.2. Background Variables

The questionnaire was also used to measure various background variables such as hearing capacities –which of course may affect the evalu-

ation of music– attitudes to music, musical training, music preferences, and listening habits. No one reported having any health conditions or illnesses affecting their hearing on the day of the questionnaire. For over 85% of the participants, music was important, while, for 7%, it was not.

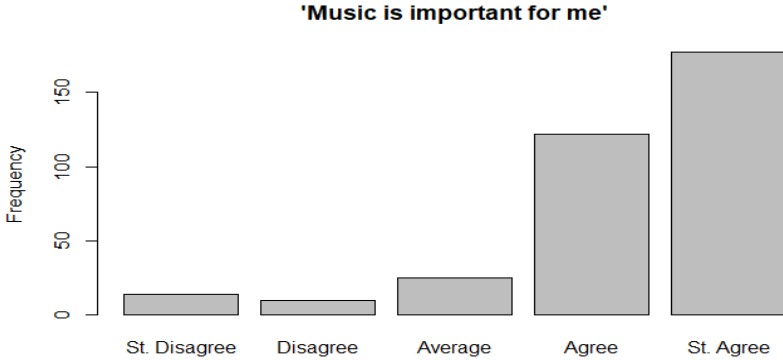


Figure 3: Importance of Music

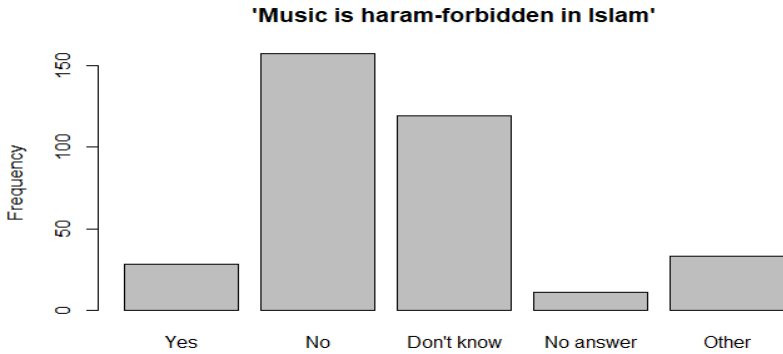


Figure 4: Permissibility of Music in Islam

For 45% of the participants, music is not forbidden (haram) in Islamic teachings, but, for 8%, it is. The option of 'don't know' on this question has a relatively higher answer at 34%, and 'other' option is at 9%, with which for which the respondents provided explanations. These explanations are generally in parallel with the current study's scope (Chapter 2.2.2). The situation might be appropriate on the

grounds that the question of ‘whether music is forbidden in Islam or not’ is not a topic of teaching in both the Turkish and Scottish RE systems. Thus, it might be argued that the answers of ‘other’ may reflect the respondents’ affinities with religious teachings.

The majority of the participants listen to music several times a day (80%), whilst only 1% report never listening to music. Of those who state that music is forbidden in Islam, no one stated never listening to music; on the contrary, 75% of them listen to music several times a day. In addition, it should be said that music preferences of the sample varied widely, but Pop and Rap/Hip-Hop were the most preferred genres (Pop= 242, Rock= 88, Classical= 97, Religious= 79, Folk= 103, Rap/Hip-Hop= 179, Others= 34). Additionally, for the question on musical training in singing or playing an instrument, 45% of the answers are affirmative. Furthermore, for musical expertise, the figures are as of 2% for ‘professional musicians’, 4% for ‘semi-professional’, 23% for ‘amateur’, and 69% for ‘occasionally singing/playing for fun’ and ‘non-musician’.

2.3. Materials

2.3.1. Music Stimuli and Measures

The stimuli (Table-8 and Appendix-3.2) were fourteen Turkish excerpts from twelve makams. However, only twelve excerpts were in use for each session, because one of the alternatives was used for the second and fourth excerpts. The excerpts ranged from 103 to 287 seconds in length ($M=185$). These were selected from among the Turkish *makam* music repertoire, according to the relevance between the *makam* of the excerpts and GEMS structure. This relation was explained in the *Methodology* (Chapter 4.3.4), as well as in the next section (Chapter 5.2.4-Procedures).

For the excerpt selection, first, the list of makam-emotion relations in the resources (in Appendix-1) was regarded with the guidance of the literature review. The standard literature indicates about 60 links between different makams and emotional responses. In this process,

considering possible future research and educational advantages, uncommon makams such as Kuçek and Nişabur were eliminated. In addition, what is excluded is when a combination of several makams is attributed to a single feeling (*Makams of Büzüirg, Zirefkend, and Rehavî, for example, induce sorrow* –Merâgî cited in Karabaşoğlu, 2010). This is in order to avoid relating one single emotion to more than one excerpt. In other words, this research does not test the capability of inducing *sorrow* for the above-mentioned makams. Otherwise, for this attribution, it must use three excerpts for a single emotion. Hence, that combination was excluded from the research. To put it in a different way, to make the listening list shorter, efforts were made to establish connections between one single excerpt to as many emotional attributions as possible. Suitably, what is included in the research is the makams with multiple attributions. Therefore, Neva is included in the research, because it is argued that (i) Neva removes negative thoughts; induces relief, happiness (Güvenç, 2006); (ii) Neva gives relaxation (Farabi cited in Kalender, 1987); (iii) Neva induces bravery (Urmawi cited in Akdoğan, 2007).

After this examination, the *makam* list was reduced to 18 with reference to recent studies that have used GEMS for Turkish *makam* music (e.g., Arman, 2015; Altun and Egermann, 2020). Finally, the number of makams was reduced to twelve in relation to the relevance between the makams with the attributed emotional effects and the GEMS structure, with its twenty-five adjective items and the nine musical emotion factors. Each excerpt was linked to one of its corresponding emotion factors (therefore, to its associated adjective items) in GEMS (Table-8). The exceptions were the 5th excerpt (Buselik) and the 12th excerpt (Neva), because they have been linked to 2 different GEMS factors because of their varied emotional attributions. The assumption was to have higher scores for the linked factor's emotion item ratings in the related excerpt. In Segâh, for instance, the related GEMS factor is Transcendence. Accordingly, the expectation is to get higher ratings for the sub-items of the Transcendence factor (fascinated, overwhelmed, and feeling of

transcendence), when the participants listened to the fourth excerpt. In the same way but with a reverse direction, this is the expectation for the Tension factor, because the intended effect of Isfahan and Neva is to *reduce* negative feelings. So, for Isfahan and Neva, the expectation is to have lower scores for the ratings of Tension-related items (tense and agitated). These relations will be also considered for data analysis.

Table 8: Excerpts List with the Intended Emotion Factors

	GEMS Factor	Makam	Feature	Excerpt Name	Length
1	Wonder	Mâhur	Hymn, with lyrics	Gaflet ile Hakkı Buldum Diyenler	02:18
2a	Wonder	Irak	Instrumental (Ney)	Uyan Ey Gözlerim	02:54
2b			Hymn, with lyrics	Awake (Uyan Ey Gözlerim)	03:22
3	Power	Nihâvend	Instrumental (Multiple)	Nihâvend Longa	04:20
4a	Transcendence	Segâh	Hymn/Prayer (İlahi/Salat), with lyrics	Tekbir, Salât, İlahi (Dinle Sözümü)	04:45
4b			Instrumental (Multiple)	Salât-ı Ümmiye	01:43
5	Peacefulness Power	Bûselik	Song, with lyrics	Dirler ki kovalum bendelerini	03:38
6	Tension (-)	Isfahan	Hymn, with lyrics	Yandım Yakıldım Ben Nar-ı Aşka	02:15
7	Tenderness	Hicaz	Song, with lyrics	Aziz İstanbul	04:10
8	Nostalgia	Sabâ	Instrumental (Tanbur)	Tanbur Taksimi	01:53
9	Peacefulness	Hüseynî	Instrumental (Clarinet)	Clarinet (Klarnet) Taksimi	02:51
10	Joyful Activation	Rast	Hymn, with lyrics	Erler Demine Destur Alalım	04:47
11	Sadness	Zirefkend	Hymn, with lyrics	Yâ rezzâk vehhabi'l-can	02:07
12	Power (+) Tension (-)	Nevâ	Instrumental (Multiple)	Mehter - Nevâ Cengi Harbi	02:09

Having determined the list of makams, suitable excerpts for each *makam* were then traced through online resources. After the initial search, approximately 10 potential excerpts for each *makam* were identified. In order to determine the final excerpt to be used within the questionnaire, several standards were observed during the selection process. The quality of the recordings was an asset. Another factor in the selection was the balance between excerpts regarding instrumental music (2a, 3, 4b, 8, 9, 12) and music with lyrics (1, 2b, 4a, 5, 6, 7, 10, 11). In the same regard, another distinction observed was between religious (1, 2b, 4a, 6, 10, 11) and non-religious excerpts (3, 5, 7, 8, 9); this was despite the fact that dividing musical excerpts into two contrasting categories such as religious and non-religious may not be straightforward or acceptable for all cases. The second excerpt (2a), for instance, is a pure religious composition, a hymn. However, for the instrumental version (2b), it may not be relevant to label it as 'religious' for those who do not know the original version. This also applies to the fourth.

Moreover, for the second and the fourth excerpts, there are two options in the same *makam*. 2a and 4a were used within the Turkish questionnaire (expectedly with Turkish speaking participants), while 2b and 4b were for the English questionnaire. 2a and 2b are a version of an original Turkish hymn (Haug, 2019; İşler, 2018: 89-92; Bardakçı, 2014). 2a is the instrumental version and 2b is the English-translated version of the original Turkish lyrics with the same composition. Similarly, 4a includes 3 pieces of hymns/prayers in Turkish and Arabic. Then, 4b is the instrumental version of the second part of 4a. The rest of the list is the same for both the Turkish and the English questionnaires. In this regard, while I labelled these stimuli 'Turkish excerpts', this might be problematic when, for instance, considering the instrumental music. (For the broader meaning of 'Turkish music' applied in the current study, please, refer to Chapter 2.2.) These classifications among the excerpts were also considered through the data analysis process.

To be used in the online questionnaire form, the excerpts were converted to a video file and uploaded for online availability. However, to eliminate the visual effect on emotional responses while listening to music, the background was replaced with a black-blank page. In addition, for all excerpts, 5 seconds of silence was added before commencement. For the paper version of the questionnaire, since the researcher administered the process, participants were not aware of these technical properties of the excerpts.

Viewed overall, the set of twelve *makam* were chosen by the researcher from the domain of Turkish makam music for their coherence with the GEMS method's adjective list/emotion factors, and in relation to specific emotional attributions conventionally associated with Turkish music makams. Fourteen excerpts were selected by the researcher, though just twelve were used at the time of application.

2.3.2. Questionnaire

What is measured with the questionnaires is, in essence, the subjective feeling component of the aroused emotions in listeners, by means of a 25-item adjective list from GEMS. Participants were first asked to provide basic demographic data and information about individual musical considerations, the results of which are mentioned above. After that, GEMS was applied to the listening sessions.

The questionnaire was delivered to the participants in two separate formats: paper-printed and online. Both versions were available in English and Turkish (translated by the researcher himself). Thus, there are two versions in two languages: Turkish-paper, English-paper, Turkish-online, and English-online (Appendix-3). Although the content is absolutely the same for all, a printed questionnaire lasts three pages, and the online version consists of 15 sections. This is because the GEMS adjective list has been repeated for each excerpt in a single section for the online questionnaire and the GEMS tool was converted to a table format for the paper version.

list (Table-8) tell us is that, given the link between the makams and the emotion factors, it is expected to have higher emotion ratings in certain emotion adjectives for each excerpt. The 10th excerpt (with the makam of Rast), for instance, is linked to ‘Joyful Activation’ (as an emotion factor) for which the assigned adjectives are ‘Animated, Bouncy, and Joyful’. Therefore, the assumption is to have relatively higher ratings for these three adjectives among the GEMS ratings of the 10th excerpt, if the excerpt is successful in inducing ‘Joyful Activation’.

Zentner (2017) also argues in favour of sharing the Turkish translation of the tool. Since the limitation related to language and translation issues was highlighted in the literature review, the translation of the GEMS tool into Turkish is of vital importance for the study. To the best of my knowledge, the only study applying GEMS (with GEMS-45) in Turkish is Arman (2015). Rather than copying all the translations Arman presents (2015: 57), a colleague’s reviews and the present researcher’s proposed translations of the adjective list have been taken into account. Eventually, the final list (Table-10) was reached and adopted into the questionnaire.

Table 10: Turkish Translation of GEMS

	Zentner, et al. (2008)	Final Terms for the present study	Proposed by the researcher	Reviewer’s suggestions	Arman, 2015
1	Moved	Duygulanmış	Etkilenmiş	Etkileyici	Duygulanmış
2	Fascinated	Büyülenmiş	Büyülenmiş	Büyüleyici	Büyülenmiş
3	Strong	Kuvvetli	Kuvvetli	Şiddetli-Kuvvetli	Güçlü
4	Tender	Hassas-Duyarlı	Hassas- Duyarlı	Yumuşak	Hassas
5	Nostalgic	Nostaljik	Nostaljik	Nostaljik	Nostaljik
6	Serene	Huzurlu	Huzurlu	Durgun	Dingin
7	Animated	Canlı- Hareketli	Canlı-Hayat dolu	Hareketli	Hareketli
8	Sad	Üzgün	Üzgün	Üzgün	Üzgün
9	Tense	Gergin	Gergin	Gergin	Gergin

10	Bouncy	Dinamik- Yaşam dolu	Sıçrama-Dans	Dinamik	Yerinde duramayan
11	Filled with Wonder	Merak- Hayret	Merakla dolmak	Hayret verici	Harika
12	Sentimental	Duygusal-Hisli	Duygusal-Hisli	Duygusal	Duygusal
13	Affectionate	Sevecen-Şefkatli	Sevecen-Şefkatli	Sevecen	Sevecen
14	Overwhelmed	Kahrolmak-Mahcup olmak	Boğulmak-Mahcup olmak	Yoğun	Darmadağın olmuş
15	Agitated	Telaşlı- Tedirgin	Tedirgin	Telaşlı	Heyecanlı
16	Feeling of Transcendence	Aşkınlık-Yücelik	Aşkınlık Hissi	Olağanüstü	Aşkınlık
17	Calm	Sakin	Sakin	Sakin	Sakin
18	Joyful	Neşeli	Neşeli	Neşeli	Neşeli
19	Tearful	Ağlamaklı	Ağlamaklı	Ağlamaklı	Ağlamaklı
20	Soothed	Avunmuş	Teskin Etmek-Sakinleşmek	Sakin	Avunmuş
21	Energetic	Enerjik	Enerjik	Enerjik	Enerjik
22	Dreamy	Hülyalı- Dalgın	Rüya gibi	Dalgın	Hülyalı
23	Mellowed (Softened-up)	Olgunlaşmış	Yumuşamak (Yumuşatılmış)	Olgun	Olgunlaşmış
24	Allured	Cezbedilmiş	Cazibeye kapılmak	Çekici	Cezbedilmiş
25	Triumphant	Muzaffer	Muzaffer	Mükemmel	Muzaffer

2.4. Procedure

First, potential participants were contacted with the help of their teachers, school managers, or programme coordinators. While the content was the same for both paper-printed and online questionnaires, the procedure was not identical. For the online version, participants did not meet the researcher; hence, the participants received the information sheet online. Similarly, all verbal explanations given in the paper-based were supplied within the online questionnaire form. Furthermore, online-questionnaire participants had to figure out where, when, with what kind of device (smart-phone, computer, etc.) they would access the material, and how they would complete the test.

For the paper-based questionnaires, however, the researcher was involved in almost all stages of the application. Rather than test the whole school population, it was determined with the help of teachers and school authorities to select classes to be included in the study. After the completion of ethical requirements, participants joined the sessions in class settings with their peers. On all occasions, technical equipment of the schools, such as computer and sound systems, was used while the researcher brought physical questionnaire materials and recordings of the excerpts.

Participants were first asked to answer the questions on the basic demographic data and individual musical backgrounds on the first two pages. While answering, they had a chance to ask questions about any point not clear to them. After the questions at the end of the second page, they were given time to read the instructions about the GEMS tool, in order to rate accurately their emotions that the music evoked in them. These instructions were simply explaining (i) the difference between perceived and felt emotions, (ii) how the participants should use 26th-28th rows, and (iii) how they should rate the intensity of their felt emotions ranging from 1 (*not at all*) to 5 (*very much*).

On the third page, participants observed the GEMS table (Table-9). Then, instructions were illustrated to the participants in relation to the 25-adjective list, blank rows (26-28), and the excerpt list. Before the listening period, participants were asked to rate their current emotional status on the table using the GEMS adjective list. This provided the chance not only to the researcher to see the change in participants' initial feelings. Thereafter, for the loudness adjustments, the first excerpt was played for a period. Then all the excerpts were played once in the same order for each session. Participants rated their feelings while they listened to each stimulus. After each piece, participants were given extra time to complete their ratings. When everyone finished the ratings, the next excerpt was played. Before each stimulus started, the number of the piece/rating column was reiterated. After the listening and rating

period, the last questions and final comments of the participants were answered. All documents were then collected and later the data was converted to digital copy to be analysed with R-studio software.

3. Results

3.1. The Preliminary Findings

The principle on which the table below relies has been borrowed from Gabriellsson's renowned paper on perceived-felt emotions. Regarding recognition of emotion perception, he states that 'all reports on emotion perception demonstrated that listener agreement practically never reached 100 percent. In fact, a common criterion is that at least half of the listeners (50 percent) agree on the respective emotion' (Gabriellsson, 2001-02: 139). Applying same perspective to the present research, if half of the participants (or more) agree that an excerpt makes them felt the respective emotion, then the excerpt has been labelled (*by X on Table-11*) as successful in inducing that emotion. In this regard, according to the table, all the excerpts used in the research have evoked a varied number of emotions. While the average is seven emotions per excerpt, Segah has induced twelve emotions and the figure is 2 for Zirefkend. The most induced emotions are 'serene' 12 times (*or by 12 excerpts*) and 'calm' 9 times (*or by 9 excerpts*). However, the ratings on the emotion terms of 'filled with wonder', 'overwhelmed', and 'soothed' have never reached 50 percent or more throughout the sample (for any of 12 excerpts). The rest of the emotion terms (22 items) has reached/exceeded the limit at least once (Appendix-4 provides the details of Table 11 for the Scottish and Turkish subsamples).

Table 11: Summary of the Findings (X: Feelings that reached over 50% of the sample; Green: Respective GEMS factor ratings)

↓ Adjective Terms	→ Musical Excerpts	C	1	2	3	4	5	6	7	8	9	10	11	12	-
		Pre-Test	Mahur	Irak	Nihavend	Segah	Buselik	Isfahan	Hicaz	Saba	Hüseyni	Rast	Zirekend	Neva	Sum
1 Moved			X	X		X	X		X		X				5
2 Fascinated				X	X	X	X		X			X		X	7
3 Strong	*		X	X	X	X	X					X		X	6
4 Tender	*		X			X	X		X		X				5
5 Nostalgic					X						X			X	2
6 Serene	*	X	X	X	X	X	X	X	X	X	X	X	X	X	12
7 Animated	*	X		X			X					X		X	5
8 Sad			X			X	X		X		X		X		5
9 Tense								X						X	1
10 Bouncy	*			X								X		X	3
11 Filled with Wonder	*	X	X												0
12 Sentimental	*					X	X		X	X	X				5
13 Affectionate	*		X	X	X				X			X			4
14 Overwhelmed						X									0
15 Agitated								X						X	1
16 Feeling of Transcendence			X		X							X			3
17 Calm	*	X	X		X	X	X	X	X	X	X		X		9
18 Joyful	*	X		X				X				X		X	5
18 Tearful			X								X		X		2
20 Soothed							X				X				0
21 Energetic	*			X			X					X		X	3
22 Dreamy	*		X		X	X				X	X				5
23 Mellowed (Softened-up)	*				X				X						1
24 Allured		X	X											X	1
25 Triumphant				X			X							X	1
<i>Total</i>		4	11	9	12	9	6	7	4	8	9	2	10	91	

In the next section, I will first discuss to degree to which the excerpts are successful in inducing the intended emotions (due to makam-emotion attributions) in connection with the GEMS-factor structure. In this regard, each excerpt's results will be highlighted regarding the significant issues such as GEMS's emotion factors' items, the successfully induced emotions, and the extremely high or low results for the respective excerpts. After that, by conducting factor analysis, I will examine whether the results fit into the existing GEMS structure or they require to build a new pattern. Finally, I am going to look at the connections between the characteristics of the respondents (and also musical differences such as religious/non-religious etc.) and the emotional response patterns.

3.2. Detailed Analysis

As it was stated in the literature review, there are claims about the Turkish music makams' ability to evoke particular emotions. For the purposes of the present research, the question of 'how much each excerpt with its *makam* is successful in inducing the intended emotions?' will be the key to assessing the makam-emotion claims. In this context, Table 12 (below) will be a guide to the findings and subsequent discussion (Appendix-4 provides the details of Table 12 for the Scottish and Turkish subsamples). This table consists of aggregated GEMS-9 factor mean values for each excerpt; that is a shorter version of Table 11 (above). For these results, it must be remembered that GEMS-9 factors were not directly presented the participants to be rated. Rather, participants have rated 25 emotion-items, all of which are linked to one of the GEMS-9 factors. Power, for example, is the aggregated mean value for the ratings of strong, energetic, and triumphant for the respective excerpt.

There are a couple of codes in the text and tables that must be well understood for smooth reading and comprehension of the data. Hereafter,

1. *Makam* names (always start with Upper case character e.g., Rast, Neva, or Hicaz) and excerpt numbers have been interchangeably used (i.e., Mahur or 1st excerpt).
2. Any factor names, like Wonder, Tension, Power, etc. (starts with Upper case character) indicates the aggregated mean value of a GEMS factor for all excerpts; and excludes pre-test results (the right-end '*factor-mean*' column in Table 12). Similarly, Sublimity, Vitality, and Unease represent the aggregated mean value of 3 higher-order categories of GEMS for all excerpts (not seen in the table).
3. Any factor name and higher-order category, as vitality⁵, sadness¹², nostalgia³, etc. (starts with lower character and followed by a number) reflects the aggregated mean value of GEMS factor or of the category for the numbered excerpt.
4. Any item of the adjective list, as *fascinated*⁵, *calm*⁷, *joyful*³, etc. (with *italic* lower character and followed by a number) states the mean value of the respective feeling item of GEMS-25 for the numbered excerpt. For the pre-test results, the number of the excerpt following the factors and sub-items were replaced with '*c*', like *joyfulc*.
5. There are also the colour-codes within Table 12. Green-cells show the intended factor for the respective excerpts. Buselik and Neva have two intended factors, while the rest has just one (as outlined above in '5.2.3.1. Music Stimuli and Measures'). For the excerpts, blue-figures give the highest factor score, while yellow-figures indicate the lowest factor score. Accordingly, the match of green and blue in a cell tells that the excerpt has a very high intensity to induce the intended emotions. In other words, the performance of the 'green' cells might be read in comparison to 'blue' and 'yellow' figures.

Table 12: Factor Mean Values

Musical Excerpts	C	1	2	3	4	5	6	7	8	9	10	11	12	-
	Pre-Test	Mahur	Irak	Nihavend	Segah	Buselik	Isfahan	Hicaz	Saba	Hüseyni	Rast	Zirefkend	Neva	factor-mean
Wonder	1.93	1.70	2.20	1.68	2.23	1.95	1.58	1.84	1.67	1.94	1.80	1.67	2.20	1.87
Transcendence	1.57	1.78	2.22	1.63	2.52	1.85	1.75	1.88	1.70	1.80	2.07	1.78	2.25	1.94
Tenderness	2.27	1.92	2.33	1.75	2.54	1.90	1.76	1.92	1.77	2.00	2.01	1.76	2.32	1.99
Nostalgia	1.93	2.01	2.51	1.74	2.43	2.18	1.87	2.10	2.14	2.33	1.81	1.95	1.97	2.09
Peacefulness	2.44	2.30	2.79	1.92	2.81	2.43	2.03	2.09	2.09	2.42	2.10	1.97	2.19	2.26
Power	2.21	1.93	1.89	2.55	2.09	1.77	1.82	1.50	1.38	1.47	2.72	1.64	3.60	2.03
Joyful Activation	2.58	2.32	1.86	3.17	1.82	1.48	2.17	1.43	1.37	1.42	3.07	1.60	3.42	2.09
Sadness	1.74	1.44	2.18	1.20	2.12	2.02	1.38	1.97	1.87	2.21	1.39	1.79	1.35	1.74
Tension	1.80	1.31	1.32	1.40	1.62	1.74	1.46	1.67	1.49	1.53	1.42	1.53	1.56	1.50
<i>excerpt-mean</i>		1.88	2.18	1.94	2.27	1.93	1.78	1.82	1.72	1.90	2.10	1.75	2.38	

3.2.1. Judging Makam-Emotion Claims

First of all, there are three success categories according to the comparison between the intended emotional responses and the results.

(i) For Buselik, Saba, Hüseyni, Rast, and Neva, there is a noticeable correspondence between the intended emotion factor and the highest factor score. Hence, these excerpts (5th, 8th, 9th, 10th, and 12th) are successful in evoking the intended emotions.

(ii) On the contrary, for Irak, Nihavend, Segah, and Zirefkend, there is a partial success. While the intended factor is not the highest among the GEMS factors of the respective excerpt, it is higher than the aggregated mean value of the GEMS factor for all excerpts. Accordingly, it is said that these excerpts (2nd, 3rd, 4th, and 11th) have a capacity to stimulate the intended emotions to some extent. Likewise, for Isfahan, the score of the intended factor matches this rule. Since the intended emotional response for Isfahan is to reduce tension, this excerpt (6th) is also partially successful.

(iii) For the rest of the list (Mahur and Hicaz), the mean value of the targeted GEMS factor is neither highest among GEMS factors of the respective excerpt nor higher than the aggregated mean value of the respective GEMS factor for all excerpts. With the same perspective, Buselik (5th excerpt) in inducing power and Neva (12th excerpt) in reducing tension are not successful. In this regard, these excerpts are not successful in evoking the intended emotions. However, it does not mean these excerpts do not have an emotional response from the sample but it means that those responses are not in accordance with the expectations of the study.

(i) **Successful Excerpts** with the significant correspondence between the intended emotion factor and the highest factor score (5th, 8th, 9th, 10th, and 12th excerpts):

- In Buselik, the intended emotional response factor was peacefulness. The majority of the sample have emotionally responded to two sub-items of peacefulness5, *serene5* (69%) and *calm5* (73%). There are 9 induced emotions for Buselik, among the 25-adjective list. Among the GEMS factors of the 5th excerpt, peacefulness5 is at the highest rank with 2.43 (Figure-5), ($F(8, 3141) = 27,45, p < .05$). That is also slightly higher than Peacefulness score (2.26) and is the third-highest peacefulness score among 12 excerpts ($F(12, 4537) = 28.71, p < .05$).

Mean Scores for Buselik

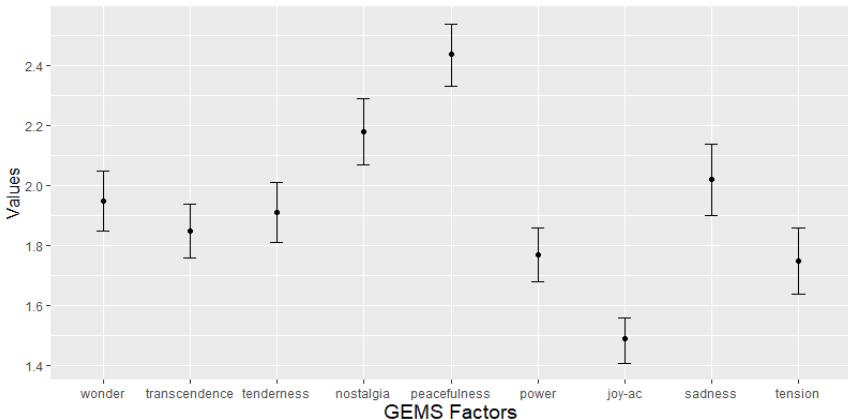


Figure 5: Mean Scores for Buselik

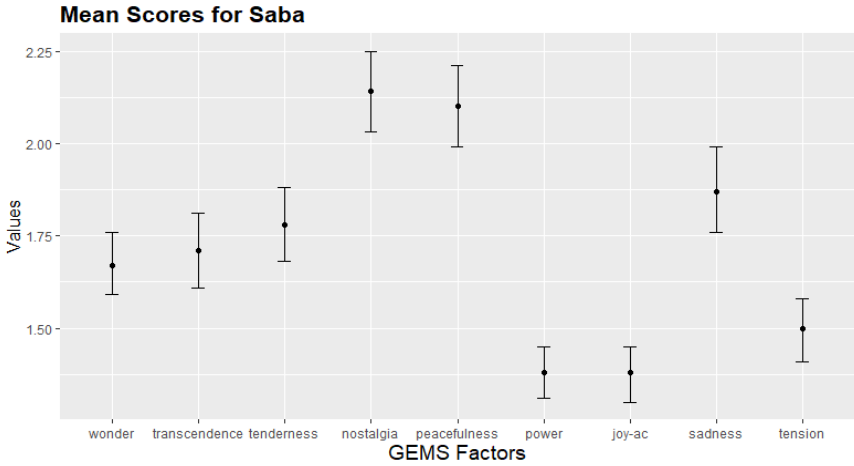


Figure 6: Mean Scores for Saba

- For the 8th excerpt, the intention was to evoke nostalgia. While there are 4 induced emotions for Saba, two sub-items of nostalgia8, *sentimental8* (52%) and *dreamy8* (53%), have exceeded the 50% limit. Even though *nostalgic8* (47%) is 3% away from the limit, its mean value is relatively higher (2.08). At Saba, nostalgia8 with 2.14 is at the top in comparison to other GEMS factors ($F(8, 3141) = 33.31, p < .05$) (Figure-6), while it is at the middle in comparison to other excerpts' nostalgia scores ($F(12, 4537) = 17.28, p < .05$). For the 8th excerpt, the lowest factor scores belong to vitality-related factors: power8 (1.38) and joyful-activation8 (1.37).
- In Hüseyini, the intended emotional response factor was peacefulness. The 9th excerpt has 8 induced emotions and two sub-items of peacefulness9, *serene9* (64%) and *calm9* (71%), have exceeded the 50% limit. For Hüseyini, peacefulness9 is at the 1st highest rank with 2.42 among the GEMS factors ($F(8, 3141) = 49.12, p < .05$) (Figure-7). As this score is close to the overall Peacefulness score (2.26); peacefulness9 stands at the 4th rank among the other excerpts' peacefulness scores ($F(12, 4537) = 28.71, p < .05$). Accordingly, Hüseyini is one of the excerpts that are successful in inducing the intended emotions.

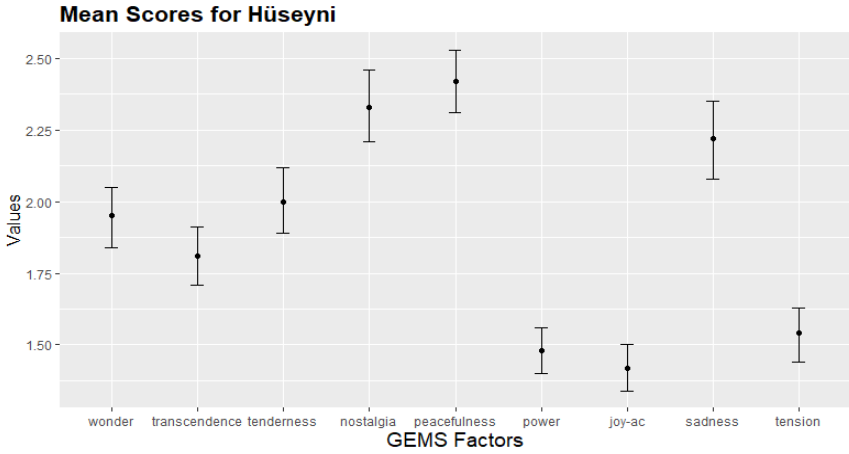


Figure 7: Mean Scores for Hüseyini

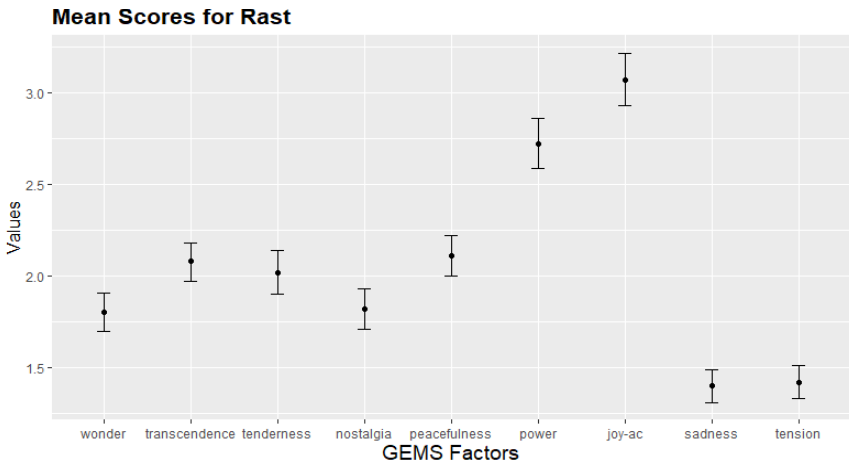


Figure 8: Mean Scores for Rast

- In Rast, the intended emotional response factor was joyful-activation. All sub-items of joyful-activation10, *animated10* (80%), *bouncy10* (70%), and *joyful10* (71%), have exceeded the 50% limit with positive response ratings. For Rast, there are 9 induced emotions. Among the GEMS factors, joyful-activation10 of Rast has the highest score with 3.07 ($F(8, 3141) = 91.9, p < .05$). Conversely, the lowest factor score belongs to sadness10 with 1.39 (Figure-8). Alt-

though joyful-activation₁₀ is quite higher than the overall Joyful-Activation score (2.09), it is the 3rd highest joyful-activation score among 12 excerpts, after Neva and Nihavend, both of which are related to power factor (vitality) ($F(12, 4537) = 164, p < .05$).

- For the 12th excerpt, the intention was to induce power. All sub-items of power₁₂, *strong₁₂* (82%), *energetic₁₂* (85%), and *triumphant₁₂* (72%), have significantly exceeded the 50% limit. In total, there are 10 induced emotions for Neva. For the GEMS factors, power₁₂ of Neva has the highest score with 3.60 ($F(8, 3141) = 147, p < .05$). This figure is also the highest among the power scores of the excerpts ($F(12, 4537) = 141.9, p < .05$). Suitably, the highest aggregated GEMS factor score of the present research belongs to power₁₂. Since Power score is 2.03; power₁₂ has almost doubled the average figure. While power₁₂ and joyful-activation₁₂ are at the top two highest ranks, sadness₁₂ is the lowest (Figure-9).

Mean Scores for Neva

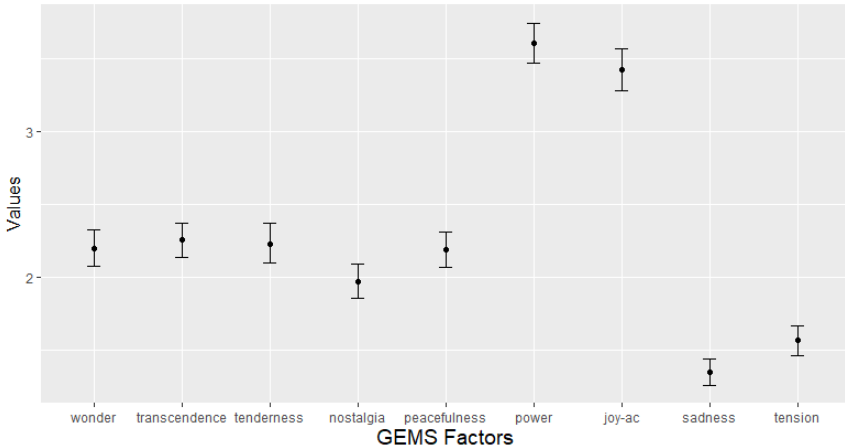


Figure 9: Mean Scores for Neva

(ii) Partially Successful Excerpts, the intended factors are not the highest among the GEMS factors of the respective excerpt, but it is higher than the aggregated mean value of the respective GEMS factor for all excerpts (2nd, 3rd, 4th, 6th, and 11th excerpts):

- In Irak, the intended emotional response factor was wonder. Despite 11 induced emotion items, only one sub-item of wonder2 has exceeded the 50% limit, *moved2* (82%). However, *filled-with-wonder2* stands with 37% and *allured2* has been rated by 39%. In this regard, sub-items of wonder2 ratings are inconsistent with each other. Among the GEMS factors, wonder2 has the 5th highest value with 2.20 ($F(8, 3141) = 55.55, p < .05$), whilst peacefulness2 and nostalgia2 are at the first ranks. Even though it is intended to induce wonder through listening 1st and 2nd excerpts, results are incompatible with each other. For wonder scores, Irak has higher ratings than Mahur (1.70). Moreover, wonder2 is also at the 2nd rank (after Segah) in comparison to other excerpts' wonder scores and is higher than Wonder score, 1.87 ($F(12, 4537) = 19.99, p < .05$) (Figure-10). In short, it may be argued that Irak is partially successful in inducing wonder in comparison other excerpts.

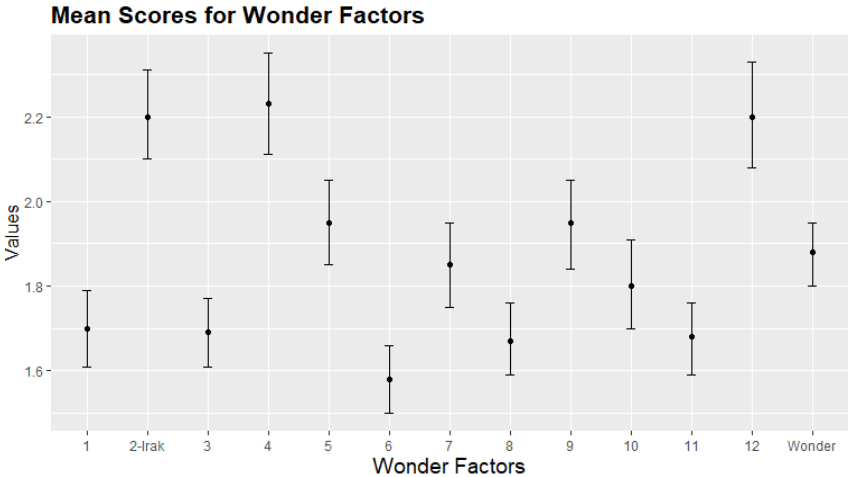


Figure 10: Mean Scores for Wonder Factor

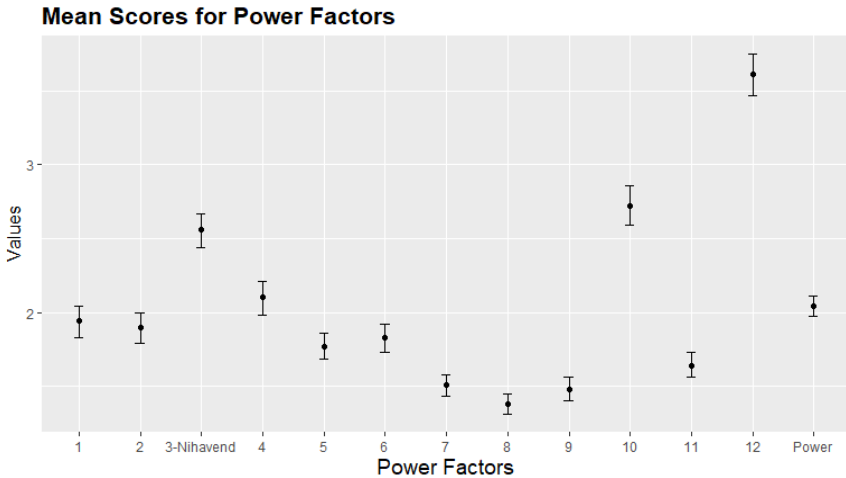


Figure 11: Mean Scores for Power Factors

- For the 3rd excerpt, the intention was to induce power. While having induced 8 emotion items for Nihavend, two sub-items of power3 have (*strong3 and energetic3*) exceeded the 50% limit, but not *triumphant3*. For Nihavend, among the GEMS factors, power3 has the 2nd highest value with 2.55 after joyful-activation3 with 3.17 ($F(8, 3141) = 159.1, p < .05$). The power3 figure is also at the third-highest rank, among 12 excerpts, after Neva that is also a power-related excerpt and Rast that is a joyful-activation-related excerpt ($F(12, 4537) = 141.9, p < .05$) (Figure-11). In GEMS structure, joyful-activation and power factors are components of the 'vitality' category. Accordingly, vitality-related excerpts, Neva, Rast, and Nihavend, have held the first three ranks in power scores. Relatedly, power3 is significantly higher than Power score (2.03). Subsequently, it might be argued that the 3rd excerpt in the makam of Nihavend is partly successful in inducing power.
- In Segah, the intended emotional response factor was transcendence. In the 4th excerpt, while the figure of the induced emotions is 12, two sub-items of transcendence4 (*fascinated4 and feeling of transcendence4*) have exceeded the 50% limit. Nevertheless, the

last item, *overwhelmed4*, has a significantly lower score. For Segah, among the GEMS factors, transcendence4 has the 3rd highest value with 2.52 ($F(8, 3141) = 38.41, p < .05$) after tenderness4 and peacefulness4 scores. However, Segah distinctively has the highest transcendence score in comparison to other excerpts ($F(12, 4537) = 27.29, p < .05$). Therefore, transcendence4 is higher than overall Transcendence score (1.94) (Figure-12). In short, even though transcendence4 is not the highest GEMS factor for the 4th excerpt, it may be argued that the 4th excerpt in the makam of Segah is partially successful in inducing transcendence.

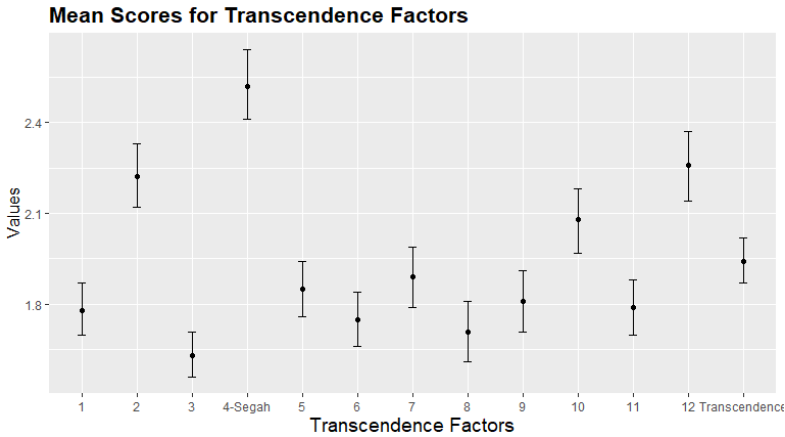


Figure 12: Mean Scores for Transcendence Factors

- Then, for the 6th excerpt, the intention was to reduce tension. Namely, the more ratings at '1' for the sub-items of tension6, the more affirmative results, due to the emotional attributions to the makam of Isfahan. The majority of the sample has declared low levels of tension while listening to the 6th excerpt by rating both tension items with '1' (*tense6* and *agitated6* by 75%). In addition, Isfahan has 6 induced emotions. Hence, among the GEMS factors, tension6 of Isfahan has the second-lowest value with 1.46, after sadness6 with 1.38 ($F(8, 3141) = 28.98, p < .05$). As Tension score is 1.50, tension6 has the fifth-lowest tension figure among 12 excerpts ($F(12, 4537) = 7.42, p < .05$) (Figure-13).

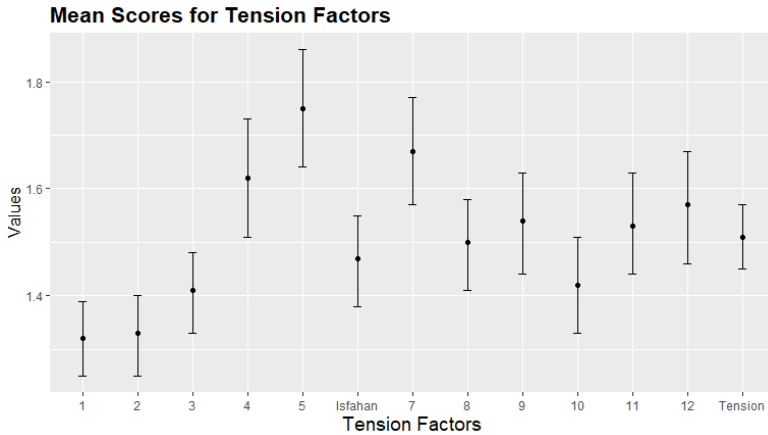


Figure 13: Mean Scores for Tension Factors

It might be argued, as an objection, that ‘tension’ is among the lowest factors for the 6th excerpts, and the situation might be coincidental for Isfahan. However, for the 6th excerpt, tension6 score is lower than many other excerpts, it is at the fifth rank. In addition, tension scores for the previous two excerpts (Segah and Buselik) and the latter excerpt (Hicaz) are over 1.60; which is relatively higher than Isfahan. Furthermore, the highest factors for the 6th excerpt are joyful-activation6 (2.17) and peacefulness6 (2.03). Namely, sublimity6 (1.80) and vitality6 (2.00) scores are higher than unease6 (1.42). In this situation, tension6 at 1.46 might be identical for Isfahan. Consequently, it is possible to say that makam of Isfahan is capable of reducing tension, while having higher factor rates for the rest.

- For the 11th excerpt, the intention was to induce sadness. The sub-items of sadness11, *sad11* and *tearful11*, have not exceeded the 50% limit, since Zirefkend successfully aroused only 2 emotions. For the 11th excerpt, sadness11 with 1.79 has the 3rd highest score among the GEMS factors ($F(8, 3141) = 9.60, p < .05$). However, this figure is at the 6th rank in comparison to other excerpts’ sadness score. This is, then, just a bit higher than Sadness at 1.74 ($F(12, 4537) = 44.37, p < .05$) (Figure-14). In this regard, it is possible to argue that 11th excerpt

in the makam of Zirefkend has a capacity to induce sadness for the sample, even though this effect is not strong.

Mean Scores for Sadness Factors

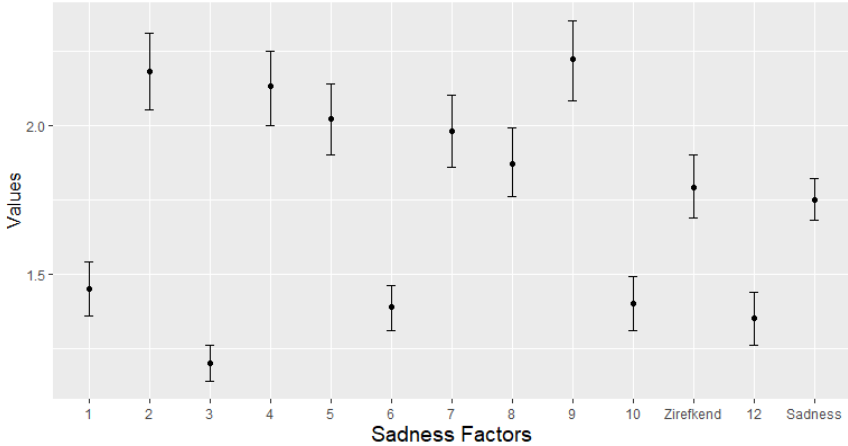


Figure 14: Mean Scores for Sadness Factors

(iii) **Not Successful Excerpts**, the mean value of the targeted GEMS factor is neither highest among GEMS factors of the respective excerpt nor higher than the aggregated mean value of the respective GEMS factor for all excerpts:

- In Mahur, the intended emotional response factor was wonder. For the 1st excerpt, there are 4 induced emotions, whereas the sub-items of wonder1 have not exceeded the 50% limit. While the aim is to induce wonder during listening to 1st and 2nd excerpts, on the contrary to Irak, Mahur has relatively low-intense ratings. For the 1st excerpt, wonder1 has the 7th highest value with 1.70 among the GEMS factors, before sadness1 and tension1 ($F(8, 3141) = 42.04, p < .05$). Furthermore, wonder1 of Mahur is lower than Wonder score (1.87) of all excerpts ($F(12, 4537) = 19.99, p < .05$) (Table-12). In short, wonder1 is both not higher than other GEMS factors of Mahur and not higher than other excerpts' wonder scores. Therefore, it might be said that the 1st excerpt in the makam of Mahur is not successful in inducing wonder.

- For the 7th excerpt, the intention was to induce tenderness. Even though Hicaz has 7 induced emotions, only one of the sub-items of tenderness7, *tender7*, has exceeded the 50% limit. Other tenderness7 items, *affectionate7* and *mellowed7*, have significantly lower scores ($F(3, 1396) = 4.83, p < .05$). For Hicaz, tenderness7 has the 4th highest score with 1.92, among the GEMS factors ($F(8, 3141) = 21.57, p < .05$). The figure of tenderness7 is also lower than overall Tenderness score (1.99) and higher than only 5 excerpts' tenderness scores ($F(12, 4537) = 19.08, p < .05$). Even if the expectation was to be successful in inducing 'tenderness'; it is hard to indicate any extra capacity to successfully induce tenderness by Hicaz. This is because (i) the figures of GEMS factors for the 7th excerpt are quite closer and (ii) tenderness7 score stands at the middle among all excerpts in terms of inducing tenderness.

In sum, the present research has demonstrated success in the following: inducing peacefulness via Buselik, nostalgia via Saba, peacefulness via Hüseyini, joyful-activation via Rast, and power via Neva. The research has also demonstrated partial success in the following: inducing wonder via Irak, power via Nihavend, transcendence via Segah, and sadness via Zirefkend. Similarly, there is a partial achievement in reducing tension via Isfahan. However, the research does not offer evidence of success in inducing wonder via *Mahur* and tenderness via *Hicaz*.

3.2.2. Coherence between the GEMS Structure and the Responses

Since one of the objectives of the present research was to test whether the GEMS model is a suitable tool for studying the emotional response to Turkish *makam* music, I will now assess the relationship between GEMS structure and the findings of the study. By using factor analysis, Zentner et al. (2008) have grouped the 9 GEMS factors into 3 higher-order categories: Sublimity (for Wonder, Transcendence, Tenderness, Nostalgia, and Peacefulness), Vitality (for Joyful Activation and Power), and Unease (for Tension and Sadness). Hence, on every single excerpt's GEMS factor scores and overall factor scores, two kinds of

factor analysis were conducted: (i) 'confirmatory factor analysis' (CFA) of 'structural equation modelling' (SEM) to compare the results with the existing GEMS structure (Zentner et al., 2008) and (ii) 'exploratory factor analysis' (EFA) to test whether the data suggests a better structure. As of all statistics in the present study, CFA and EFA analysis have been run by using R. The factor analysis process has been also accompanied by relevant statistical procedures such as Cronbach's alpha, correlation analysis, Kaiser-Meyer-Olkin (KMO), and Bartlett's Test.

First, I applied CFA (with 'lavaan' package of R) to the sub-items of the intended factor of each excerpt, in order to see how sub-items suited into the GEMS factor. For the 4th excerpt, for example, the intended factor was transcendence. Hence, just sub-items of transcendence4 (*fascinated4*, *overwhelmed4*, and *feeling of transcendence4*) have been included in CFA to see how they have loaded on the factor (Figure-15). Then, to test if any other items also suited well into the intended factor, I added one more item to the analysis (Figure-16).

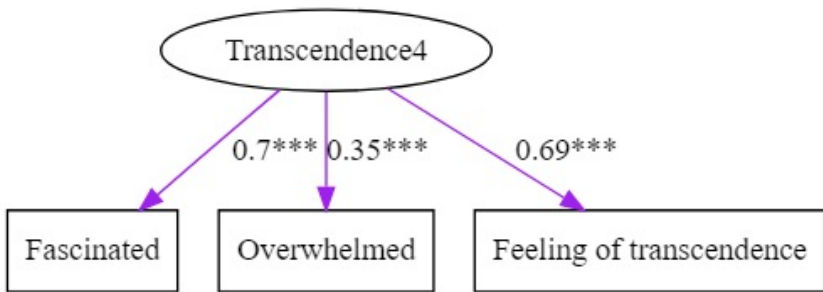


Figure 15: Factor Analysis-transcendence4

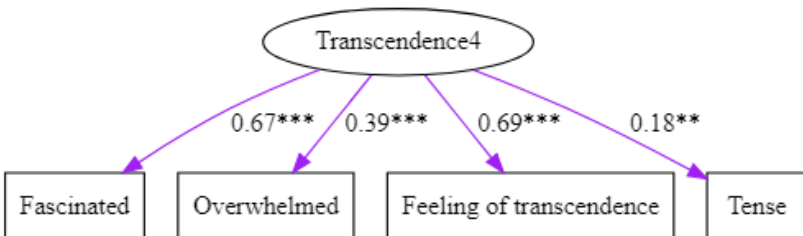


Figure 16: Factor Analysis-transcendence4 with *tense4*

After that, CFA was duplicated for each excerpt with the adjective list (25 items), the factors (9 items), and the higher-order-categories (3 items) of GEMS. Next to this, for each excerpt's 25 adjective list, EFA has run with two options; (i) factor analysis without rotated (with 'principal' function of R), and (ii) performing maximum-likelihood factor analysis with varimax rotation (with 'factanal' function of R). As a final remark for confirmatory and exploratory factor analysis, I applied the same procedure on the aggregated factor values. At the end of this section, beyond the factor-based GEMS structure, I will also highlight a couple of specific points that were observed as *high-* or *low-rated* results, while this is not reported by other studies using GEMS.

In all excerpts, Cronbach's alpha scores, ranging from (.92 $\geq \alpha \geq$.86), are sufficient for factor analysis. In many cases, the sub-items of the intended GEMS factor do fit well into the respective factor, but not of the 2nd excerpt. While having a relevant alpha score ($\alpha \geq .91$), *allured2* of Irak does not fit well within wonder2 factor of GEMS within the confirmatory factor analysis (Figure-17). Moreover, the items of other factors, *strong2*, for instance- as of power2 factor, fit in the wonder2 factor better than its own items (Figure-18). Contrarily, adding extra items to the intended factors (for example, *tense1* to wonder1 of Mahur, *agitated3* to power3 of Nihavend, *bouncy6* to tension6 of Isfahan, *sad10* to joyful-activation10 of Rast, and *tearful12* to power12 of Neva) did not enhance the respective GEMS factor loadings.

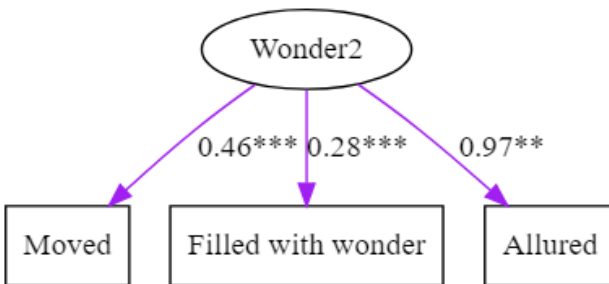


Figure 17: Factor Analysis-wonder2

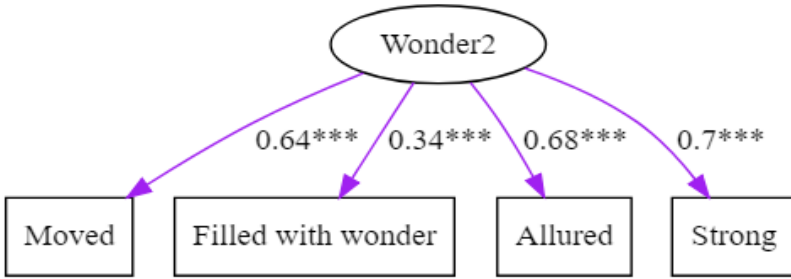


Figure 18: Factor Analysis-wonder2 with strong2

Following that, running CFA with 25 emotion items of GEMS for each excerpt revealed that the data generally fits into the 9-factor-based GEMS structure. Consequently, 3 higher categories were well-loaded on by the aggregated factor values (Figure-19). However, there are a couple of limited and weak loadings. These problems have occurred at feeling *overwhelmed* (of transcendence factor) for Irak and Rast, and feeling *agitated* (of tension factor) for the 7th and 8th excerpts. In addition, following *agitated*, the tension factor has problems to load on the Unease (as of higher-order-category) for the 1st, 2nd, and 6th excerpts. I will discuss the situation for the *low-rated* feeling items, at the end of this section.

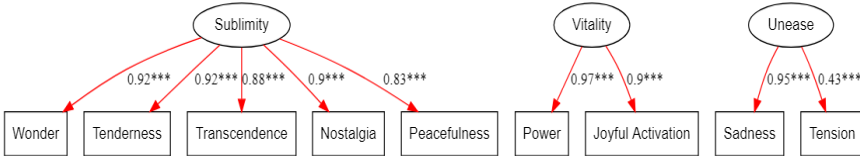


Figure 19: Factor analysis- aggregated values

Even if it is not necessary (*and maybe not appropriate*) to run EFA on a data which is collected with already constructed measurement tool, the reason for having EFA is to explore whether the data offer a better structure than GEMS. With the relevant KMO (ranging from =.85 to =.93) and Bartlett’s scores (for all $p < .05$) for each excerpt and the aggregated values, EFA suggests, for many excerpts, that it is still a convenient solution to keep sub-items together in the intended factor

loadings. However, it is not the case for the 2nd and the 4th excerpts. In Segah, EFA does not accommodate *overwhelmed4* together with other *transcendence4* items. Similarly, in Irak, *filled-with-wonder2* was not ascribed to the same factor, contrary to other wonder2-items. Moreover, even though it is observed that EFA keeps the sub-items of the intended factors together, it is stretching things too far to suggest another factor structure for a single excerpt. However, running EFA with aggregated factor values offers a quite similar structure of GEMS with 3-higher-categories. As a result, Tension and Sadness; Joyful Activation and Power; and Wonder, Transcendence, Tenderness, Nostalgia, and Peacefulness have been grouped together.

I will conclude the section with the unexpectedly high and low ratings for the stimuli. 'Filled with wonder', 'overwhelmed', and 'soothed' have never been successfully induced by the stimuli, while 'serene' 12 times and 'calm' 9 times have been induced (Table-11). Additionally, factors of tension (for 4 excerpts), sadness (4), and joyful-activation (4) were recorded as having the lowest ratings (Table-12). Having low intensity for evoking negative emotions, such as sad, tense, agitated, and tearful, is already reported in the literature (Taruffi and Koelsch, 2014; Zentner et al., 2008; Laukka, 2007). It is also reasonable that vitality-related items have low ratings for the excerpts (Busek, Saba, and Hüseyini) which are expected to induce Nostalgia and Peacefulness. However, what is quite disparate is the results of feeling 'overwhelmed' since it was never successfully induced by the stimuli. 'Overwhelmed' is sub-item of the transcendence factor within the GEMS structure and was translated to Turkish as '*Kahrolmak- Mahçup olmak*'. Just once, for the Scottish subsample, feeling overwhelmed is observed for pre-test ratings (Appendix-4).

In sum, the present research suggests that GEMS is a proper tool to study emotional response to Turkish music (stimuli), because the

data fits well into the GEMS structure with its 9 factors and 3 higher-order-categories through the CFA analysis. Furthermore, it is not the case that the data offers another/better structure within the EFA analysis. While there are a couple of unexpected high and low ratings, there is no sensible ground to link these results to issues around the GEMS structure. Thus, these rates might have resulted from other indicators of the research, like translation issues, excerpt characteristics, and individual differences, which I will look at in the next section.

3.2.3. Differences through the Responses

While the present chapter was conducted on two grounds, namely the emotional attributions to Turkish music makams, and the GEMS structure, what makes that kind of study attainable is the 'emotional response' given by individuals. To put it in a different way, this research works on the collection of 'felt-emotions', reported by the individuals for listening to Turkish music. Therefore, examining why individuals emotionally respond to music in a personally unique way still might be as prominent as the grounding principals might be. In this regard, the focus of this section is to discuss how the emotional response might have been affected by external variables like musical qualities of the excerpts, by country and school groups, or by the personal characteristics such as sex, age, and musical ability.

1. Country and school groups: There are significant differences among the country and school groups. While, for the sample, there are 91 emotion items induced by the stimuli (Table-11), the figure is 64 for the Scottish group, and 101 for the Turkish (See, Appendix-4). In particular, though 'nostalgic' (of Nostalgia) was induced twice (Table-11), the figure is 8 for the Turkish group and 0 for the Scottish group. The difference is significant for feeling nostalgia between the country

groups, for all excerpts ($p < .05$), but for Segah. In contrast, regarding the classification of successful, partially successful, and unsuccessful categories, there are 5 successful, 5 partially successful, and 2 unsuccessful excerpts (Table-12). However, for the Turkish sample, there are 4 unsuccessful excerpts, while the figure is 2 for the Scottish group (See, Appendix-4). For the intended GEMS factors, the Scottish group has higher figures for 1st, 3rd, 6th, 9th, and 11th excerpts, and for the rest, the Turkish group's values are higher (Figure-20).

For the school groups, the association between the intended GEMS factors and the school groups is significant for all extracts, except 5th and 11th excerpts. In Scotland, there are two groups, secondary and Higher Education groups. For all the aggregated values and intended GEMS factors, students in Higher Education have results with 'higher value' than the pupils in Secondary Education. (The exception is tension6. However, for the 6th excerpt the intention is to reduce feeling tension. So, the lower score of Higher Education is better for tension6.) In fact, Higher Education has relatively high scores, and Secondary Education has lower scores, for all aggregated mean values in comparison to all school groups, as of Wonder (Figure-21).

From Turkey, there are 3 different school types included in the study: EFL, the science high-school; HHI and AUI, Imam-Hatip schools; HDI and ANI, Imam-Hatip schools with the musical curriculum. For transcendence4, HDI and AUI have the first two rank, followed by ANI and HHI, while EFL is at lowest. The same order is valid for Wonder. In general, HDI has the highest scores for the intended GEMS factors, and EFL has the lowest. Despite their 'religious' character, other schools' ranks have changed for other excerpts.

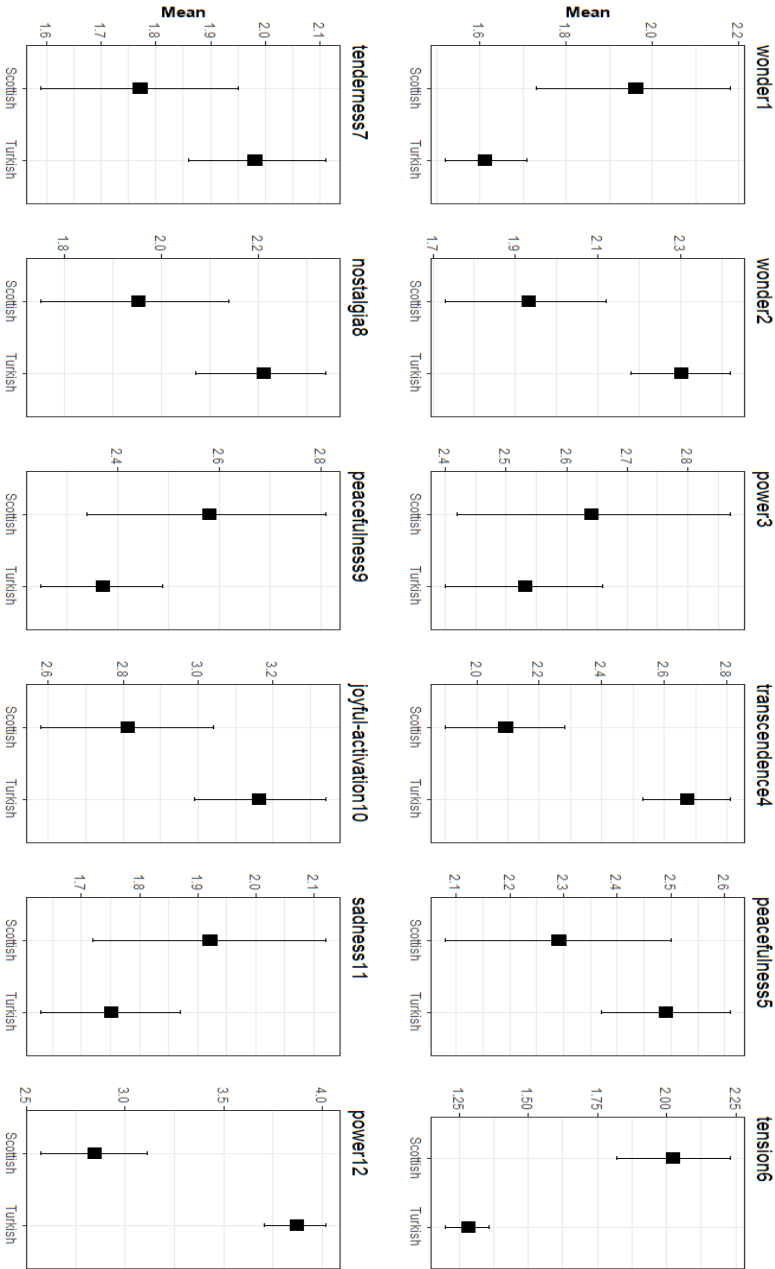


Figure 20: Intended Factor Means by Country

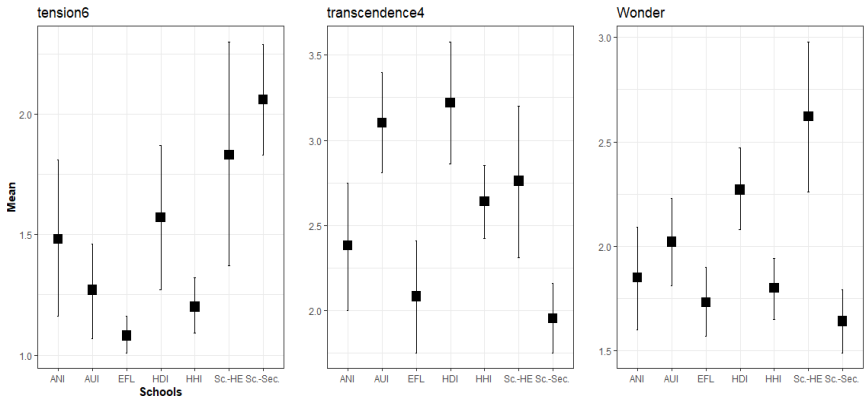


Figure 21: Mean Values for tension6, transcendence4, and Wonder by School Groups

2. Sex: For all cases of the aggregated mean values, male scores are significantly higher than female values ($p < .05$). The significance of the difference for male figures against female scores also remains in the successful and partially successful excerpts for the intended GEMS factors. However, there is an exception: the female mean value for peacefulness5 is higher than male figures ($p < .05$), which goes against the general trend. Furthermore, as it is for Irak on feeling calm, a sub-item of peacefulness, (Figure-22), the female group has significantly higher mean values for all excerpts -except the 8th and 10th.

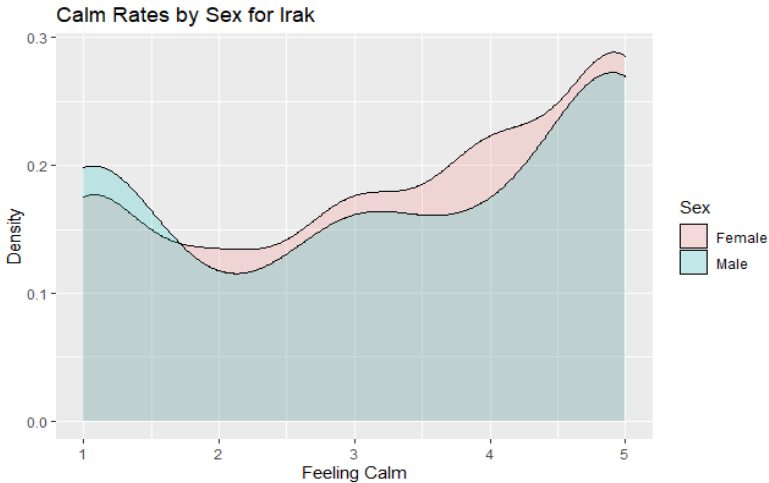


Figure 22: Calm Rates by Sex for Irak

While there is a difference between Scottish and Turkish sample for the intensity of *peacefulness4*, for instance, the variation between the genders is still valid (Figure-23). The gender-related issues might be also the reason for the difference between schools for a couple of cases. There is, for instance, a significant difference in *tenderness7* figures for the male group ($p < .05$). Similarly, HHI, girls-only Imam-Hatip school, has 0.6 points lower *mellowed7* score than HDI, boys-only Imam-Hatip school. HHI also has the lowest mean value for *nostalgia8*, among Turkish schools. From the reverse perspective, it should be seen that having the highest *power12* score for HDI might indicate its boys-only school character. Therefore, for all cases, there is no reason to argue that the difference in the emotional responses is only because of the school type.

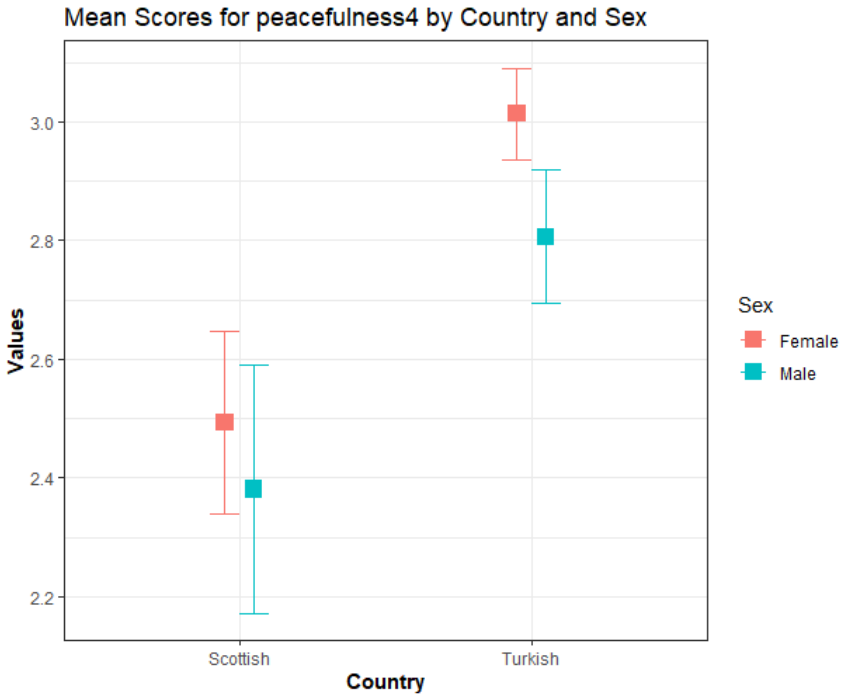


Figure 23: peacefulness4 by Country and Sex

3. Age and school grades: There is not a general effect on the emotional responses due to the age of the participants, because the age

range of the sample is not diverse enough for developmental explanations. In this regard, no strong correlation was observed between age and the aggregated mean values (highest= Transcendence and Tenderness at 0.19), and the intended GEMS factors (highest= peacefulness9 at 0.18). Nevertheless, participants' age sometimes does affect the emotional response under particular conditions. According to the school groups and grades, in peacefulness9 mean values, school groups have relatively close and comparable figures. However, the figure for the group of Higher Education is distinctively higher than others (Figure-24). It might be argued that, in some cases, participants' age influences the emotional response.

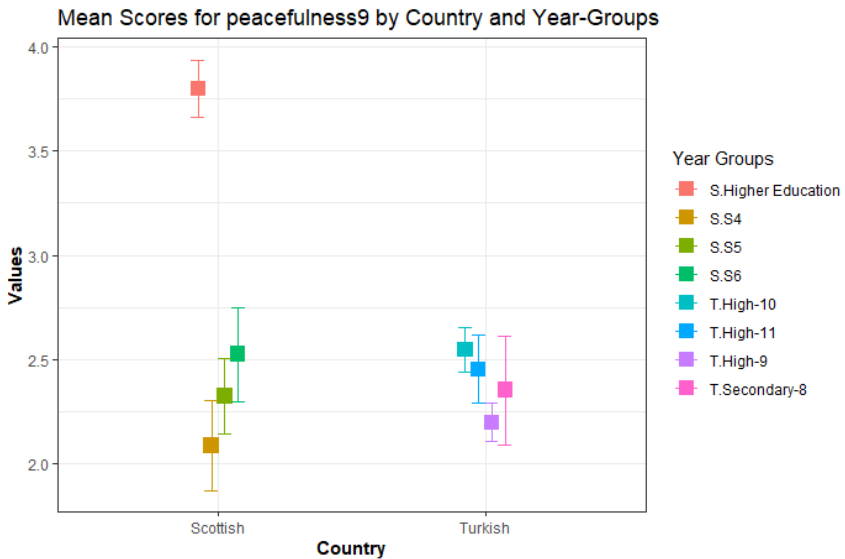


Figure 24: peacefulness9 by Country and School Groups

4. Musical preferences (importance, training, and expertise): Musical expertise may have increased the intensity of emotional responses for all the aggregated factor mean values ($p < .05$), except Peacefulness. Similarly, participants with musical training, for example, have a higher score for Tenderness, Power and Sadness than those who have no musical training ($p < .05$). For the intended GEMS factor scores, it is observed

that participants with musical training have a higher score for power12 and tenderness7 ($p < .05$). Likewise, lower musical expertise reduces the intensity for wonder1 ($p < .05$). However, no relationship has been observed between musical expertise and joyful-activation10 ($p > .05$).

Within a similar perspective, for those whose answer is 'other' with relevant explanations (on the question of 'whether music is forbidden in Islam'), the mean value for transcendence4 is the highest ($p < .05$). Given that question is not a matter of teaching in the Turkish and Scottish education system, this score may imply that those, who have more religious information, rate more intense religious feelings for Segah. For these kinds of responses, the musical characteristics of the excerpts and the attitude of the participants may give an explanation.

5. Excerpt characteristics: EFL has the highest mean on feeling *moved*1 (1.85), while HDI has the lowest (1.50). This is not in line with the general trends, in terms of the Turkish school groups. Similarly, for peacefulness5, EFL has the highest mean value. These scores might be influenced by the listener's familiarity with the excerpts. An explanation might be that the excerpts of Mahur and Buselik are not pieces of music that Turkish listeners might normally listen to in daily life. Hence, the participants in EFL might have higher intensity in their emotional response for the 1st and 5th excerpts.

However, for tenderness7, ANI and HDI have the highest scores and EFL has the lowest. During the test procedure, it was revealed by the conversation with the participants that many participants at HDI and ANI were familiar with the *makam*, composer, and songwriter of the 7th excerpt. However, it was the first time they had listened to the 7th excerpt for many of the participants at EFL. Moreover, for tenderness7, the mean value for the Turkish group is higher than the Scottish.

Furthermore, for the 10th excerpt, it might be argued that it is relatively more common and maybe popular than other excerpts among Turkish listeners. In this regard, AUI has a higher score for the mean value of joyful-activation10 than HDI and ANI. Similarly, there is a significant differ-

ence between the Turkish and Scottish groups for joyful-activation₁₀ ($p < .05$). In addition, the association is not strong between joyful-activation₁₀ and musical expertise ($p > .05$). Therefore, in these results, familiarity may have a role more than musical expertise. It must be considered that the participants' earlier experience of the music and the individual access to the emotional response may have influenced the findings.

Additionally, the religious character of the excerpts must be taken into account. For Mahur, Irak, Rast, and Zirefkend, the 'religious nature' of the excerpts may have affected the emotional responses of the Turkish participants. Assuming that Scottish participants are not informed about the religious features of the stimuli, Scottish schools have been excluded from the analysis. For the 1st excerpt, for instance, the mean value of *feeling of transcendence*₁ (2.23) is higher than the mean of wonder₁, the intended GEMS factor, (1.61). In all Imam-Hatip (religious) schools, the mean value of *feeling of transcendence*₁ is clearly higher than EFL ($p < .05$). Similarly, the situation is almost the same for the 2nd excerpt. For transcendence₂, EFL has the lowest mean value among Turkish schools ($p < .05$). Besides, the mean value of transcendence₂ is higher than wonder₂, the intended GEMS factor. Moreover, transcendence₂ has the 3rd highest score among the transcendence scores of 12 excerpts after 4th excerpt (Segah) and 12th excerpt (Neva). Accordingly, it might be argued that the 2nd excerpt has successfully induced transcendence. In the same regard, for the 10th and 11th excerpts, there are relatively higher transcendence scores, and an association between school types and transcendence ratings ($p < .05$). Therefore, the question emerges here as to what the relationship between religious education, promoted in these schools, and the emotional response to religious music is.

In sum, according to regression analysis (for all, $p < .05$), for the male subsample, the ratings for Wonder, Joyful-Activation, Power, nostalgia₈, sadness₁₁, and power₁₂ are higher than the female. However, for the

intended GEMS factors (wonder², transcendence⁴, power¹², and tenderness⁶), the Turkish subsample has more relevant responses, than the Scottish. Similarly, this sample has higher ratings for Transcendence, Tenderness, Nostalgia, Peacefulness, Power, Joyful-Activation, and Sadness. In terms of school groups, HDI (for transcendence⁴, and power¹²), AUI (for joyful-activation¹⁰, power¹², and transcendence⁴), and Scottish.HE (for wonder², Peacefulness, and Sadness) have higher figures. Yet, EFL has lower ratings for transcendence⁴. Consequently, there might be an interplay between cultural, national, and religious associations, gender, school type and grades, and age for the emotional response to music listening. Considering the sample size and the homogeneity within the subsamples, it is hard to indicate the reason behind the responses in some cases. Turkish and Scottish groups are not comparable, for instance, in religious belief and language. Similarly, one of the schools, HDI, is a boys-only religious school with a musical curriculum and another is, HHI, a girls-only religious school. Nevertheless, it might be concluded that the change in school types, sex, age/school grades, musical ability (training and experience), and the excerpt characteristics (and to which participants' attitudes) have an effect on the emotional response.

4. Discussion

Regarding the findings of the present research, this section first discusses the results indicating (i) the successful emotional stimulations through Turkish music due to its *makam*, (ii) the suitability of GEMS as a tool to study emotional responses to Turkish music, and (iii) the effects of individual and musical differences on emotional response. After that, the significance of the results will be evaluated for the future implementations, regarding the coherence between value terms of the Turkish RE system, makam-emotion relations, and GEMS's factors and adjective list. At the end of the section, the present chapter will be assessed considering the limitations of the research.

4.1. Discussion of the Findings

4.1.1. Makam-Emotion Relations

The present research confirms the previous studies on emotion induction with music listening (Kreutz, et al., 2008; Gabrielsson, 2001–02; Västfjäll, 2002) and broadens the perspective on the selection of the proper stimuli. The selection of Turkish *makam* music, the stimuli, of the experiment has not only demonstrated its potential in the stirring or inducements of emotions, but also proved that it might be possible to estimate possible emotional response due to makam-emotion attributions, as rated by the subjective self-reports. The majority of the excerpts in the research have successfully (or partly successfully) evoked the intended emotions (through the sub-items of the intended GEMS factor). Therefore, the key finding of the research is the experimental justification of the hypothesis that certain emotional responses would be associated with listening to Turkish music due to its makams. Consequently, the research verifies the historical claims on makam-emotion attributions with 10 excerpts. Even though two excerpts were not successful in inducing the intended emotions, they have still induced many other emotions. However, given that the sample was not informed about the makams of the stimuli and the expected emotional reactions, the relations between the historical attributions and the current emotional responses are something different from the relation between perceived and felt emotions (Gabrielsson, 2001–02). Hence, this research points out the need to extend the perspective in music-emotion studies for non-Western context (Mathur, et al., 2015).

Table 13: Emotional Attributions of the Makams and Linked Emotion Factors

	Makam	Attributions	Emotion Factors
1	Mâhur	Contentment, Complete Relief, Strength, Courage	Wonder
2	Irak	Relish, Zest, Flavour, Pleasure; Piety, Ascetism Removes Exasperation, Fear	
3	Nihâvend	Strength, Courage	Power
4	Segâh	Piety, Religious Feelings Bravery, Relaxation	Transcendence

5	Bûselik	Relaxation Power	Peacefulness Power
6	Isfahan	Removes negative thoughts, clears the mind; increases intelligence, mobility, self-confidence	Tension (-)
7	Hicaz	Humility, Humbleness, Modesty Melancholy, Pleasure and Amazement	Tenderness
8	Sabâ	Grieving, Sorrow, Gloom Bravery	Nostalgia
9	Hüseynî	Peace, Relaxation, Tranquillity, Serenity, Comfort	Peacefulness
10	Rast	Enjoyment, Pleasure, Tranquillity	Joyful Activation
11	Zirefkend	Sadness, Sorrow, Grief	Sadness
12	Nevâ	Power, Courage Removes negative thoughts; induces relief, happiness	Power (+) Tension (-)

Table 13 encapsulates the connection between the makams with the attributed emotional effects and the GEMS factors (The detailed version of this table with the resources, Table 6, was given in Chapter 4.3.4). Nihâvend and Neva, for instance, have been linked to Power (to induce the sub-items of the factor) because of the ‘attributions’. Since the results demonstrated that both makams have successfully induced the power-related emotions, this research supports the attributions. Similarly, the historical claims to induce the intended emotions have been confirmed by Irak for Wonder, by Nihavend and Neva for Power, by Segah for Transcendence, by Buselik and Hüseynî for Peacefulness, by Saba for Nostalgia, by Rast for Joyful-Activation, and by Zirefkend for Sadness. From the reverse angle, having reduced feelings on Tension has been achieved by Isfahan. On the contrary, the findings of the research do not endorse the claims to induce Wonder by Mahur and Tenderness by Hicaz; even though these excerpts have induced many other emotions than the intended feelings. However, as will be also discussed in the section for the limitations, much more effort is required to generalise both positive and negative results.

To my knowledge, this is the second experimental study using the Turkish translation of GEMS in investigating the emotional effects of Turkish music makams. Arman (2015) has conducted a study on

the stimuli of 11 makams (Hicâz, Hüseyinî, Hüzûm, Kürdîlihiczâk, Mahûr, Muhâyyerkürdî, Nihâvend, Râst, Sabâ, Segâh, and Uşşâk) in 2 tempos (fast-slow) with 2 excerpts (totally 44). However, a couple of the findings of the present research are not consistent with her results. This might be due to (i) first, for her study, the tempo was more influential than *makam* and (ii) her findings were not compatible with the existing GEMS factors and presented in another structure. What is not observed in the present research is that Arman reports that Hicâz and Nihâvend have more calm and sad effects especially than Mâhûr, Sabâ, and Hüseyinî. Additionally, in the present study, Mahur did not induce more power-related emotions, while she argues Mahur as having higher energetic effects (Arman, 2015: 83-8). Contrarily, the relevant finding with the current research is that *Râst* and *Segâh* are of more likely to induce '*mellow and spiritual*' feeling which is not one of the GEMS factors, but come from her own analysis. In the present research, the higher transcendence scores for Rast and Segah had been explained by the religious nature of the excerpts. Furthermore, the current research's findings are also compatible with Haddad's study on Arabic music with German listeners, since he reports the grievous effect of Saba and the energetic effect of Rast (Haddad, 2011). In addition, Altun and Egermann (2020) use GEMS-25 for the makams of Hicaz, Hüseyinî, Mahur, Saba, and Müstear. However, they present the results according to the higher-order categories of GEMS, namely sublimity, vitality, and unease. Hence, their results are not comparable to the findings of the present research. Nonetheless, it is reported that the Hicaz and Mahur makams were experienced as more vital than the other three makams. However, these makams did not evoke significant emotional arousal for sublimity and unease (Altun and Egermann, 2020: 8).

In sum, the findings of the present research have affirmative results for the first hypothesis, in the sense that a predominantly positive relationship between the intended and the felt emotions was observed for this stimulus set. This is because a group of 8 intended GEMS fac-

tors (Wonder, Transcendence, Nostalgia, Peacefulness, Power, Joyful-Activation, Sadness, and Tension) were successfully or partially successfully rated for the respective excerpts by the participants. Conversely, 1 intended factor (Tenderness) has not been induced.

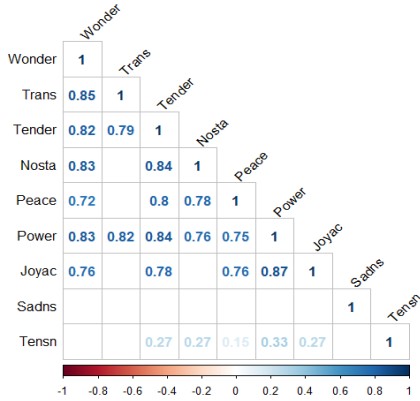
4.1.2 GEMS Suitability

GEMS: One of the research questions for the current research was 'how does the GEMS model perform to study the emotional response to Turkish *makam* music?'. Throughout the factor analysis process, it is observed that the data has fitted well into the 9-factor structure of GEMS and does not indicate a better structure. That is different to Arman's study (2015), because she suggests a 4-factor-structure, but does not report the factor loadings for the original 9-factor structure of GEMS. Even if the 9-factor structure is a proper tool, the 3-higher-order categories need attention for better explanations regarding the convenience and statistical power (Altun and Egermann, 2020; Pearce and Halpern, 2015). Therefore, the consistency of the higher-order categories must be analysed over in the diverse test conditions. Yet, due to the qualitative similarity of the rating patterns for each excerpt, it is reasonable to argue that the GEMS-25 (with 9-factor and 3-higher order categories) is appropriate for measuring emotional response to Turkish *makam* music.

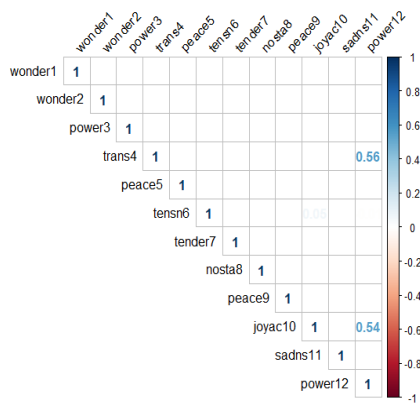
However, judging the current study's findings by looking at the relationships among the aggregated values may not be justifiable, despite being done in such a way by Vuoskoski and Eerola (2011). This is because the excerpts in the current research are intended to induce certain emotions, which might be adverse to each other, such as one excerpt for sadness and another for joyful-activation. Aggregating these adverse responses in a single set of values for all excerpts may not be sufficient to explain the specified responses. According to the correlations (Figure-25), there are relatively strong associations between the aggregated factors, except Sadness. However, for the intended GEMS factors, this is just for power12 to transcendence4 and joyful-activa-

tion10. But, for a single listening excerpt (as of 2nd and 12th), the correlation is observed between the Sublimity items, and between the Vitality items, but not for the Unease items.

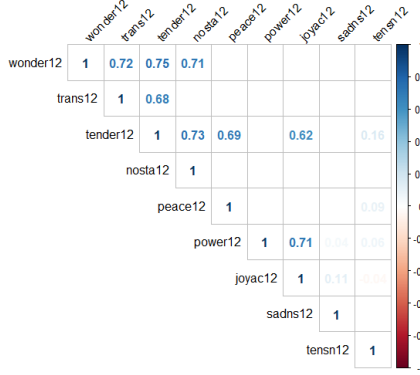
Aggregated GEMS Factors



Intended GEMS Factors



GEMS Factors- 12th Excerpt



GEMS Factors- 2nd Excerpt

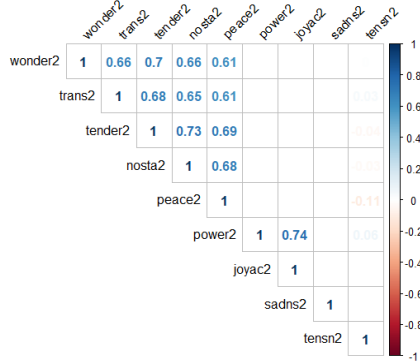


Figure 25: Correlation Tables for GEMS Factors (Only the significant correlations (p<.05) were preserved in the tables.)

Additionally, there were a couple of unexpected outlier rating scores for the sub-items against the GEMS structure. The ‘negative emotions’, for instance, are rarely reported in response to music (Ta-

ruffi and Koelsch, 2014; Zentner, et al., 2008; Laukka, 2007). However, what is not reported before, therefore not expected, for GEMS is that having the high scores for 'serene' and 'calm'; and having the low scores for 'filled with wonder', 'overwhelmed', and 'soothed'. These findings might have come from other issues like 'translation' and 'negative emotions', rather than GEMS itself.

Wording/Translation: Since the present research applies Turkish translations of the English GEMS adjectives (originally translated from French by Zentner, et al., 2008) for the Turkish participants, it is highly possible to lose some nuances of the original GEMS scale in the present research. Even in English, some of the GEMS factors might be confusing for participants as indicated by Zentner, et al. (2008). For this reason, Aljanaki, et al. (2016), for instance, suggest replacing Wonder and Transcendence with Amazement and Solemnity. Nevertheless, Amazement and Solemnity still have a low agreement between participants in their study. Similarly, Vuoskoski and Eerola (2011) measure Wonder and Transcendence factors higher than Unease category, and lower than other factors. Nonetheless, as this research did not present the factors to be rated by the participants, these concerns about the factor names are not applicable to the findings.

On the other hand, the current research has low ratings for feeling 'overwhelmed' (sub-item of transcendence factor), which is never induced by the stimuli (Table-11). It was represented with two options in the Turkish questionnaire as '*Kahrolmak- Mahçup olmak*', to cover the meaning well (Table-10). However, the problem is that it is hard to connect '*Kahrolmak- Mahçup olmak*' in Turkish to Transcendence. It was first believed that might be the reason for low 'overwhelmed' ratings, even for religious excerpts in the Turkish sample. However, low ratings did not change for the Scottish sample (Appendix-4). The difference between the English and Turkish questionnaires was not significant for all excerpts ($p > .05$).

Negative Emotions: As was established in the present research, low ratings for feeling sadness and tension in response to music were recorded before (Zentner, et al., 2008; Vuoskoski and Eerola, 2011; Vuoskoski, et al., 2012). According to Zentner, et al. (2008), ‘negative emotions lose their scope, as people move into a mental state in which self-interest and threats from the real world are no longer relevant’, which is the case for this experimental research. This explains why musical sadness is different from everyday sadness (Vuoskoski and Eerola, 2011; Vuoskoski, et al., 2012). Moreover, the current findings support that, rather than occurring separately, negative emotions, among others, were experienced in a blended manner, even if this correlation is statistically disturbing (Zentner, et al., 2008). In other words, the 11th excerpt of the study, which is intended to induce sadness, has reached almost the same pattern of Taruffi and Koelsch (2014: 8) by evoking not only sadness but also a wide range of complex and partially positive emotions (Figure-26). Similarly, a relatively high sadness score for the 2nd and 4th excerpts has been accompanied by comparatively high nostalgia and tenderness scores.

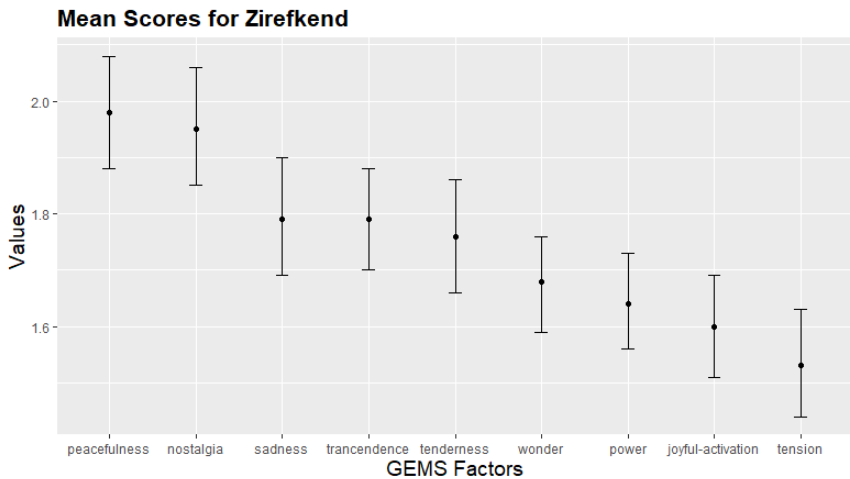


Figure 26: Mean Scores for Zirefkend

4.1.3. Individual and Musical Differences

The current research supports Labbé and Grandjean's concerns (2014) about 'by whom the test was taken'. For them, that is certainly as important as how the stimuli and the measurement tool are effective on the findings. Nihavend and Neva, for example, successfully have triggered 16 of 25 emotion items. Similarly, the fact that Segah and Buselik reached a total of 17 induced emotions implies the achievement of the stimuli. Contrarily, Hicaz, Saba, and Zirefkend have induced two or fewer emotions. However, just the number of induced emotions does not mean the success for the present study. Mahur, for instance, has induced 7 emotions, but it stands among the unsuccessful excerpts. It is unsuccessful in inducing the intended emotions. Yet, Rast with 5 induced emotions, for instance, is successful in inducing joyful-activation¹⁰. Accordingly, in this study, not only different emotions have been induced by different excerpts (as it was intended through excerpt selection), but also diverse emotional response patterns have been observed in parallel to the characteristics of participants and stimuli. Thus, the performance of GEMS as well might be linked to stimuli and participants (Vuoskoski and Eerola, 2011).

Even if the present research does not include any measurement scale for participants' personality traits, it is meaningful to interpret the findings to show how the emotional responses differ in terms of participants' basic features such as culture, gender, age, etc. For this, country and school groups, for instance, must be observed. It is, of course, not reasonable to argue that all participants in these subsamples have the same personality. However, there is a pattern in the responses according to the sub-groups. Therefore, as Demmrich (2020) highlights, there is a need to consider culture-dependency of the emotional response to music listening.

The findings of feeling nostalgia illustrate this view. For the present study, nostalgia was defined as 'a sentimental longing or wistful affection for a period in the past' (Stevenson, 2010). It might be assumed

that the Turkish subsample have had earlier memories in relation to the stimuli, whereas, for the Scottish sample, it might be the first time they had listened to these excerpts. Recognising that earlier experiences can affect emotional response to music listening (Robinson and Hatten, 2012; Gabrielsson, 2001-02), it is reasonable to get higher nostalgia ratings from the Turkish subsample. Similar responses may be extended beyond feeling nostalgia, in relation to the identity of the listener.

Furthermore, it is observed in the present research that school type has an effect on the responses. This might be because of the teaching promoted in these schools. Apart from the Imam-Hatip schools, EFL (science high school), for instance, generally has the lowest scores especially for religious excerpts among the school groups, within the Turkish subsample. Contrarily, HDI and ANI generally have the highest scores; both schools are Imam-Hatip with the musical curriculum. Because of this musical curriculum, this school type might be linked to higher musical experience and training. This research suggests that musically more experienced listeners (in Imam-Hatip schools with musical curriculum) have higher intensity in their emotional response to music (compare with Gabrielsson, 2001-02 and Kreutz, et al., 2008). In this respect, the findings support the idea that 'the individual's long-term commitment to music is important if the same genre of music is used for emotion induction' (Västfjäll, 2002). The music curriculum in those Imam-Hatip schools promotes Turkish *makam* music, which is the domain the present research has selected for its stimulus set. Similarly, while participants were asked only one question regarding the religious belief, it is presumable that students in Imam-Hatip schools might have been also religiously more trained.

For the Scottish subsample, there is a significant gap between the responses of the Secondary school and Higher Education groups. However, this might be influenced by the age of the participants, as the mean-age is relatively higher for the Higher Education group ($mean=25.33$). Since age and year group of the participants influence emotional

responses, the present research supports the attention on the developmental approaches (Pearce and Halpern, 2015) as well as regarding faith and emotional development in relation to this. In addition, the difference between genders is salient in the present research. Since, for feeling calm (and in return for peacefulness factor), female figures are higher for many of the excerpts against to general figures, the findings suggest taking into account the gender effect on the results (Aljanaki, et al., 2016; Balteş, et al., 2011). However, as there is a boys-only (HDI) and a girls-only school (HHI) in the study, it has blurred the gender effect. Subsequently, it is such an undeniable fact that the stimuli and participants have affected the emotional responses in the present research.

Since listener agreement has never reached 100 percent (Gabrielsson, 2001-02) in the present research for any emotional response, the variation might depend on the unique features of the participants. In this regard, the relation between the participants' initial moods and the emotional response might be stated (Aljanaki, et al., 2016). Because the emotional response to music might result from the idiosyncratic associations that are not related to what the music expresses (Robinson and Hatten, 2012; Vuoskoski and Eerola, 2011), the listener's personality might be more dominant in the response. Thus, the present research suggests considering the popularity/familiarity of the excerpts for the participants, during the stimuli selection process. This also explains why the mean value for transcendence⁴ (a relatively religious feeling for a pure religious musical form) is higher for the Turkish subsample, especially for those who have a relevant explanation about the permission of music in Islamic thought. Similarly, the initial moods may help to understand the success and failure of the intended wonder and tension factors. Furthermore, musical preferences and cross-cultural differences might be mirrored through the emotional response to music in the present research (Demmrich, 2020; Taruffi and Koelsch, 2014; Balkwill and Thompson, 1999). Therefore, it is not that easy to abstract the emotional response from the personality or the unique state of the listeners (Liljeström, et al., 2012).

4.2. Applicability/Implementation

As presented before in the tables, there is an invaluable alignment of three aspects for this research to express the rationale behind the present chapter and to link the findings to the implementations. The first was about the emotional attributions of the makams. It was presented in Table 6 (Chapter 4.3.4.), and the shorter version was in Table 13 (Chapter 5.4.1). The second was about GEMS's structure with its adjective list and factors in Table 9, mentioned above (Chapter 5.2.3.2). Both layers were merged earlier in this chapter in Table 8, for the stimuli and *makam* selection process. The third was about the 'value terms' of Turkish RE curriculum in Table 2 (Chapter 2.3).

I will now convert these layers into a new table (Table 14), merging the value terms to the factors of GEMS and the emotional attributions of makams. This new table states that GEMS factors and the emotional attributions of the makams are being linked to the value terms of the curriculum. Hence, the significance of this view for the current research is that the compatibility between the emotional attributions (therefore expectations) of the makams, GEMS factors, and the value terms has been provided. This relationship is both remarkable for guiding the discussion for the implementations and unique for making the perspective RE-specific for the Turkish Values Education system.

The unsuccessful excerpts in inducing the intended emotions were shaded by green in the table. For the unsuccessful makams, following GEMS factor and value terms (root, secondary, and high school levels) were also shaded. However, despite Mâhur, Wonder (as a GEMS factor) and value terms were not shaded, because the factor and related value terms were promoted by another Wonder-related makam, Irak. Moreover, in Buselik (for Power) and Neva (for Tension), the related value terms were omitted since Neva (for Power) and Isfahan (for Tension) have granted the intended factor and the value terms. As a result, Tenderness with the related value terms is the only factor for which the selected *makam* (Hicaz) does not promote this kind of assurance.

Table 14: Alignment of Value Terms to Makam Attributions and GEMS Factors

Makam	GEMS Factor	Root Value (2018)	Secondary Level-Value Terms (2010)	High School Level-Value Terms (2010)
Mâhur ———— Irak	Wonder	Helpfulness	Helpfulness; Sacrifice; Sharing; Generosity; Solidarity; Hospitality	Helpfulness; Sacrifice; Sharing; Generosity; Solidarity; Hospitality
Nihâvend	Power	Patriotism	Patriotism; Peace; Independence; Love of the nation; Courage; Consciousness of national unity; Martyrdom; Veteran; Awareness of democracy; Respect for Turkish elders; Respect for the Turkish Flag and the National Anthem	Independence; Patriotism
Segâh	Transcendence	Self-control	Diligence; Hygiene; Chastity; Frugality; To give importance to being healthy; Uprightness; Moderation	Diligence; Hygiene; Uprightness; To give importance to being healthy; Moderation
		Honesty	Sincerity; Honesty; Accuracy; Reliability	Being reliable; Accuracy; Honesty; Confidence; Sincerity
Bûselik	Peacefulness	Justice	Justice; Forgiveness; Mercy	Being fair
	Power			
Isfahan	Tension (-)	Responsibility	Responsibility; Keeping the promise; Protect the trust; Goodwill; Scientific thought; Sensitivity to historical heritage	Responsibility; Keeping the promise; Protect the trust; Scientific thought
Hicaz	Tenderness	Respect	Respect; Shame; Aesthetic; Sensitivity; Respect for places of worship; Kindness; Humility; Having manners; Sensitivity to the natural environment; Appreciation	Respect; Sensitivity; Humility; Aesthetic sensitivity

Sabâ	Nostalgia	Love	Love/Compassion; Tolerance; The love of nature; The love of truth; <i>Hakseverlik</i> ; <i>Miirüvvet</i>	Love/Compassion; The love of truth; Soft-temperedness; Tolerance
Hüseyinî	Peacefulness	Justice	Justice; Forgiveness; Mercy	Being fair
Rast	Joyful Activation	Friendship	Friendship; Brotherhood; Fidelity; Giving importance to family institution and unity	Brotherhood; Giving importance to family institution
Ziref-kend	Sadness	Perseverance	Being abstinent; Thankfulness (to God); Patience; Simplicity	Being abstinent; Patience
Nevâ	Power (+)	Patriotism	Patriotism; Peace; Independence; Love of the nation; Courage; Consciousness of national unity; Martyrdom; Veteran; Awareness of democracy; Respect for Turkish elders; Respect for the Turkish Flag and the National Anthem	Independence; Patriotism
Tension (-)				

As explained around the concept of ‘meaning-making’ (Chapter 3.3), the rationale behind the present research is not a simple argument such as *–if Turkish music induces a strong emotional response in students, then it must be included in the curriculum and teaching activities*. This is what exactly Haddad (2011) suggested for Arabic music to German listeners/students. If it were the case for this research, then I would argue that because the 7th excerpt was emotionally well responded to, then it must be part of RE. However, what makes the 7th excerpt unsuccessful for the current research is this: the response for Hicaz does not confirm the tenderness-related attributions via GEMS score (tenderness7); despite it having induced seven emotions and having a relatively higher response for nostalgia7. Hence, it is not sensible to use Hicaz for the tenderness-related value terms, as long as it could not induce relevant emotions. Contrarily, 12th excerpt is successful for the current research in the sense that: the response for Neva does approve the power-related attributions

via GEMS score (power12). So, there is a ground to argue that using Neva for the power-related value terms might be valuable. In this point, the question is how 'feeling' is important for values education, in other words for the implementation field of the study.

In this research, what is measured via GEMS is the subjective experience of emotion, namely feeling. However, in the 'component process model' of musical emotions (Scherer, 2004), subjective feelings are accompanied by cognitive evaluation, behaviour preparation, physiological arousal, and motor expression (Egermann, et al., 2011). In addition, it is reported that the musically induced emotional states are associated with similar behavioural and cognitive changes (Västfjäll, 2002, 2010). Accordingly, for the current research, it is a prominent view that how feeling 'transcendence' due to musical induction, for example, is followed/accompanied by action tendencies, physiological arousal, cognitive appraisals, and motor expression.

Regarding nostalgia, the question for neuroscience, for instance, is the activation of brain areas related to mnemonic activity during musically induced nostalgia (Zentner, et al., 2008). Since nostalgia is linked to the retrieval of autobiographical memories, the experience of nostalgia during music listening highlights the role of the memory process (Taruffi and Koelsch, 2014). Music also affects the brain in similar ways, to biologically relevant stimuli –such as food, and artificial activation of drugs. In the same way, a recent study demonstrated that sad music could induce sadness-related effects on memory and judgment as autobiographically induced sadness (Vuoskoski and Eerola, 2012). Even though music is neither necessary for biological survival nor of a pharmacological substance, this relation implies that being of significant benefit to mental and physical well-being (Blood and Zatorre, 2001). Therefore, Sabâ in connection to 'nostalgia' may promote the teaching/learning activities for value terms of 'love' within this perspective.

Related to memory and cognition, if previously learned 'words' or any other information in connection to feeling 'power', for instance, are easily retrieved during the musically induced power, then the ef-

fect of the musical emotions on the cognitive process will reveal. This is to say that music helps to facilitate the encoding of information when the music-induced feeling is congruent with the valence of information learned (Tesoriero and Rickard, 2012). According to emotional arousal theory, emotional states have effects on memory via neurobiological mechanisms that accompany emotional arousal (Cahill and McGaugh, 1998). Furthermore, in terms of mood congruence theory, the congruence between the emotional state of the 'person' (listener or student) and the positivity or negativity of the music influences encoding (Bower and Forgas, 2000; 2001). In this regard, Rast and Irak, for example, may suggest stimulating relevant value terms in connection with the musical emotions accompanied to teaching/learning. This relation may underpin the way of using music in inducing emotion, in the context of enhancement of the information process for listeners.

Likewise, the behavioural expressions of the musically induced 'peacefulness' could be the subject of implementation on helping listeners to change/adapt their behaviour. As a sign of engagement, a desire to action will be consistent with the emotional association (Labbé and Grandjean, 2014). Hence, expressive movements in music might lead to synchronised movements of the body (Scherer and Zentner, 2001). Then, musically induced peacefulness may encourage listeners to act properly for 'justice'. From a reverse angle, reducing tension with music, for instance, may support the related actions/behaviours for teaching/learning in connection to value terms of 'responsibility'.

In sum, the present research, as a potential for educational purposes, argues that the feeling component of emotion as induced via music might back the cognitive, behavioural, and emotional aspects of values education within RE. To briefly extend my perspective for RE, I argue that the findings suggest that the emotional enhancement of values education may be fostered by including music into teaching (Liljeström, et al., 2012). I will turn back to this perspective in Chapter 7 for the further implementation possibilities in RE.

4.3. Limitations

After all, the limitations of the research have been acknowledged by the researcher. From all possibilities, the present research design bears a couple of restrictions due to the selection of the stimuli, participants, materials, listening context, measurement, and data analysis. Yet, the limitations, and in return future directions, are fairly ample since there is not a broad literature on the emotional capabilities of the Turkish *makam* music.

The stimuli of this research of 12 makams reflect the considerations of the researcher, with the objective to implement the results in RE. However, there are more makams with emotional attributions in Turkish music. Even in the selected 12 makams, it is highly possible to find another excerpt performed by someone else in a different context with a different set of instruments. All these options may alter the emotional response. Thus, there is still a need for more work to generalise the findings for Turkish music (Zentner, et al., 2008). Even though the research proved the successful emotion induction, large numbers of listeners with diverse characteristics may produce more systematic and reliable results (Scherer, 2004). The unsuccessful results of the present research on the induction of tenderness and wonder, for instance, might be sought with musical features. At least, for emotion expression, the stimuli might be evaluated before the future studies in terms of musical characteristics (Västfjäll, 2002: 176).

For participant recruitment, within a convenient sampling strategy, this research was forced by a couple of parameters. In Turkey, the limited number of Imam-Hatip schools with the musical curriculum made the target group narrowed. Similarly, selecting students from the school population have always been manipulated by ethical considerations and school principals. It must be stated that, due to COVID-19 conditions, schools were unwilling to participate in such a project, especially in Scotland. As revealed through the findings, the test with a higher number of participants, with a much more diversity, may indicate different directions. Additionally, for future studies, the examination of the

personality variables through such as 'The Big Five Inventory' (John and Srivastava, 1999) might be rewarding to apprehend the underlying mechanism behind the emotional response to Turkish music (Vuoskoski and Eerola, 2011; Kreutz, et al., 2008). Having a culturally diverse sample and /with broader age range may also facilitate the discussion for developmental approaches and cross-cultural understandings.

As already mentioned before, the present research may suffer from translation issues. The GEMS scale within the questionnaire was available in two languages (Turkish and English). Though the application procedure works with two languages, there are more linguistic works behind, for the research. Therefore, it is possible to argue that in the translation certain details might get misrepresented (Balteş, et al., 2011). Similarly, paper-based and online-questionnaires may have indicated a diverse set of standards (Cohen, et al., 2018). To increase reliability and generalizability, future studies may need more stable conditions for the procedure.

Considering the theory of emotion, there are also technical/theoretical boundaries. The present research embraces the 'component process model' for musical emotions (Scherer, 2004). In this model, an emotion consists of cognitive evaluation, behaviour preparation, physiological arousal, motor expression, and subjective feelings (Egermann, et al., 2011; Niedenthal, et al., 2006). However, in this research, the subjective feeling component of the aroused emotions has been measured by means of self-reports, namely with GEMS. This may not be a GEMS-specific limitation in itself, because each measurement strategy has its own advantages and disadvantages. Nevertheless, this research could have been conducted to measure other components of musical emotions with any proper methods. Future studies could benefit from, for instance using neurophysiological and physiological methods for measuring emotional response to Turkish music (Demmrich, 2020). Likewise, rather than GEMS, the discrete and dimensional emotion mod-

els could have enlightened the assessment of the emotional power of Turkish music (Vuoskoski and Eerola, 2011). In GEMS scale (as well as other self-report models), presenting a pre-selected set of adjective/rating items simply implies that the list of 25-items is well enough to represent the possible emotional response of the listener (Zentner and Eerola, 2010). However, in the present research, a few participants have reported a couple of feelings that are not within the 25-adjective list. Even though these feelings are not prevalent for all participants, it supports Zentner, et al. (2008) regarding the lack of some relevant feeling terms within the adjective list. 'Free-description' methods, for example, may provide more individualistic and diverse results (Scherer, 2004). For future studies, it might be also suggested to conduct a study on perceived emotions, rather than felt emotions (Gabrielsson, 2001-02).

Last, this kind of study might be also conducted for another subject rather than education. Due to defining educational purposes and applicability, the subject field of the present research, RE, has affected the research, especially for data collection and analysis. The excerpt selection process and the suggestions for implementations were well documented for that concern. Similarly, the data analysis in the current research has been derived from the statistical approach. Hence, the underlying mechanism of the emotional response, for example, has not been highlighted during the analysis. However, the current research focused on emotions, already induced by Turkish music and rated by the participants. For future studies, the process of emotional response to Turkish *makam* music might be assessed from a different scope.

Finally, since the beginning of the literature review, as it is repeated a couple of times, the present research suffers from the scarcity of the experimental studies on the emotional capabilities of Turkish *makam* music. Thus, what is unrealistic is to fill this gap just by the present research. Consequently, having too many restrictions to this extent for the present research also indicates the direction for future studies.

5. Conclusion

This chapter was conducted to assess listeners' emotional response to Turkish *makam* music, on the question of inducing predetermined emotions for the context of RE. For this aim, the data was collected with a questionnaire. The participants of the research listened to stimuli (12 excerpts of Turkish *makam* music) and rated their felt emotions by means of GEMS-25. The questionnaire was also accompanied by questions of background variables. The stimuli were selected in relation to the comparison between the historical emotional attributions of the Turkish music makams and GEMS factor structure. Then, the emotional responses of the participants were evaluated in three perspectives: the success of an excerpt in inducing the intended emotions according to the coherence between makams' historical emotional attributions and GEMS factor structure, appositeness of GEMS to study Turkish *makam* music, and the effect of the background variables on the emotional response to music listening.

The findings suggest that the stimulus set of the research has induced a distinct number of emotions. This emotional arousal capacity is in line with the historical emotional attributions of the makams for ten excerpts. In this regard, it is successful in inducing *peacefulness* via Buselik, *nostalgia* via Saba, *peacefulness* via Hüseyini, *joyful-activation* via Rast, and *power* via Neva. Similarly, it is partly successful in inducing *wonder* via Irak, *power* via Nihavend, *transcendence* via Segah, and *sadness* via Zirefkend; and in reducing *tension* via Isfahan. However, Mahur for *wonder* and Hicaz for *tenderness* are not successful in inducing the intended emotions. Moreover, this research argues that the existed GEMS structure, with its nine factors and three higher-order-categories, is a relevant research instrument to assess the emotional response to Turkish *makam* music, according to the confirmatory and exploratory factor analysis procedures. Furthermore, this research highlights the relationship between emotional response to music listening and listeners' characteristics such as cultural, national, and religious associations,

gender, school type and grades, and age. To some extent, emotional response to music listening changes according to school types, sex, age/school grades, musical ability (training and experience), and the excerpt characteristics (and to which participants' attitudes).

Regarding future studies and implementation possibilities, Turkish *makam* music promises an invaluable perspective for the cross-cultural interpretations of the music-emotion research field. However, this perspective needs much more work for detailed explorations. Furthermore, since Turkish *makam* music provided the arousal of predetermined emotions, there is a valuable potential for using emotions in RE, among other fields. Hence, Turkish *makam* music will be beneficial for RE to the extent that it induces the intended emotions. Yet, this potential must be re-conceptualised in terms of the role of emotions in the context of effective RE. In the next chapter, I will evaluate this potential according to the view of RE professionals.

Chapter VI
Qualitative Investigations:
Experience of Religious Education Professionals

1. Introduction

This chapter of the research explores the place of music in the Turkish RE system from the perspective of RE professionals. The chapter is informed by the data obtained from the semi-structured interviews with the participants. While literature highlights the importance of music for RE (Berglund, 2008, 2014; Stern, 2004; Babacan, 2019, Yorulmaz, 2012), the aim of conducting interviews with the individuals was to evaluate the view of the experts in the field of RE. Using a grounded theory research strategy, this qualitative chapter formulated a theory (Glaser and Strauss, 1967) to explain the present situation and offer suggestions for improving the use of music in RE. Accordingly, regarding the musical emotions, the related sub-question of the research is ‘how do RE professionals evaluate the place of music in RE?’

2. Method

2.1. Study Design

With its qualitative and exploratory nature, this chapter was conducted in line with the ‘informed grounded theory’ research strategy (Thornberg, 2012) to build a theory on the extent to which RE professionals in Turkey use music as a pedagogical strategy in their classroom. There-

fore, unlike the previous chapter, there was no a priori assumption for the qualitative investigation before the data was collected and analysed. However, the expectation was to co-construct the data and reality with the research participants (Charmaz, 2017). Such a design of the study not only allows data to be collected from different perspectives, but also takes into account the researcher's pre-perceived theoretical knowledge about the general situation of RE in Turkey. While this section shortly summarises the final set of research methods, a broader methodological account was also given in Chapter 4 (Methodology).

2.2. Materials/Questions

The initial primary question of the semi-structured interviews was similar to: 'could you tell me about your (teaching) experience regarding the place of music in (your) classroom?', and then, 'how do you think its role might be improved?'. These questions were modified according to the interviewee's status. The sample questions, for example, were directed to a teacher. However, for an academic, the structure of the questions needed to be adjusted. For the researcher, the questions facilitate further probing and data gathering with the follow-up questions dependent upon the respondent's answers. Furthermore, due to the nature of the data collection and methodological demands of grounded theory such as constant comparison and theoretical sampling, the questions evolved and were directed towards '*theoretical saturation*'. Apart from the introductory questions, there was no single set of questions to be asked of all participants. So, the questions were at least slightly different for each participant.

2.3. Participants and Sampling

The initial research question (*how do RE professionals evaluate the place of music in RE?*) formed a set of qualifications for the potential participants. Yet, in line with theoretical sampling (Strauss and Corbin, 1998), all participants were not identified at the beginning of the research

but during the actual research process. Nonetheless, setting boundaries from the outset was required to consider who/why/when/about what to be interviewed (Coll, 2008). Hence, the potential participants were recruited according to their professional engagement with the subject of RE (as of teacher, academician, or policymaker) and their considerations on the place of music in RE. The participants were then purposively sampled and there were no restrictions concerning music-specific or personal characteristics. It was intended to recruit participants who were familiar with the research field. In addition, the snow-ball sampling method sometimes promoted the recruitment process as long as new candidate participants met the required characteristics.

For this part of the research, there was a total of 20 interviews conducted in 4 phases with 20 participants. Five of the interviews are in the form of field note/discussion with the experts and MoNE level policymakers.

2.4. Procedure/Data Collection & Analysis

With the semi-structured interviews, the researcher collected the data himself and probed further with follow up questions if necessary. During the interviews, participants shared their perspectives on using music in RE classrooms.

After the ethical procedures were settled, all participants were individually invited to an interview. All interviews were audio-recorded. The first half of the interviews (1st phase-7, and 2nd phase-3, and expert interviews-5) was face-to-face, whereas the next 5 participants (3rd phase) were interviewed by phone. One of the participants in the 3rd phase insisted on providing written answers, rather than consenting to an interview. That was the exception in the study during the data collection activities as well as for the materials/question preparation. Face-to-face interviews were conducted at either the respondents' workplace (schools) or in a public space. For the field notes, the experts and policymakers were visited in their offices. Owing to the

nature of the grounded theory research strategy, data collection and analysis were performed concurrently. A detailed account of information about data collection and analysis processes have been given in Chapter 4 (Methodology). In addition, the layout of the categories and concepts, which is developed throughout the analysis process, is provided in Appendix-5. This might be needed for smooth reading and comprehension of the findings and discussion sections.

3. Findings

3.1. Musical Material

This category takes ‘music’ as a material of RE class and explains material-related aspects such as suitability and availability, by starting from theoretical perspectives before moving on to explore practical interpretations.

3.1.1. *Legitimation and Disapproval of Music*

The very first problem with music to be used in the Turkish RE classroom is its validation to the present standards. There is a struggle between approval and disapproval of music as a pedagogical instrument in Turkish RE classrooms. Yet, the latter has a relatively low intensity. The ways of reasoning that RE professionals use to articulate that music is *not* a problematic ‘material’ for RE classrooms, comprise various dimensions such as Religious, Cultural, Natural, Aesthetic and Musical, Realistic and Communicative, Psychological and Emotional, Pragmatic and Purposive, Self-referring and Self-legitimation, and Academic and Legal Conformity. Even though the interviewees believe that only a minority in Turkish society hold that music is entirely forbidden in Islam, the question of whether music is actually forbidden (*haram*) in Islam is still a significant point for using music in RE. Solomon⁶ states that ‘there may be a very small minority among teachers and parents who think that music is *haram* and should not be included in the class’.

6 Participant names are pseudonyms.

However, for Benjamin, 'due to the people and teachers who believe that music is forbidden, the effective use of music in RE is blocked'.

However, RE professionals employ various strategies to convince the education environments of the permissibility of using music in educational settings. This attempt has religious, cultural, emotional, psychological, philosophical, and legal endorsements. In other words, this is not always grounded on religious thinking, despite the nature of the *haram-halal* distinction. Hence, those various explanations may be reflecting the expectations of the many objections against using music in RE.

As informed professionals, the participants are knowledgeable about the religious character of the discussion and share the religious views that music is not entirely and unconditionally banned in Islam. In accordance with Islamic rules, the legitimation of music is always interpreted by referring to the relevant *Quran* verses (i.e., The *Quran*, *Luqman*, 31:6) and Prophet Muhammed's *Sunnah*. To support this view, religious leaders from history such as al-Ghazzālī (d. 1111) and Rumi (d. 1273), or contemporary institutions such as the Presidency of Religious Affairs (PoRA or *Diyanet*) were frequently mentioned during the interviews. The musical character of *Quran* recitation and call to prayer (*adhan*), and religious music forms such as hymns, chants, and prayers were also indicated. David explains this view as:

There is no definite provision in the religious sources as 'music is forbidden'. In addition, music is included in religious services such as reading the Quran and Adhan, that appeal to people's feelings. I personally think that the content may be haram, not the music itself.

Similarly, Adam states 'Adhan is a kind of music as well as reciting *Quran*. As bad and good reciting have different effects on listeners, people prefer better recitation of *Quran* and *Adhan*'. Then, Noah argues:

If Diyanet (PoRA) and Islamic Law departments [at the universities] may support the idea that using music in the educational context is not forbidden in Islam; then the public will not resist.

Mary supports this: '*Diyamet* declared that 'music is permitted'. If this is defended by them, then the negative perception may be overcome.'

Next, culture has a crucial role in the debate of the permissibility of music for RE class. Simply saying music is an important part of our *culture*; therefore, it must be included in *our* RE. It becomes *our* music, if it is underpinning religious and cultural values, or having culturally adopted instruments such as nay (reed flute) and oud (Isaac). Even songs performed by *non-religious singers* (as of public statements) in a non-religious format might be acceptable for RE, due to the values reflected within the music. To illustrate this, Moses underlines the significance of 'content':

It is often debated around theology environment whether music is halal. I think, if there is no direct problem with the content, all kinds of music can be listened to. So, we can consider even Rock music. There may be some issues with the content, but one might notice it himself.

For disapproving music in RE, Aaron indicates the forbidden type as: 'The musical works that lead to sin stand at a closer point to *haram*'. However, Jacob describes the unwanted music not by applying religious terms, but with its negative effects:

For those who oppose music, including our students and our fellow teachers, the first thing that comes to mind is the music produced by popular culture. In fact, when I say, 'we are against that music', I mean the music of popular culture and what is given here is not just music. In this conception, music becomes a carrier of immorality, blasphemy, slang speech, and violence. We are against these side effects. In this sense, music acts as a carrier. So, what is important here is what is being carried through music.

What Aaron and Jacob indicate is that, in addition to religious and cultural concerns, music with negative effects on students or without educational benefits might be pragmatically rejected by the RE professionals. In this regard, disapproval of music for the RE class is not a general rejection, but the answer for what kind of music is not proper for RE activities. Accordingly, RE professionals indicate the non-suit-

ability of music for the RE classroom with the limited number of conditions –in contrast to the views of legitimization.

3.1.2. Defending Music in RE Class

Following the debate over justification of using music, there is still a valid question as to ‘why music should have a place in RE class?’. The answer generally reflects the teachers’ attitudes for/against music and, in turn, approaches in RE class. Both positive and negative justifications (to use or not to use music) mostly lean on the personal experience of the interviewees, rather than on a scientific and academic theory. Even it does not mean that they are not aware of the theoretical discussions about music and its capabilities, their theoretical arguments were not as effective as their personal experience to change their minds.

Initially, it must be stressed that music is one of the educational methods for RE, regardless of whether it is the best. At most, it should be used in a certain time slot of a class and it needs to be switched with other methods when needed. Hence, it might sometimes be problematic to expect to see musical activities in every RE class and each topic, because the intelligence and skills of teachers and students must be taken into account as well as the suitability of the subject. David unambiguously describes this view:

When using musical material, it is necessary to know the balance and limits. Music is our tool, but the aim is to educate and teach. To illustrate this, in a 40-minute lesson, we cannot use music continuously from the beginning to the end. Let’s say one day we start the lesson with 3-5 minutes of background music. Another day, for example, we can use a video supplemented with music in the mid-time of class. There is no point in spending the whole lesson with music.

The interviewees anticipate improvements for RE with music in three areas: in the affective domain –the emotional enhancement of the class environment; in the cognitive domain –better communication of

knowledge opportunities for teaching and learning; and in a hybrid/mixed domain –the behavioural and general improvements. These domains are not ordered in priority and do not exclude each other. In other words, music in RE class might be a source of both emotion and knowledge. In some cases, the emotional stimulation due to the music can lead to a cognitive quest, whereas prior knowledge about music may foster the emotional response.

For the affective domain, Moses says, 'I don't think there's any other power that can stimulate emotions like music'. In addition, for Noah, 'As music directly speaks to our emotions, musical activities may enhance the emotional dimension of RE'. Because 'Music can be used to comprise emotions in lessons' (Solomon), students are active agents during the class activities. Since music is for emotional enhancement of RE class environment, students are expected to feel 'something' more than ordinary teaching, due to the musical activities. As music can induce emotions in listeners, students' role is emotionally responding to the music they listen to in the class. This is a prompt response to music in a short time, to reveal one's own feelings. Furthermore, the musical activities of RE can address the emotional diversity in the classroom. In connection with emotional development, students' expectations might be satisfied as well by the relevant musical stimulus.

For the cognitive domain, John and Eve, respectively, advocate using music for teaching:

I often make hymns listen to in class. It's beautiful because there are hymns that have an educational trait, for example, hymns that teach the pillars of faith and Islam.

When I teach something through music, it becomes more permanent. I think it's more efficient to learn with a melody.

In this domain, students are targeted during the musical activities by their teacher for academic achievements. Furthermore, David gives detail on how music accomplishes this:

Children may have difficulties while trying to learn subjects such as religion, God, and faith. In order to overcome these difficulties, you need to use different tools and teaching methods. But when these concepts are taught through music, they become more memorable for children. Students who listened to hymns were both motivated to the lesson and wanted to sing hymns themselves. While they were singing, they learned the subject of the lesson. For example, one of the lyrics I wrote is as follows: 'Praying five times a day is worship'. The child learns it easier with music, it becomes catchy, and when s/he participates in chanting, this learning process takes place in a fun and active way. In this practice, music has been used as both a motivational tool and an effective way to get information and learn.

What David stresses is that music is there to foster the cognitive perspective owing to students' knowledge-based engagement for teaching activities. In other words, music might be a better teaching method than others for certain subjects. This perspective implies that it is possible easily to learn and to remember well with the help of music. Music can present, express, and communicate knowledge. Therefore, music must be in RE classes, because it does cater for individual learners. Additionally, the educational outcomes of the knowledge-based musical activities are relatively more suitable for assessment, in comparison to the sentimental benefits of such activities.

For the hybrid/mixed domain, the effects of musical activities of RE comprise both the affective and cognitive domains. Isaac, for instance, prioritises the behavioural improvements:

During these musical activities, students may have the opportunity to get to know and understand each other and their teachers better. Mutual respect develops between older and younger pupils. Not only hymn singing, but also in terms of behaviour, there is an improvement. Now that education is not just studying and solving tests; students need to be given the chance to show themselves in such activities.

Accordingly, music may open one more communication channel within the class. Students may express themselves with music or

find expressions in music that talk to them. As musical activities may lead to cooperation and peer-learning, music fosters self-confidence to identify everyone's own success. For Benjamin and Mary, respectively, there is a line between attitudes and musical activities of RE:

Just as immoral words spread to people through music, the same can and should be used for moral development. I have often observed that when I use music in lessons, students' interest, attitude, and love towards the lesson increase. Music may affect listeners' moral attitudes; so if we use music, we can manage the direction of that change.

The idea is, of course, not to promote Music Education with RE, but to support RE with music. Thus, students' positive attitudes towards music might be converted to having pleasure with the RE class, the subject, and the school. Furthermore, Benjamin highlights widening the effects of classroom activities:

With a very effective song, students can access information outside of school time and even share it with their environment. In this respect, an effective and meaningful song can redeem RE of being confined to only the course hours and classroom and can spread its message to a wider environment and time.

In this regard, even if students do not actively emotionally respond to the music, the calming and entertaining effect of music gives sentimental variation to the class. The variations also consist of feeling-based relaxation, knowledge-based learning, and activity-based involvements. Therefore, with music, it might be attainable to conduct an informative, enjoyable, lasting, and internalised RE class where emotions and minds are activated.

3.1.3. Defining Proper Music

In the light of the legitimization of and defence of music for RE, the *educational and pedagogical good* of music for RE must be defined, rather than the exclusively musical, aesthetic, or religious good. Established constructions of so-called 'Religious music', for example, is not an adequate definition of the appropriate musical forms to be used in the RE

class. Some parents' view that 'if it is religious, it should not be problematic'; which sometimes creates a real problem (*the vulnerability point for parents*). Mary points out this:

There are lots of musical works with negative effects in use. However, since their name is 'hymn', it is not problematic for parents to make their children listen to this music.

This view may become a basis for neglecting the pedagogical factors in the excerpt selection process. Similarly, being musically or commercially 'good' does not always equate to being educationally and pedagogically good. For John,

The primary rule is to determine whether it [excerpt] is suitable from a pedagogical point of view. In addition, its educational/instructive features must be taken into account in terms of our lesson.

In this respect, there is no single, one-way definition for the suitability of musical materials for RE classes, but 'the proper musical material' is located among a broad range of musical genres, with a couple of consistent filters.

The content, first, is more important than the form. If the meaning of lyrics, for instance, is not problematic, then the genre is not a substantial obstacle to selection. Benjamin evaluates the material with religious and aesthetic views paramount:

First, I check whether its content [excerpt] is against the Quran. Unfortunately, there are expressions in hymns that are contrary to the Quran. Then, I look at the quality of the music, because many materials available in the field of RE are of inferior quality.

In other words, the coherence between the *content of the music* and the *subject or values the teacher wants to teach* is dominant in the selection process. Contrarily, a lot of children's songs and religious musical forms (hymns, chants, prays, etc.) are not appropriate for RE due to the message and values they spread. Job also focuses on the message of the excerpts, rather than their form:

These excerpts do not just have to be hymn-oriented. For example, a song by Barış Manço could be a great one. 'Halil İbrahim Sofrası'⁷, for example, is a song made on respecting the rights of others. During the Religious Culture and Morality course, through this song, the lessons associated with rights, law, and justice can be processed very easily.

Similarly, for Eve, the meaning of the extracts is more important than the musical characteristics:

Certain types of music are more advantageous than others. Instruments, lyrics, style, tempo; it is all-important for the selected music. But I think the most important thing is that none of these should prevent the message that is meant to be delivered through music in the course.

Furthermore, the selected musical material must 'fit' into the ways the subject will be taught. In this regard, Solomon reminds us of the teacher's responsibilities:

The most important responsibility for making this decision [suitability of music for class] lies with the teacher. The teacher can make his choice according to the curriculum.

This relationship between the musical material and the curriculum often determines the choice between instrumental or vocal music (with lyrics) and between recorded music (and with video clips) or performing at the class. Additionally, each school's unique social conditions and its students' desire and capabilities must be considered for excerpt selection. To illustrate this, Noah highlights students' interests:

What must be sought is the match between a child's level and the suitability of the music. Because certain songs might be harder than kids' ability. Hence, a song may not be equally proper for all school levels.

David confirms this:

Considering that children's musical tastes and understandings vary according to their ages, we should keep in mind that the music we use in primary school children will not have the same effect when used in high school years.

7 <https://www.youtube.com/watch?v=CZWHbfr9iBs>

However, Samuel asserts that students may not always approve of the teacher's selection:

Sometimes, in a way of trial-error, I can see that a hymn I chose is not very appreciated by students. In this respect, the pleasure of the students can also decide whether the selected hymns will be used in future.

While suffering from not having standards for musical materials, RE teachers take responsibility for finding suitable materials, owing generally to what are regarded as unsupportive teaching materials (textbook, teacher guides). Isaac depicts it in this way:

The music that fits the course should be mentioned in the curriculum. For example, while the subject of the Prophet is processed in the course, the verses are pointed out in the textbook or in the teacher's book. Similarly, people who prepare the materials can recommend the appropriate hymns on the subject, in the textbook for students or in the Guidebook for teachers. Sample recordings and videos about these hymns can be shared online, too. When so, the teacher can use these materials, even if s/he cannot sing it. Then, the teachers do not have to search for musical materials to use in class. Given that, we also note that the current textbooks do not make such suggestions to us.

The search for the relevant material starts with identifying the teaching activity. As it is necessary to establish a conformity between subject and musical material, the process is of course dominated by the aim of the subject, as in most classical educational theory (Stern, 2004). The rationale is to facilitate teaching activities by music. Moses illustrates this point:

Repentance, for instance, is a matter of emotion. Of course, information is also necessary, but it is impossible for the child to understand it, without feeling it. So, I need to activate this feeling. To do this, I first find a song that can appeal to young people. It could be a song or a hymn.

Teachers may search for online sources to find proper (recorded) materials or, as an activity, they may produce music with students in the class. John has experienced this negatively:

There is a huge shortfall in finding relevant material, for example, we cannot use YouTube-like video sharing sites at school. There is an access barrier. If

YouTube is to be banned, a video sharing website can be created by National Education. Under the control of the Ministry, this type of material is being shared with the EBA network (Education Information Network-Eğitim Bilişim Ağı).⁸ But EBA provides limited content. To unlock this access barrier, I sometimes use my own phone to make children listen to hymns on YouTube.

The existing materials existed in limited quantities and with a narrow scope. Those materials might be found in EBA, YouTube (and other video streaming platforms), and RE-specific material webpages. However, what John highlighted is a serious shortage of musical materials that have educational credibility. Otherwise, teachers need to figure out their solutions.

3.2. People and Place/or Environment

This category outlines the features of the activity setting where RE stakeholders (teacher and students) engage with the musical material.

3.2.1. Defining the Proper School/Classroom

This section examines the school/classroom where the study of RE includes meaningful musical activities. It highlights two dimensions of place: the physical conditions and the ‘mentality’ of the school/classroom. Regarding the physical conditions, Mary underlines that,

We must consider the school’s physical environment and technological facilities as well as students’ ages and their social/cultural status. There is a difference between using a cell-phone and using hi-fi sound systems to make students listen to music.

Accordingly, it is essential to not unsettle others in the wider school while conducting musical activities in class. Hence ‘at this point, music must be such loud that it doesn’t bother other teachers and students in the next classroom. Otherwise, it would cause discomfort’ (Noah). To safeguard the comfort of other classes, if possible,

8 Education Information Network (Eğitim Bilişim Ağı): <http://www.eba.gov.tr/>

sound-proof classes might be designed for such activities. Likewise, specially designed music classrooms might be used for these kinds of activities. Moreover, having proper technological equipment in the classroom is vital for certain musical activities. There must be relevant listening devices, for instance, for listening activities.

For the mentality of the school, John suggests further considering the surroundings of the schools:

In relation to society, the environment where the school is located, the neighbourhood, the province, and the socio-economic structure will also have an impact on the reactions that will arise. Hence, these factors should be considered for musical interventions in the classroom.

The mentality of the school shapes both its willingness to seek and find relevant help from the experts, and its approach to the students. Assuming that neither the school nor the RE teacher must be an expert on music, the RE teacher or school must be able to find and obtain advice from experts when needed. In addition, the way the school/class approaches its students, imprints the character of that school/class and the quality of its learning. Job prioritises students in this view:

It should be determined whether 'such studies will be carried out only with talented students or for the whole school'. I think it can be conducted for both groups. The teacher of the class needs to know when to include who.

For musical activities of RE, the school/class is not directed by the musical ability. Because the purpose is not to promote music in the RE class, but to enhance RE outcomes through effective musical activities; everyone in the class/school should be able to participate in this kind of activity regardless of musical ability. Thus, no student should be marginalised during such musical activities.

3.2.2. Roles and Responsibilities of the Teacher

This section profiles teachers in terms of their attitudes to music for RE classes and its relationship to their wider responsibilities. The most significant element of the process of using music in RE classes is of

course the 'teacher'. Since music is not an essential part of RE in the current system, the teacher is alone in deciding to use or not use music, in searching for the relevant musical materials, and in finding ways to support successful classroom practices.

In this study there are three groups of RE teachers characterised by their attitudes to using music in RE. Moses describes these groups in these terms:

I think there will be a two-way reaction among teachers. First, conservative religious educators may not want to introduce such a method into the field of RE because they are directly against the music itself. Second, teachers are not ready because most teachers do not know how to do it. If he saw the music is not harmful or if he thought it was needed, but this time he does not know to use, so he cannot use it in his class. That is the case for most teachers. Third, the proportion of teachers who currently use music in RE class is very low.

Solomon shares the same view:

Perhaps a minority is using music in their lessons, or they may have such a willingness. Perhaps 5% of the teachers may carry out studies in such ways as songs and choirs. But I would say that the majority of RE teachers do not have that kind of activities, whereas new RE teachers are more willing to work with this kind of activities.

Negative attitudes among teachers were also indicated by Eve:

Teachers who are accustomed to traditional education methods, I do not think, have got enough skills to use music in their classrooms. Music for them can drop to a level to spend free time in the course.

For Samuel and David, respectively, the reason for that is:

There is a willingness in teachers to use music, but teachers' bias or fear of failure often slows down the process of accepting a technique and supporting a new initiative. In this sense, I would say that some teachers are not open to development.

We can say that among the current RE teachers, music is not much given place. Even if the Ministry of National Education will advise the teachers to use mu-

sic in religion lessons and provide the necessary materials, teachers who have this negative view will still not use these musical materials in their lessons.

Reflecting on this data, these teacher groups are named *Experienced, Hesitant, and Dissident*. The *Experienced* teacher signals those already using music. However, there are no shared standards across the practices of even this group. The group has emerged with its abilities to use musical material for educational outcomes. Thus, its professional practice brings two fields together, namely RE and music. The experienced are aware of the emotional and educational power of music, based on their own individual experiences and expertise. Despite the label 'experienced', these teachers are in fact relatively young, and the fruit of contemporary improved teacher education standards including a familiarity with technology in the classroom.

Those of the *Hesitant* teachers do not use music but want to use it. They are at least in principle open to using music, yet they do not know the way. This group highlights the necessity of the training needs and a supportive environment for teachers. Hence, teacher education of RE professionals should cover 'using music as an educational method' for the RE class much more systematically if it is to build successfully on the initial appetites of this eager group. Additionally, the theoretical basis of this work must be strengthened by the institutional support of MoNE.

The *Dissident* teachers do not use music in RE and not would like to use it. This group's members might have traditionalist perspectives on education and might be uneasy about using music due to not leaving its personal accustomed practices. Their teacher-centred traditional teaching methods may not allow them to try such an innovative method like music in their RE classrooms. The group is similar to the hesitant teachers in not knowing the way to use music in RE. However, the unconditional disapproval of music might be the reason for negative attitudes along this group of teachers.

The main responsibilities of an RE teacher in using music are 'finding' proper material, 'selecting' relevant activities, 'conducting' such ac-

tivities, and 'caring' for students' needs throughout this whole process.

i. For finding proper music and connecting it to the subject/topic of the class, Noah suggests that,

MoNE must design the connections between music and teaching subjects, find proper hymns/chants, if possible, produce, and make them accessible for teachers. What is expected by teachers is to use these already produced musical excerpts. If teachers are expected to find a relevant song/hymn, to produce it, and to make it adapted to class activities, it is not feasible. So, all processes might be professionally conducted.

However, as was indicated for the 'proper musical material', the RE teacher has a unique role in defining and finding the materials of the RE class. Just as John indicates 'when we want to use music, *how much material do we have*' should be discussed'; and Job highlights basic teachers' needs in this regard for locating the right material: 'in fact, we need to create a source including music excerpts for most taught subjects in the curriculum, so that teachers can use it'. In addition, teachers must consider how the material will be connected to the teaching subject.

ii. Selecting relevant activity for practice: The musical material must fit well with the teaching activities. Vocal music with its lyric content, for example, might be better suited for discussion and Q&A sessions than instrumental music. Deciding the activity and switching it to another, when needed, are also closely connected with the implementation process and the monitoring of students' responses. Moses, for instance, condemns some teachers' attitudes:

As a shortcoming, we, religious educators, usually prefer to teach by speech. When we talk, we assume that the student understands. It is an easy, ready-made method for us. Alternative methods are more difficult to use accordingly.

After that criticism, John points out another problem with music as an educational method: 'If teachers do not know enough about the educational, instructive side of music or the emotional dimension of music; and just see its role in entertaining; then they will not use music much'.

iii. For conducting the activity in the classroom, Noah highlights that skills and interest of the students (and also of the teacher) must be considered in the process of planning:

Since both teacher and students do not professionally pursue music, I assume, we should not expect these people will produce a high quality of music.

Similarly, Job expects interventions with varied qualities:

It is wrong to say to everyone that 'you have to teach a subject in RE with music'. We must move forward based on one's intelligence and talent. In this sense, we need to consider the intelligence and skill structure of the teacher and the students. Thus, it is necessary to accept that not everyone can provide the same level.

In this regard, in using music in the RE class, the teacher's role during the intervention process is vital to the creation of a meaningful educational impact. Just giving a piece of music to the class does not by itself produce a positive educational outcome. The intervention process requires the active participation of teacher and students. Accordingly, musical activities must be thoroughly planned by the teacher so that the RE class might get benefits.

iv. Caring for students' needs during this process: Noah proposes to meet students' needs across a range of factors. For example:

With a contemporary educational formation, some of the teachers, relatively younger, have been trained to meet students need, by using technology and other educational materials. They use music and hymns/chants very well.

What Noah is again underlining is the variable teacher capacity, which means that meeting all students' needs requires the teacher's readiness and awareness. There is no perfect musical material or activity process that will immediately attract everyone's attention, due to the varied abilities and personality types in the classroom. The range of student reactions, therefore, is central to the teacher's role in shaping the right musical material and learning experiences.

3.2.3. Defining the 'Proper Student'

Interviewees state that musical activities are for all students while acknowledging age and grade-related dependencies:

I want to evaluate students differently depending on their age. (Aaron)

You should also consider the levels of the classes. (Moses)

It is necessary to consider the readiness of the students. Hence, it would be more advantageous for teachers to use musical instruments that children know and are familiar with. (John)

Yet, for musical interventions, students routinely carry certain tags such as talented, interested-disinterested, participant, etc., according to their adherence to, and prior ability in certain musical practices. These can be variable and complex too. Noah says:

For these activities, it is not a matter what kind of talent kids have, because we may ask students just to listen and to participate in a basic song. However, those who have extra capabilities in music may have further roles for musical activities. But these activities should be open for all who wishes. Because the target in these activities is not to produce high-quality musical compositions but to strengthen the Values Education. Moreover, these activities might be a ground where kids with their abilities may musically express themselves in RE class rather than in an academic context.

David reinforces this point:

If children will be actively participating in singing, then we can expect them to have a certain skill level. Otherwise, our expectation for the children is not to make musical production in the RE class. Given that not everyone has the same abilities, individual differences should also be regarded in education.

Accordingly, a talented student for singing, for example, may not fit for the listening activity. Similarly, a student able for discussion of a song (or a related topic) may not be interested in being a choir member, and so forth. In this context, there is a range of roles and expectations students are assigned in RE class during the musical activities. These tags are connected to the positive impacts of music in RE class, as ref-

erenced above in 'Defending music in RE class'. To maximise student engagement in the activities, teachers must be aware of their own roles and confident in their professional judgements of their pupils. First, students may have an 'artistic personality' as e.g., a singer, player or even listener. Second, they might be inclined to perform their cognitive abilities in thinking, talking, and discussing. Third, they might be more inclined towards processes of self-examination and introspection led by their emotional responses. The point is to recognise difference and diversity across learners in the classroom.

3.3. Approaches and Musical Activities

This section first explains how musical interventions fit in the approaches of values education. After that, it gives a classification for the proper musical activities for RE.

3.3.1. Values Education Approaches and Musical Activities

Regarding the Values Education approaches, it must be questioned how music can be aligned to RE. At this point, the problem is which values (or whose values) will be highlighted and underpinned through musical activities. In other words, deductive and inductive values education approaches are not compatible in the sense, speaking in broad terms, that the former is based on the teaching of pre-determined values, whereas the latter prioritises the students' construction of their own values (Herman, 2005; Veugelers, 2000). Accordingly, the question is whether music should teach the pre-determined values of the curriculum or help students to find their own values. Therefore, the original question returns: 'how should music be embedded in RE?'. Since these approaches do not invalidate each other, the third option is to apply both approaches in a mixed way. As has already emerged from the study, there is a clear connection between these approaches, the practicalities for the musical activities of RE classroom, and the questions of 'why music should be in RE class?'

RE professionals have evaluated the congruence of musical activities with the approaches of values education. In this context, they believe the emotion-based musical interventions are appropriate for the inductive values education approaches, while cognitive interventions are relevant for the deductive values education approaches. The emotion-based approach is considered to be student-centred, whereas the cognitive approach is dominated by the teacher. However, the third option, applying both approaches alternately (mixed approach), is frequently used by the teachers.

In the deductive approach, music supports a) the teachers in their planning and teaching and b) the students to learn better. In this approach, music is a) chosen by the teacher, b) is found in the textbook, or c) in the curriculum: in other words, by the authority in the class. Isaac posits that:

I think it is our job to pass our own culture to students rather than what students want. The values in the curriculum are transferred to students in the musical context.

Then, Noah indicates:

If we have chosen music, it is a deductive approach. Because we set up the 'values' before, decided in which song/music to teach those values, and presented it to pupils.

Isaac and Noah argue that the selection process of the musical material is determined by its relevance for the subject to be taught in class. That makes lyrics have relatively more significance for the selection and activity. This is because music can prime moral concepts, and associated thoughts exert an influence on judgment; owing to the lyrics that carry meaning (Seidel and Prinz, 2013). Thus, what is expressed with music (with lyrics) becomes dominant for teaching activities. Furthermore, Moses and David, respectively, elucidate the capacity of music to convey values:

Let me give you an example of how I use music in RE. I use songs, folk songs, Anatolian rock music (Barış Manço, Cem Karaca, Kıraç) in my clas-

ses, though I am personally not very talented. For example, my favourite song about 'repentance' is 'Hatasız Kul Olmaz' by Orhan Gencebay.⁹ I do not think a teacher needs to write anything about repentance on the board. If we would like to study an informative, enjoyable, lasting, and internalised class where emotions and mind are activated; If we want the student to understand and practice repentance, this song is a very good teaching material. It seems that is more directly related to the teaching of values. I think music is more effective in conveying the message we want to teach. But how effective music is at the point of internalising values is related to how much the music used appeals to emotions.

In this regard, it is expected that the information, conveyed by the musical excerpts, and perceived emotions will connect the students to the values (of the class subject). For this approach, therefore, students must engage in the subject mostly with their cognitive capabilities.

Conversely, within the inductive approach, students are supported by music to explore the values with their feelings. Then, it presumes a relatively higher responsibility and awareness for students. Moses argues that:

I do not find the first method, i.e. deductive, very accurate in the education of religion and values. I think that imposing religious knowledge cannot be applied to values education. In the second, inductive method, music is something that can create awareness. That is why I used music for. My goal is to create awareness with music for emotions, thoughts, and behaviours. In this sense, music seems to be more suitable for this method.

For this approach, music might be either selected by the teachers or by the students or produced in class with the active involvement of the students. The level of students' comprehension is vital for excerpt selection, and the material produced at the class will possibly match that level. Students actively and emotionally engage with the musical material to the extent of their understandings. For Mary,

9 <https://www.youtube.com/watch?v=wzGENjrUuWg>

Music is better to suit to values acquisition-inductive approaches-, rather than values transmission-deductive approaches. In other words, pupils will have gained the values informally in a natural process. No need to call manifestly a value within the teaching activities. Music helps students to internalise class subjects.

In this context, the emotional response of the students to the musical excerpts (felt emotions) is invaluable for discovering values in class settings, in contrast to receiving information via music. Jacob asserts this:

In my opinion, music is more about giving emotion than carrying knowledge. Perhaps knowledge can also be given in this feeling; I mean, giving information with emotion. Whatever is to be given, it is a little bit involved in that feeling.

John says 'music appeals more to people's feelings. In this respect, I can say that music is not used much for teaching'. Hence, that music helps the students to reach their own feelings brings the student and his/her emotional response to the centre of the class activities.

As already suggested, it is vital to use both approaches of values education in order to facilitate wider educational benefits; music might be integrated into a mixed-method or be alternately used within deductive and inductive approaches for values education in RE class. For Noah, 'music is suitable to be used in both inductive and deductive approaches'. Similarly, Jacob offers to merge both approaches:

It is not right if we think of education only as of loading information to the child. In this sense, the question of how to teach has become more meaningful than the question of what to teach. Whatever is included in it can be delivered to the students through the love of music. In this sense, music is relatively easy to convey the desired message.

The advantage of this approach is that, similar to the 'hidden curriculum', teachers no longer need to explain what the class will be about. In this way, musical pieces, selected by the teacher, might be evaluated by the students to the extent that students may interpret their cognitive and emotional responses. Likewise, students might be

asked by their teacher to make a musical composition that expresses the class subject. Eve illustrates this:

If I determine the music to be used in the course, for example, it will be easier for the student to learn the values I set. But on the other hand, when we think the values that the student discovers himself, it is necessary to move forward with the music of the student's choice or the values that s/he finds from selected music. In this sense, both seem equally important depending on who determines the material.

Mary exemplifies this view with her own works:

Such activities have benefits, as I have a lot of examples of students' own compositions. When you ask them to write a song in line with the course subject, they can do it and then sing. It is effective, that is to say, the achievements or concepts of the course objectives are often included in these songs. Since students use these concepts when writing lyrics, learning is very permanent together with music. Students also can transfer this to another person later; because it is something that is achieved by living, by doing. I did not have to tell students anything for hours, I just said, 'You can use the textbook as you like'. I only gave them guidance on what kind of information should be included in. By assessing the musical material, I also understood whether they actually learned the subject. In a simple form, almost all students can participate in such an event. In terms of permanence, the student can remember this work for years.

What Mary emphasizes is, however, that this method's success is strictly dependent on how the teaching activities are connected to the musical activities and materials.

3.3.2. Musical activities: Theoretical and Practical Considerations

In relation to the questions of *why* (Defending music in RE) and *how* (Approaches in using music for Values Education), the next question regarding the benefits of the method is the educational activities in which music will be used for RE. The answer to that question includes a range

of activity types for classroom interventions (manifest level) and expected cognitive, emotional, and behavioural responses for students (latent level). The manifest level states the visible class activities for everyone, for example, singing and listening; the latent level indicates the targeted educational outcomes such as remembering, valuing, and adapting.

Before explaining these levels, a couple of issues must be highlighted again with the view of Noah:

It is not proper to spend all class time with music, but 4-5 minutes in a class might be relevant to conduct musical activities. If music is helpful for the class subject, part of the class might be devoted to musical activities. But the connection between music and the class must be conducted before the class.

What is demystified by Noah is that, first, musical activities do not last during all class time, but maybe for 5 minutes, depending on the situation. Similarly, the use of music is not suggested in every lesson, nor for all topics in RE. There is no sense in insisting on using music all the time and in all classes. It is just one of the teaching strategies which can be used. Second, the success of the method depends on connecting the musical activity to the lesson content. The connections must be planned before the class and applied by the teacher. Otherwise, without a well-planned class, musical activities would be only filling free time during lesson time. Third, music is here to improve the quality of RE. The idea is not to find extra time for musical studies in the RE class.

Manifest Level: After that, the manifest level of musical activities for the RE class includes a chain of work regarding the ability of the students. The first one is the main activities for everyone in the class, such as listening, singing, watching (with video clips), and Q&A sessions about music (including thinking, talking, discussing, and conversation). For RE, 'listening, singing, making a composition, writing lyrics have a value' (Mary). Moses summarises one of his lessons as:

I came to class and told the students that 'we are going to study the class with a song today. The subject is repentance, get your notebooks for the event. Now you are going to listen to a song. Take notes about the lyric of

the song, about the person making mistakes, regrets, apologising, expectations of the person who made the mistake, the emotions, and thoughts that those lyrics arouse. We will have an event about your notes later’.

Job adds:

We can learn in the form of conversations or question-answers through musical works. Excerpts about the theme of the class/subject can be listened to in such a way: ‘Let’s listen to this, then we will talk about it. I wonder what is told in this song’.

For Noah;

We may ask students just to listen to and to participate in a song. Listening and singing are the most important activities, I think. Those, who have a talent to write a poem or to compose it, may do this in the class.

The second is the class activities, requiring musical talent, such as lyrics writing, composing songs/hymns (and relatively shorter rhythm and slogan patterns), playing an instrument, and music-related Homework (or Term-papers) for interested students. Benjamin argues that ‘Listening to professionally recorded songs has a very positive effect. However, it has a greater effect when teachers or students play live and sing together in the classroom’. Furthermore, ‘a child with an interest in rap music can easily be given an assignment in the form of a rap song about the life of the prophet’ (Solomon). Moses also defends this view:

I have asked some of the talented children to compose some rap-style songs in RE. If I know a child with his/her talent for music, I give him/her an annual assignment, a term paper, about music. For example, I gave homework to a student to prepare a song and to sing it in a classroom or a school program. I do this for years, as it is very successful, because I have one condition for this assignment: the songs must be (at least a little bit) about a religious subject, value, or moral behaviour.

Accordingly, the resources and the talent we have in the classroom are important for these activities, as John exemplifies: ‘When I brought the notes of a song to the class, within a week, students were able to play these notes with a flute’.

The third is the group-works with talented students such as choir studies and concert programs. Yonah tells that 'We have a choir for chants. When we attended a programme at a mosque, the audience showed their appreciation and invited us to later programmes'. Jacob expresses his view as:

Special religious days give us a serious opportunity to display our works. When we participate in these events, almost 5000 people, the congregation of a mosque, listen to our students. Listeners appreciate our musical activities, present us their satisfaction, gratitude, and even their support. Such programs ensure that our schools do not live in an introverted circle. It makes our works go outside the school walls.

However, these kinds of activities require further professionalism to enable students to participate in the school-wide, local, and national performances. This is because 'some schools have an expectation to conduct public events in those [religious] days' (Mary).

Finally, music might be a supportive element during other activities such as storytelling, case analysis, educational games, drama, the celebration of religious days, and music-listening in break-times. For Mary, religious day programmes, for instance, 'might be helpful for the guests as well as for practitioner students'. Therefore, there is a potential to use music in these activities.

Latent Level: Next, the latent level of musical activities for the RE class implies that the set of objectives will be gained through musical activities. These goals are latent because they may not be clearly observable for the students but must be planned by the teacher. This level can be achieved through affective response, cognitive stimulation, and attitudes and behaviours.

Thanks to the feeling-based response to the musical activities, emotions will be a substantial component of the RE class. Through music, students perceive emotional expressions, and they may emotionally respond to music. For David, 'non-verbal, instrumental mu-

sic, is directly related to the activation of emotions.' When this emotional context overlaps with the subject's core value (teaching topic of the class), it allows students to feel the topic as a first-hand experience. This is the emotional attachment to the class's subject owing to the perceived and felt emotions. For Aaron, this is quite apparent:

Emotional intelligence is a critical area of intelligence that influences decision-making processes. In this sense, I think that some things can emotionally be transferred with music more quickly and more easily. If we do not touch the emotions, some things are missed.

Moreover, the emotional enrichment of RE class will be promoted by empathy and sympathy since music helps students to express themselves during musical activities. John is, for instance, 'in favour of using music that will calm the child more'. Furthermore, when students present their talent (individually or in a group), they feel that they are valued by teachers and peer-students (or who listen to them).

Another way of reaching the latent level is with cognitive stimulation. Musical activities can directly speak to the students' cognitive abilities due to the knowledge-based aspects. Eve thinks that 'music is useful in teaching, explaining, transferring information to students, and therefore learning'. For Mary,

Music may create a way of better learning for those who engaged in music. By listening/singing a song together by which students can communicate/discuss each other; you can efficiently teach many values. You can teach the values with the strong 'voice' of the artist. You are having employed music, a more effective/stronger expression than verbal communication.

In her way, the teacher, for example, can straightforwardly give information within the musical excerpts to the class. In this way, students may learn knowledge of and about certain values, with a process of investigation, analysis, evaluation, and creation. This is because 'what we mean by musical activity is not just to listen to. The child should also learn something through music. The process is directly related to learning from the lyrics' (David). When students are asked, for

instance, to evaluate an existing excerpt for its suitability for a certain occasion like religious days, Eid, and festivities, students must employ their cognitive skills. Furthermore, for teaching and learning, musical activities can stimulate remembering and retrieving earlier memories.

The last way to reach the latent level is related to attitudes and behaviours. In this way, musical activities combine feeling-based and knowledge-based responses in favour of promoting positive behaviour-based changes. Noah states this view as follows:

To teach the rules of ablution, the teacher can use songs. Similarly, daily prayers (salah) can be easily taught with a song. In this method, pupils not only learn 'rules' easily but also learn in a fun way; instead of learning something just to keep in mind.

Moreover, musical activities may help the teacher in promoting class discipline through the active participation. For this, Isaac prioritises students' engagement:

This [music with videos] requires extensive work. Yet, students will be in a passive condition while watching the video. I want students to be active, not passive. Let them be in the music themselves, doing it themselves, singing it themselves. Previously made musical works can be shared with students through videos. Students like them, too, but what the student is actively involved in is better in terms of education.

Additionally, just as Moses argues, a teacher's behaviours, an artist's attitudes, and even peers may inspire students for positive change:

With a [musical] homework assignment, the student first feels that s/he is valued. 'I am interested in music, and the RE teacher is giving me a homework assignment on this subject' a student may say. At the same time, when s/he sings in front of class and school, s/he sees value from his/her friends. Such a contribution, of course, allows school programs to be more colourful, which shows us how music can take RE to a different level.

In other words, this way highlights students' guided behaviour that is 'valued and organised by the emotional domain', and 'analysed

and created by the cognitive domain'. As Jacob indicates 'children's motor skills, cognitive skills and social cohesion processes are being supported with the musical activities.' Accordingly, these activities might be a ground where kids with their abilities may musically express themselves in RE class rather than in an academic context (Noah).

3.4. End Matters: Reactions, Problems, and Futures

This category concludes the findings with the reactions to musical activities in RE class. It highlights the problems that lie behind the insufficient dissemination of the musical activities within the RE classes. This section ends with the suggestions and future directions for improvement possibilities.

Reactions caused by music: When RE teachers use music in their classes, it may lead to both positive and negative responses among other colleagues and parents. Beyond the physical disturbance of high sound within the school, these reactions may have more abstract motivations, such as the beliefs of those people for and against religion. Those parents who argue that music is forbidden will be naturally against musical activities in the RE class. Similarly, some teachers and parents might be against 'religious' music in RE due to their secular affiliations. Nonetheless, Aaron reports no negative response: 'for secular people, this method is much more valuable. Giving religious messages through music is getting a very different and positive response'.

Yet these kinds of reactions might remain limited and localised. In addition, because of the inherent values of a musical excerpt (even though it was not necessarily the teacher's intention), the teacher's selection of musical stimuli might be educationally criticised. This is especially relevant for the excerpts played during breaks and lunchtimes. To illustrate this, Noah reminds teachers' positionality in relation to reactions:

There is still a relevant objection [on whether music is forbidden in Islam?]. Even some teachers may have a bias about music. Similarly, some parents may

always not approve of using music in class. The important thing is that the teacher must stick with the curriculum. If the teacher uses music as a matter of the subject in the course, there is no problem. If a musical work is used as educational material, no one has the right to object. Here, what the teacher should do is not to go outside of the curriculum set by the state. If s/he stays within the curriculum limits, I think there will be no problem because of the music.

Similarly, for John, 'the musical works to be used in the courses should be produced with pedagogical concerns, by which no child will be harmed'. If a song reminds the students of a very bad example of student behaviours, that is a musical excerpt of which RE teacher should be against. As long as a musical excerpt is directly linked to the curriculum subject, a teacher can defend his/her position legally and ethically.

Problems (Barriers in the field teachers faced): The problems underline why music in RE is currently not popular. First, Aaron and Isaac, respectively, consider the lack of support:

I do not think we/teachers have enough support in terms of material. [You just stated YouTube as an example, but you did not mention the EBA (Educational Information Network) - YZO]. This is because YouTube extension links are not accessible in schools. If such visual and musical materials were available via EBA, the utilization rate would increase. I think this opportunity should be provided by the authorities. (Aaron)

The music that fits the course should be mentioned in the curriculum. Of course, while all this [improvement process] is being done, I think, teachers need in-service training. (Isaac)

For teachers, there is neither sufficient organisational support nor practical material supply for the musical activities of RE. Second, Mary extends this perspective for both policy-level encouragement and pertinent academic relevance:

The assumption of the perfect class in a traditional way: the teacher is at his desk, students are sitting, and class is going in silence. Teachers do not have enough support from the school management, central education agencies, and NGOs, to change this mentality.

In this view, the personnel in the field might be a problem themselves. Especially for the teachers wedded to traditional teaching styles, there may be no convincing reason to use music in RE. However, while using music for RE is a personal decision, teachers cannot be blamed if they are not using music in an unsupportive environment. Additionally, structural aspects may make using music harder in RE. Owing to the time limits placed on RE classes in a week, teachers may think that musical activities will consume more time than traditional methods. Finally, it should be stated that all schools do not have the same financial and technical resources.

Future directions/suggestions (Improvement possibilities):

For positive effects to be expanded, support of the MoNE is essential. (Isaac)
Such issues should be adopted and spread throughout by the MoNE and Higher Education Authorities. (Job)

The state is the dominant force in the education sector in most countries, even if it does not control everything. Not exclusively for RE, it supplies the teachers, approves education materials, including the curriculum, textbooks, and teacher guides, and it administers the schools from the 'centre'. From this perspective, the compulsory status of RE in Turkey is both a blessing and a curse for the RE professionals. Thus, in the interviews, it is clear that, for realising improvement possibilities, RE professionals are unquestioningly confined within certain roles and responsibilities assigned by the state. Noah suggests,

If MoNE suggests (or declares) to use music in RE, I assume it would be regarded by many of the teachers. MoNE must design the connections between music and teaching subjects, find proper hymns/chants, if possible, produce and make them available for teachers online. MoNE must have a plan to answer questions like: which song/hymn will be brought to class? How the music will be selected? Will pupils whether to sing or listen to? Will be there any activity about the music such as a Q-A session or drama?

What Noah says is actually to expect *everything* from the government. In a similar vein, for David and Samuel, respectively, teacher education should include using music in RE classes:

RE teachers should be trained for using musical materials in lessons. Let the teacher learn the theory during training so that s/he applies musical technics in practice. Leaving the teacher alone for these practices will reduce the rate of musical activities finding a place in the classroom.

To make progress in this field, rather than dealing with the prejudice that the existing teachers may have, I think teacher candidates should be taught how to do this work in the faculty years.

The Ministry, of course, can easily work on this issue. However, it seems RE professionals are not ready to take the initiative. Thus, the situation implies the need for further co-operation to secure lasting improvements.

Beyond the state, there is an apparent need for further collaboration between teachers themselves, especially for experience sharing. Currently, this collaboration happens in a closed circle around the *experienced* teachers (Mary, Aaron, and John), but not exclusively for musical materials. In these contexts, by sharing their good and bad experiences, experienced teachers may provide mutual insight into, for instance, preparing musical activities; the role of music in the activity; *'do and don't do'* tips, pros and cons; and age-related adjustments. *'Collaboration among teachers may be considered regarding material preparation'* (David). Moreover, *'if the visibility of successful practices in this field is achieved in the media, the spread of positive effects will accelerate'* (Job).

As well as this, academic, institutional, arts-based (for instance, supplied by musicians), and local collaborations are all clearly essential for future improvements, especially for the sharing of teachers' responsibilities. Job and Noah explain this perspective:

Not only educators but also people from different perspectives such as sociologists and psychologists should also present their views. Workshops and academic studies to be held in this context also help us. (Job)

We need to approach the problem in an interdisciplinary way. About music, for example, RE professionals alone cannot extensively explain the issue.

The relation between music and RE must be studied by religious psychology, religious sociology, history of religions, Islamic history, and Islamic law. Similarly, cooperation between the school and the parents is required, because the school cannot achieve success without the support of the parents. (Noah)

Consequently, music in an RE context, for instance, might be discussed more openly in an interdisciplinary approach across academicians in psychology, sociology, history, theology, and education. Similarly, musicians may help education professionals in developing deeper understanding. In addition, education leaders at school, local, and national levels may serve as a basis for organisational support. Moreover, effective co-operation between the parents and schools may cultivate wider benefits beyond classes.

4. Discussion

4.1. Discussion of the Findings

It seems there are three layers of understanding in relation to the uses of music in RE. The first reflects *expectations*. The examples in this layer relate to the responses to e.g., *'why music should be included in RE'* and *'why music is a legitimate material for RE'*. The second relates to the methodological and technical concerns of possible musical intervention processes. These mesh with *'Values Education approaches for musical activities of RE'*, features of *'proper musical material'* and *'relevant school and classroom'*, and *'roles and responsibilities of teachers and students'*. The third layer relates to the objectives and educational outcomes. These are oriented around e.g., *'the manifest and latent level of musically enhanced educational activities'*, *'positive and problematic reactions'*, and *'dealing with improvement possibilities'*.

4.1.1. Expectations

Perspectives favouring legitimization of music in RE are treble those disapproving. The positive perspectives include 9 forms of explanation: *Religious, Cultural, Natural, Aesthetic and Musical, Realistic and Communicative, Psychological and Emotional, Pragmatic and Purposive, Self-referring*

and *Self-legitimation*, and *Academic and Legal adequacy*. In return, disapproving perspectives centre on *Religious, Cultural, Negative Effects*, and *Self-Approving and wider Educational* concerns. Despite relatively lower proportions, all participants have shared their reasons for their disapproval.

These perspectives of a majority Muslim country are similar to the Muslim school in Sweden discussed by Berglund (2008), where music is a natural part of students' lives and teaches pupils vital cultural and religious experiences. Its educational benefits far outweigh any disadvantages. Despite the religious rituals, including Quranic chants and call to prayers, a reaction against cultural imperialism and perceived Western hegemony nonetheless feeds the idea that *music* distracts people from religious duties (Berglund, 2008). There remains in this material a challenge to explain the approaches to music that are sympathetic to Muslim cultures and values (Power, 2007). The dispute between legitimation and disapproval means that some teachers will experience difficulties in teaching with music in their classes. This might be expected and will be probably mitigated by teachers in Turkey, though most non-Muslim teachers in the international context are unaware of this problem (Harris, 2002).

The religious perspectives on permission and disapproval mirror the context of Islamic jurisprudence (Berglund, 2014). Taking a wider perspective on approval and generally shared views for disapproval, the overall situation implies that music is *already* regarded as a legitimate learning material, albeit within certain limits. This might reflect an effort to find a niche for music within the current standards, rather than creating a new and broad educational perspective on it: a policy of containment rather than affirmation. It is coherent with one of the intentions of the present study, which is to show ways to welcome music for education in Islamic cultures (Chapter 2.2). However, two negative cases were identified for approval in the data. Solomon and Eve remain in favour of using music in RE, but their positions remain negative because they provide no religious or cultural justification for

their views. Considering that the compulsory RE course in Turkey is named as Religious Culture and Moral Education, satisfying the conditions of religious and cultural approval is crucial.

In accordance with the recent growth of research on emotions in education (Zembylas and Schutz, 2016), the present study underlines the role of musical emotions in RE as well as reinforcing the cognitive and behavioural benefits of music generally found in other investigations (Mercer, 2019; Stern, 2004; Yob, 1997; Brown, 1991). Music supports the themes of the RE class as well as providing welcome variation in the education process (Berglund, 2008). The present research also confirms previous studies of the significance of music for moral reasoning, for teaching (Carr, 2010b), for learning (Babacan, 2019), and for the strengthening of student agency (Apaydın and Arslan, 2015), in multiple RE contexts.

Classifying the expected enhancements within affective and cognitive domains mirrors the difference between felt and perceived emotions. Connecting these benefits to behavioural improvements involves the triple aspects of attitudes, moral behaviour, and wider general objectives of education, uniting emotion, knowledge, and ethical conduct. Just as James (1902) showed the relation between moral behaviours and moral emotions, RE professionals are more than ever aware of the consequences of emotional arousal based on musical material for their subject. In this regard, the emotional response to music is *not* the ultimate goal, the objective is to connect this feeling to the aims of the subject taught.

The emotional enrichment of RE with music is not limited only to the emotional response to the excerpts showcased in this research, but also extends more widely to the empathy, motivation, and enthusiasm of the students more generally. RE professionals of course do not only consider emotions as inherent to individuals, but also recognise the social aspect of emotions. Incorporating individual and social aspects is also coherent with the present study's perspective on emotions and this presents and validates further opportunities to use

emotions in education. Stern (2004), for instance, argues that music adds a communicative dimension to RE and works directly through students' sensibilities. Because music is one of the richest sources of religious expression, it can also express emotions relevant to the subject of the RE classroom. Furthermore, by bringing together affective and intellectual responses, it enables personal expression, reflection, and emotional development. In other words, RE with music might be comprehensive enough to embrace affective, cognitive, and behavioural responses across the classroom experience.

Similarly, cognitive domain enhancements include attention, readiness, and promoting remembering and working memory in students, while regarding music as a form of pedagogy to communicate beliefs and values within the musical activities. According to Babacan (2019), using music in teaching RE improves academic achievements, knowledge retention, and attitudes towards the course. Music promotes a deeper understanding of religious materials and allows students to express their feelings. This effect is observable across teacher's classroom management and students' interest, participation, attention, and motivation. Hence throughout the interviews, there were manifest varied cognitive and affective terms such as *feeling, knowing, teaching, learning, emotional response, emotional diversity, empathy, motivation, enthusiasm, musical expressions, attention, interest, excitement, readiness, and memory* were integrated with *morality, behaviour change, communication, self-confidence, pleasure with RE, being organised, disciplined, and unified, respect, and passion*. This then serves as a base to integrate the mind, emotion, and body of the students within their musical experience (Brown, 1991).

Despite the misunderstandings of the Mozart Effect (Črnčec, et al., 2006; Thompson, et al., 2001), RE professionals do not tend to expect an unconscious cognitive enhancement with music listening in the RE classroom. However, they often assume that students' emotional responses to music listening might be different from their expectations. To merge affective and cognitive responses for behavioural and gener-

al improvements, RE professionals clearly identify and prioritise what they see as the conscious engagement of students and teachers during the musical activities of RE. These judgements stress the connection between the elements of cognition and the processes of emotional response (Immordino-Yang and Damasio, 2007).

4.1.2. Methodological and Technical Concerns

In the Turkish RE curriculum, music is mentioned once, in a teaching unit for the 5th Grade (of Secondary level). In addition, within the Turkish Qualifications Framework, music is one of the '*key competencies*' for *cultural awareness and expression*, for Secondary and High School levels (MEB, 2018c, 2018d). However, these documents do not offer proper musical materials for RE as such. So, if there are no appropriate musical materials regarding the subjects of the classrooms, teachers need to prepare/produce relevant material themselves.

Educational choices, the aims, the atmosphere, or variations teachers would like to create in the class in relation to music are also significant for material selection as well as for the meanings and intentions associated with music. The selection process will have been also influenced by students' ages, study levels, familiarity with methods and excerpts, and musical preferences. Moreover, students' abilities and readiness will affect their involvement in the activities. Thus, for both excerpt selection and preparation, the appropriateness of the material for the development and educational level of students must be considered vital (Babacan, 2019).

Those who are in favour of music, in particular for teaching, prefer to use vocal music for RE activities, because, with lyrics, it is relatively easier to teach, to communicate knowledge, to explain, and to point out something expressly by this means. However, for those who are in favour of using the *emotional* power of music, instrumental music is much more desirable for RE activities. This may be because instrumental music might be better for an explicit focus on inducing emotion

(Seidel and Prinz, 2013). When it comes to stored music, on the one hand we can reasonably anticipate that music recordings have a different effect from live music and in-class-performed music. On the other, musical instruments may induce a range of feelings and ideas for the class in connection with their conventional cultural ties and experiences. Likewise, video clips during activities differ again in use from recordings.

Berglund (2014) discusses the use of children's songs and religious genres in (the Islamic RE of) Sweden for the teaching of Islam and broader religious instruction. Some of the schools accept musical instruments in RE classes, while some schools reject guitar-like instruments in the classroom. Since the lyrics of sung music are tied to traditional Islamic worship, music is here considered beneficial for pupils. Lyrics make the music suitable for pupils, if it is about themes such as nature, friendship, faith, the Prophet, or religious festivities –while not about things that are forbidden (Berglund, 2008). Lyrics are not only relevant for the determination of permissibility, but also have a clear message for use in teaching, in comparison to other aspects of music (Apaydın and Arslan, 2015).

The content is significant for the selection of musical material as well as for its rejection, but the musical genre is not sufficient by itself for selection. As highlighted above, 'religious music' is not a straightforwardly accepted genre and there are significant differences between musicians associated with it (Khan, 2007). Therefore, RE professionals generally favour different genres, including Rock, Folk, Popular, and even Rap Music for RE classes – as long as the music helps the teaching process. However, related to their teaching purpose, there are divergences among teachers' preferences, though using different music genres can of course help students gain an appreciation for the beauty and complexity of different cultures (Elbih, 2015). For instance, the religiously responsible pedagogical uses of contemporary music might be a kind of source of RE, especially for those who are disconnected from the sources of traditional religious knowledge (Abraham, 2015; Berglund, 2008).

One of the assumptions here is that the school/classroom satisfies the minimal relevant physical and technical requirements for certain activities. Unless these threshold conditions are met, musical activities might be dismissed by the RE teacher. As well as this, there is the risk that the musical activities may not reach the targeted results or even elicit a negative response within the school. That said, there are relatively higher blank answers in the RE professionals' responses about the *description* of the proper classroom/school. This might be interpreted as evidence that, owing to the lack of experience, RE professionals have not developed the necessary awareness of the required physical and technical preconditions. Literature also does not offer much insight into the physical conditions of an effective school or classroom here. Thus, different physical standards for musical activities in each school must be acceptable.

If an RE teacher questions him/herself on whether music should be an element of class activities, the answer is probably in general at the moment 'no'. Questioning here manifests that the teacher feels uncomfortable with using music in RE class settings. Those RE professionals who start to use music in their teaching, or suggest the use of it to other teachers, may never have been confronted with that kind of interrogation. They almost certainly must have somehow started to use music in their teaching activities and continue to use it because of the positive outcomes. Subsequently, deciding to use music or not then seems a solid and natural personal resolution.

Teachers' responsibilities in conducting musical activities (as it is for other subjects and methods) might be summed up as i. setting objectives forward, ii. choosing methods/activities and relevant materials; iii. building partnership with students for better practice, and iv. assessing the impact of the process (Kukkonen and Cooper, 2017). Even if RE teachers are not expected to be expert in music, professional excellence in the field (RE) and familiarity with the material (musical culture) must be merged to raise quality. Notably, there is at present no teacher education program in Turkey that teaches both the profession of RE and music (Apaydın, 2018).

Given that RE teachers are almost always isolated in using music in their classrooms, if there is a kind of success, it is totally thanks to those teachers. Absence of success may be attributable to a number of causes. Beyond the intrinsic workload, current expectations also place all the responsibility on the teacher from the beginning of the process. The teacher indeed takes a risk for such musical interventions (Power, 2007). Hence more discussion is definitely needed for the development of the method.

For the roles and responsibilities of teachers, Adam is the negative case. This might be acceptable in the sense that he is the Principal at the school and has no active teaching role. Hence, he may not have concerns about teaching activities. However, Samuel and Benjamin also have generally ignored the responsibilities of teachers. This might be because both occupy '*the experienced*' category in using music and have already interiorised the responsibilities.

Reiterated in a recent report (Gümüş, 2019), teachers are expected to embrace today the core responsibility of raising mentally, physically, and emotionally healthy students. This requires caring for students' needs, including emotional expectations. It echoes Immordino-Yang's assertion that teachers 'need to find ways to leverage the emotional aspects of learning in education' (2016, 18). The teacher's response to the needs of pupils requires his/her awareness of those students, however, at the same time, s/he must be also sensitive to the conditions of the community to which the students belong (Power, 2007).

It is obvious that RE teachers accept students with their unique social, cultural, and personal characteristics –such as personality, age, gender, talent, interest, cognition, familiarity, and state of health. If musical activities in RE are for everyone in the classroom, then the activities must be crafted according to students' comprehensions, capacities, and interests. So, the musical activities of the RE class should be various to the extent that each student can find their place there. Regarding diversity within the classroom, the repertoire should be broadened with e.g., songs that attract a wide range of pupils (Ber-

glund, 2008). These factors may also illuminate the opportunities to assess students' emotional and cognitive responses in their particular circumstances (Nias, 1996; Yob, 1997).

While the activities might be conducted based on cognitive, emotional, or artistic assumptions, the RE teacher must be aware of, and monitor, students' engagement with the activities. There are no grounds to think that one of these roles is more important than others, so the students should not be expected to participate in all activities. Yet, the teacher must be aware of the relation between the direction of the activity and the disposition of the students towards it. Showing a music video of a popular Muslim musician, for instance, may support the content of RE, if it is related to the situation of the pupils, and, therefore, may strengthen the student's Islamic identity if, throughout the musical activities, students are taught who they are, and the cultural and societal circumstances of the religious group to which they belong (Berglund, 2008).

It seems clear that RE professionals recognise the role of students in forming emotional responses to music listening, as a means of committing to the experience of the emotion. Teachers cannot perform this on behalf of students. Students must consciously and attentively 'deal with this experience'. Otherwise, without this attention, the experience of emotion would not be an authentic part of teaching and learning (Winans and Dorman, 2016). This stance is at variance with the mentality of the so-called Mozart Effect (Rauscher et al., 1993; Pietschnig, et al., 2010; Črnčec, et al., 2006) which often denies the listener's conscious awareness of his/her own response to music. This is because, for the Mozart Effect, a listener must do nothing but *listen*. However, for the musical activities within RE, students are required to be active listeners, and to be an active participant in class activities is to facilitate the learning environment.

There is therefore an obvious need to stress the attentiveness of students during the musical activities of RE. Attentiveness is a key component of effective teaching because when the student is attentive the likelihood that learning will occur is increased (Napoles, 2006). Focus

and concentration are used synonymously with attention here (Millares, 2012). One of the classic definitions of attention is that provided by William James. 'My experience is that I agree to attend. Only those items which I notice shape my mind' (James, 1981: 380). In this psychological tradition, learning takes place when a student is attentive, for learning is understood in terms of making a change in the learner's cognitive and emotional structures: otherwise teaching is easily experienced as meaningless for those involved (Hoveid, 2021). Thus, a significant enabler of learning is the selective attention that theorises the efficient and focused processing of goal-relevant stimuli and minimal interventions of goal-irrelevant stimuli (Lavie, 2000). This is because attention understood in this way enables students to discern relevant and irrelevant information, maintain focus, and resist forgetting (Sáez, et al., 2012).

Selective attention during musical activities could of course benefit students in RE. It is reported that music instructions bind the majority of the students to on-task behaviours, and attention of this kind varies with the amount of students' participation: the higher the concentration of activity, the less off-task behaviour (Moore, 2002). Thus, student attentiveness may increase the effective use of class time, and even reduce discipline problems, by promoting fewer off-task behaviours during musical activities (Napoles, 2006). As the students start to deal with music provided for RE purposes, their attentiveness can guide the class towards deeper engagement with musical material, away from the distractions of the classroom environment (Sáez, et al., 2012). This must be acquired especially by the students in the musical activities in RE, because they are transitioning from musical habits (of an out of RE context) into more formal and instructed learning expectations through their engagement with the musical materials. To gain benefit from these activities, students should manage the learning process on the basis of their selective attention. At this point, teachers may increase students' focus and efficiency by highlighting the essential aspects of the musical material for learning (Sáez, et al., 2012).

RE with musical activities remains of course a complex teaching-learning environment, embracing teacher characteristics, student characteristics, the features of musical material and the activity, the features of the classroom, and the interactions between all of these. Combined within a musical activity of RE, there are a number of cognitive and emotional demands that require students' attention, and which therefore are crucial for learning through the curriculum. For instance, multistep tasks (such as *'Listen to a musical extract, note your feelings and thoughts, and discuss it in line with the class subject'*, Moses; and *'Write lyrics or compose a song for the celebration of Eid'*, Mary) challenge students to apply their affective or cognitive skills. If students' attention is not managed well, these activities may not produce the desired effects for learning (Sáez, et al., 2012). Hence, the RE teacher must be prepared in case students' attention has waned (or directed to something other than the purpose of the class) during musical activities. This is of course a demanding and complex teaching method for both teacher and students. Although, for teachers, keeping pupils' attention high during the course is a constant challenge, it is not unexpected to find that students with little experience cannot properly focus on the musical activities of RE (Millares, 2012). At the early stages of musical interventions, students begin to understand that their thinking of and relation to music may need to change: paying attention to music (and musical activities) for the sake of RE purposes. Subsequently, the teacher guides student attention to these educational goals and related musical activities. Eventually, these practices may become a routine for students (Sáez, et al., 2012).

The negative cases for certain features of the student population came from Solomon and Samuel. For Samuel, students might be too passive, in the sense they are allowed to join the activities to the extent that the teacher is successful in his/her musical activity. However, Solomon is more pronounced in currently not being willing to use music owing to the discrepancy between students' tastes in music and his own.

It seems that values education approaches in connection to musical interventions relate to the latent level of such classroom practices.

These approaches are mainly concerned with the questions of *why* and *how* the musical activities must be conducted. The *content*, for instance, was the chief concern for approval, whereas the significant aspect for the approaches and methods relates to the *form* and *objectives* of the activities. Consequently, a manifest-level activity might be suitable for deductive, inductive, and mixed approaches if its orientation is conducted within the proper approach.

The disparity between the deductive approaches, in which policy makers prescribe the values to be taught, and the inductive approaches, in which students are given the chance to explore their own values, is observable within the discussion of musical activities. The former suffers from criticism of both indoctrination and misalignment with constructivist notions of learning, while the latter is open to criticism for its seeming values relativity (Brady, 2010). Despite the differences, the approaches are not necessarily mutually exclusive, and they can be blended for musical activities.

For musical activities favouring the deductive approaches, the values to be taught are selected by the teacher or identified in the curriculum (and therefore usually the state policy-makers). This context implies an authority structure where students might be conceived as passive receptors. However, given the nature of the emotional response to music, there will be always a kind of 'hidden curriculum' within the musical activities of RE framed in this way. Similarly, the cognitive and emotional engagement of students with the musical material might be congruently observed in the classroom. Hence, for musical implementations, there is not a strict border between these values education philosophies. Babacan (2019), for instance, discusses using music in RE class for teaching purposes, in a mentality of deductive reasoning. Babacan also reports a positive change in student attitudes towards the RE course run in this way. However, there is uncertainty in how to assess the contribution of the students' emotional and cognitive responses to the resultant behavioural and attitudinal improvements.

After that, the negative cases for the values education approaches are put by Adam and Yonah. It might be argued that Yonah does not appreciate such approaches to values education in the light of his traditional teaching mentality; and Adam pays less attention to the classroom practices, because of his managerial role.

4.1.3. Objectives and Educational Outcomes

It is common to use singing, listening to music, watching video-music, music-making and playing instruments, choir and concert programmes, and talking of/discussing music in RE (Berglund, 2008; Power, 2007). When some of the students have difficulties in understanding the meaning of the music, then teachers need to explain the lyrics or the points young people do not understand (Berglund, 2008). Communal celebrations of religious and other festivals have the advantage here of using the music for particular recognised occasions (Stern, 2004). The celebration of *mawlid* (the Prophet Muhammad's birthday), for instance, has great potential for using music. It is an opportunity for the students to perform hymns and Qur'anic recitations to a wider audience. The performers need to practise during the weeks of preparation. These celebrations are also an opportunity for the school to realise its actual wider role in the community (Berglund, 2008). Beyond the core curricular obligations, music might be a supporter of other activities, such as communal storytelling (Stern, 2004).

Music for RE is one of the several methods, among others. We can of course acknowledge that music may not be suitable for teaching all aspects of RE. To increase the benefits of the interrelationship, we need to accept that teachers need to know their students and their abilities and interests. For the first layer of manifest level of musical activities, everyone can, for instance, listen to music. Similarly, students may not require further musical skills during storytelling, since music is not the focus of the activity. Nonetheless, each student's attachment to the activity will be at a varied level depending upon their passion

for music. However, the second layer manifest level musical activities might be conducted only with the students who possess a relevant degree of talent, because talent-oriented activities such as lyric-writing and playing an instrument can only be performed with skilled and interested students. The third layer (like choir works) and the fourth layer (like competitions) demand not only talent but also further work beyond exclusively classroom activities. Therefore, for all these 'activity layers', teachers must know their students' interest and abilities. Even though students cannot be expected to be musical artists of the RE classroom, recognising their dispositions during the planning may enrich the quality of the activities and student engagement with them. Furthermore, a combination of these activities, with each other, or with other activities, might also be advisable, to speak to the diverse types of intelligence in a classroom.

The finding of a subject-related musical extract and sharing it with the class is not the end of the musical activity of RE. This is, in addition, not just a listening activity. Expecting students alone to find the connections between the activity and the class topic is not realistic. For higher benefits, students must be guided towards the aim of the activity (Veugelers, 2000; Veugelers and Vedder, 2003) and the disciplinary area of the class (Napoles, 2006; Moore, 2002), so that the manifest level musical activity leads to the latent level responses (Moses, Isaac, and David). This is because the latent levels (affection, cognition, and behaviours) are not specific for an activity of the manifest level, but indicate the competencies that will be achieved through all of these activities. Echoing Stern's practical overview of using music in RE (2004), these generic competencies include *investigation, expression, evaluation, interpretation, reflection, analysis, synthesis, application, empathy, discussion, observation, learning, feeling, and acting*, etc.

These skills are conventionally grouped into three domains of the latent level as *cognitive activation, emotional response, and behavioural promotion*. These domains suit, in turn, teaching and learning, feeling, and

acting and attitudes. For all activities (of the manifest level), there must be a way (or ways) to the domains of the latent level, which then renders the musical activity the supporter of authentically RE outcomes.

The cognitive domain (of the latent level) is shaped by teaching and learning perspectives, rooted in knowledge-based activities. Analysis, evaluation, creation, comparison, etc. are required skills for these activities. According to Brown (1991), music provides key elements for this kind of learning –such as involvement, awareness, responding, discriminating, and communicating. Cultural or subject-specific knowledge, for instance, can be conveyed by music. Singing and broadly related musical activities become a way of learning this knowledge (Berglund, 2008). When students are asked, for example, to write lyrics on a certain topic, they must get information about the subject. By working on the initial knowledge, they will cognitively engage with the material. This might, indeed, be considered as a ‘learning by doing’ philosophy. For example, by singing about Ramadan, children can learn about Ramadan in a joyful way (Berglund, 2014).

Students can also realise their identity and express their cultural attachments through their possession of music (Davis, 2005; Power, 2007). In line with the present research’s findings on the latent level of musical activities, Berglund (2014) argues from her work that the use of music is connected to the enhancement of learning, and the attempt to make Islam relevant to youth culture. For this connection, she stresses the celebration of religious narratives and the structuring function of singing for children.

Especially in group work, musical activities may also support a more peer-learning process. Music with lyrics might be more desirable for these kinds of activities because, in comparison to instrumental music, lyrics may have a ‘ground’ more easily linked to the teaching subject. Like lyrics, music with visual accompaniments can also offer a distinctive way of learning. As videos are popular among pupils today, using music-videos can motivate pupils to enhance their learning

about the topic of the class, irrespective of language. Over a longer period, children exposed to video material may eventually understand and internalise the meanings obscured by over-reliance on language alone as the medium of learning (Berglund, 2008).

The domain of emotional response (at the latent level) is rooted in the primal emotional reaction to musical activities. We must never forget this. One of the potential objectives of musical activities is deliberately to engage with students' emotions at that primary affective level. More specifically, by reaching beyond the concrete level of knowledge, musical activities focus on emotional arousal that facilitates students' awareness of the emotional dimension of the classroom subject of RE. Since music can induce emotions and trigger students' passion for the subject and enthusiasm for the teacher, this attachment may also build a respectful relationship between the teacher and students. Power (2007) describes the affective role of music in RE by means of feeling, enjoyment, calming, and encouraging. Regardless of cognitive ability, music in RE can speak to the feelings of the students through self-expression, empathy, and socialisation (Brown, 1991). For success in this domain, teachers should use music that is appropriate for inducing the desired emotions, so that students may have personal, affective experiences readily integrated into their classroom activities.

By arousing emotions with music in RE, there might be a way of further integrating emotion, motivation, and cognition in the classroom. We now recognise much more fully than before that emotions have prominence for both teachers and students in classroom interactions and the cross-cutting patterns of motivation and learning (Meyer and Turner, 2006). This is because of the reality of the relationship between emotion and cognition in experience even, while these elements often remain theoretically distinguished (Yob, 1997). The concept of emotion, as we have seen, also almost always comprises cognitive evaluation processes (Scherer, 2004). Hence, emotional and cognitive activations through musical activities are strictly connected with

each other. This kind of activation in the RE class might also be easily connected to the everyday emotional experience of the students. The teacher, the students, the class, the subject of RE, and the school may from these perceptions all broaden their insights into the deepening of shared understanding and judgement. Similarly, the effect might be further amplified through e.g., actively presenting musical activities like concert programs to wider audiences.

As a combination of affective and cognitive domains, the zone of behavioural promotions (of the latent level) is the area that highlights the significance of knowledge-based and feeling-based outcomes for psychomotor activations. In this synthesis, actions and attitudes are supported by musical activities intended to secure positive change. By integrating emotions into the deep learning process, aimed at the promotion of positive attitudes and behaviours through musical activities, RE professionals may be encouraging students to develop the sorts of capacities for transferring knowledge, skills, problem-solving, and feelings to real-world situations that are seen as integral to modern education and its 'growth mindsets' philosophies (Immordino-Yang and Damasio, 2007).

Students can acquire and develop certain behaviours during musical activities such as choral performance. This is well demonstrated in the literature, and these behaviours might be transferred to other parts of school life (Hallam, 2010, Power, 2007; Moore, 2002). Similarly, a student with his/her involvement in the musical activities can be an encouragement for others to participate. Positive feedback on active participation in musical activities sets an example for others. Moreover, during both small-group and larger musical activities, coordination and co-operation between students become vital. In addition, when students learn to communicate with music, active participation in musical activities promotes both students' social cohesion and motor skills (Stern, 2004). Music in RE can also promote certain values such as responsibility, connectedness, community, interaction with others, respect, and productivity (Power, 2007), and enrich the process of social-

ising (Berglund, 2014). Furthermore, presenting role models through music to students, for example, is to make the pupils aware of the gains from positive dispositions, which participation in music as both listeners and creators can exemplify (Berglund, 2008; Kristjánsson, 2006). In this way, musical activities are not only for prizing the past (cultural experience), but also illuminating the present and actively mapping the future. In other words, the effective RE class harnessing music successfully can foster a whole range of values, attitudes, aspirations, reflective powers, and approaches to learning across the pupil population.

The chief negative perspectives on the musical activities came from Samuel for the latent level and Adam for the latent and manifest levels. Adam may have fewer concerns about the classroom practices in the light of his managerial role in his school. Samuel might be mentioning only the manifest level because his focus is generally on the capabilities of teachers for implementing musical activities, not on the role of students.

For the reactions to music, RE professionals tend to reflect upon the religious and secular motivations underpinning both positive and negative responses. Religious people, for example, may be in favour of musical activities supporting their beliefs and cultural perceptions in the RE classroom. On the other hand, this group also includes those who argue that RE is using material that is *haram*. For more secular groups, it might be that no part of religious culture, including music, should have any place in schools. However, this group may also include those who positively evaluate religious music in schools for cultural and creative reasons, and prefer it to other, more doctrinal parts of the RE curriculum. In this broad and mobile picture, music may help RE teachers to break open stereotyped and simplistic portraits of the subject and its practitioners in schools.

It is of course obvious that some of the negative responses might reflect local, rather than general objections. It must also be recognised that the unique social, economic, and cultural background of each school requires recognition, so that teachers can predict and navigate

the 'dangerous' areas for excerpt selection in music. As a precaution for averting any negative reactions, the aesthetic aspect of religious music might be highlighted and foregrounded. Furthermore, if music seen in this context supports universal values like respect, it might be more readily defensible against secular objections.

The reactions caused by music in the RE classroom are generally evaluated within the limits set by discussion of legitimisation and disapproval of music in Islamic thought. In this context, the anticipations of negative responses are much more apparent than positive ones. However, educational concerns are mostly ignored in the expected reactions in this broad research area (Berglund, 2008, 2014; Power, 2007; Harris, 2002). This is because teachers' educational concerns regarding reactions to musical activities are still at a speculative level, due to little experience of trying it. While the present research's participants have faced a relatively small number of negative responses to musical activities, it is expected that the more frequent and visible practices will take more attention in future.

The biggest problem is that almost everything associated with musical interventions in RE is reliant upon teachers, who often feel alone in the field. There is little support for, or encouragement of, RE teachers using music in their classes –and there is no support in terms of teaching materials, which are routinely lacking in relevance, and musical materials that are often not provided to teachers at all (Babacan, 2019). To illustrate this, if anyone is opposed to music in RE, it is often left to the class teacher to convince them. Similarly, all teachers *individually* must deal with finding proper teaching materials. Yet, surely organisational support for practical and theoretical matters should be provided by the Ministry, universities, and NGOs, for teachers seeking to use music in the RE class.

RE in the Turkish system also suffers from the time constraints, especially in the domain of Values Education (Chapter 2.3). In this situation, teachers may think that musical activities are more time-

consuming than traditional methods. This is partly understandable until students become familiar with the method. However, it must be remembered that musical activities are not intended to fill 40 minutes of class time. As indicated for assessment, some of the RE teachers may not be aware of the challenges associated with the implementation process for musical activities. Similarly, because of their general allegiance to traditional educational methods, some teachers may not sufficiently consider the feelings of students as a factor in learning. Therefore, for many teachers, musical activities in RE, by which students' affective activation with the subject might be enhanced, are not among their accustomed methods.

Considering the compulsory status of RE (since 1982 in Turkey), if the state desires to make music an essential part of RE, there is always an easier way. If the state does not favour it, there is no way it will happen. Since there is as yet no certain policy decision on the matter, we still might see the current situation as a major opportunity. However, beyond the state's role and responsibilities, it seems RE professionals are themselves not ready to take the initiative. For instance, there is, as we have seen, very little suitable material. *This should have been provided by the Ministry (MoNE)*. Similarly, potentially useful YouTube links are not working (or are banned) in state schools. Once again, *the Ministry should have established a new accessible web resource*.

While Teacher Education should also introduce music as a teaching method to candidate RE teachers, the present RE teachers, of course, may not directly influence this education in ways that encourage using music in RE. Thus in-service teacher training courses must be conducted by MoNE for the current generation of RE teachers (Apaydın, 2018). However, for material production and dissemination, a state-level actor may not be necessary.

Despite the potential revealed by this research, a modest number of initiatives is far from reaching national-level adoption and support. To reach national standards, RE textbooks must provide musical ma-

terials which might be delivered to the teachers at their convenience (Babacan, 2019). Brown (1991) recommends a list of various Western musical excerpts to create a specific atmosphere for the great unconditionals of life –such as Birth, Death and sadness, Joy and celebration, Majesty, the Beauty of the natural world, Power, and Reflectiveness. While Brown does not explain how the excerpts create the respective atmospheres, a similar alignment between a list of Turkish music and their intended atmospheres ought to be offered to teachers for preparing musical material in class. This of course needs further research to explore the cognitive, affective, and behavioural connections between musical extracts and RE subjects –as this enquiry attempts in Chapter 5 –to determine the emotional arousal of pre-selected musical stimuli. However, due to the multidisciplinary nature of the problem, there is an urgent need for dialogue between RE professionals and researchers from various fields such as education, music, psychology, theology, etc. (Babacan, 2019; Day and Harris, 2016).

4.2. Future Directions

Findings of the qualitative and the quantitative chapters will be compared in the next chapter for assessing the implementation possibilities for RE practices. Hence, in this section, future directions are mostly limited to theoretical research-based aspects.

For a teacher, if music is the answer to the question of *'how can I explain better what I want to teach?'*, it ought to be utilized as an educational tool. However, especially for the İmam-Hatip school students in this study, musical training is a requirement of vocational education to improve the quality of their service in religious duties. Moreover, as this is not a well-studied topic for class interventions, it seems that schools, especially İmam-Hatip schools with the musically enhanced curriculum, will need to collaborate with external experts in the pursuit of more effective musical activities in RE.

Given that RE in Turkey is generally not successful in incorporating emotions into educational processes, the emotional enrichment with musical activities may well promote improved attitudes of stu-

dents to the subject, the teacher, and the information presented in the class. As this emotional side of the education process may connect the knowledge to behaviour, then it is highly possible to expect the relevant positive behavioural and dispositional improvements reported elsewhere in the literature. This effect might be extended to values and attitudes. However, it should not be assumed that values-enrichment will take place through music listening as prompt for an emotional response. Behaviours, thoughts, and the words of listeners are affected by their music preferences, and the music of RE class *may* help students to evaluate and change their worldviews in accordance with the underpinning values of the school. However, this perspective needs further exploration to understand the relationship between emotions and values, attitudes, and decision-making among young people in schools (Hasegawa, 2016; Seidel and Prinz, 2013).

In parallel with emotional enhancement for values, RE with musical interventions *may* play a role in shaping morality and behaviour-change by promoting a culture, but this does not happen in a moment. Effects might be seen over an extended period, prompted by emotional responses to musical listening crafted with expertise and shared insight. Thus, there is a possibility of widening a school's moral and spiritual territory with musical activities, including beyond the classroom walls. Presenting music out of the school buildings, and through a proper musical programme (at a mosque, concert hall, or competition), is not only desirable for the talented students (who actively join) but also beneficial for the audience and the perception of the school.

In the current situation, state-provided teaching materials such as textbooks and teacher guides do not include musical materials. Since EBA shares mostly student-teacher works, the visual and artistic standards are not of the highest quality. For YouTube, access is banned in school networks. Even if a video/song is on YouTube, teachers must find a copy from another source. In addition, RE-specific webpages mostly share similar materials. The ideal method would surely be to supply

high quality materials centrally, either online or with books, just as the curriculum does, for instance, for e.g., the study of literature. While EBA is currently not effective for material sharing, it might be improved in support of maintaining shared standards across all schools. As a result, teachers' workload and responsibilities to find musical materials would be eased. In this perspective, one of the problems to be considered is the copyright issues if teachers use recorded/commercial music in RE.

Although the emotional enhancement of RE with the musical interventions was not limited to the academic emotions, RE professionals are clearly not assured in their understanding and assessment of these emotions. The achievement emotions questionnaire (Pekrun, 2016) and academic achievements with music (Babacan, 2019) have been well documented. While the present research did not discuss the assessment of emotions in the context of RE, due to its methodology and data parameters, there is a need for a meaningful assessment dimension to the musical emotions concept and practice highlighted in this study (Linnenbrink-Garcia, et al., 2016).

Like Brown's list of excerpts to create specific atmospheres (1991), Yorulmaz presents a movie-list that can be used in RE (2015: 268). This list indicates which movie might be used for which theme and teaching unit, for the secondary level RE curriculum. Hence for Brown's list of excerpts (or any other list to be prepared), we may pose an important question: if a song/hymn successfully induces an atmosphere (or an emotion) such as Power or Joy and celebration, what is its value for RE curriculum and RE practices? Or how does this arousal actually support RE? In this research, I did not present such a list to be used in RE but shared a few successful examples of musical activities. For successful musical interventions, teachers require much more than using a suggestion list of musical extracts.

To make musical activities of the RE class a supporter of the educational process (not a free-time activity), teachers must thoroughly structure their class, beyond the material selection process. It should

not be accidental, for example, the time slot when music is used. In addition, the teacher should be prepared beforehand for questions like:

How will students engage with the activity; by listening, singing, thinking, analysing, or something else?

Which feature of the music will be highlighted –lyrics, composer, singer, or something else?

What kinds of background explanations may students need for the excerpt?

Will the activity continue with a Q&A session, for instance, about the message of the hymn/chant?

What is the ultimate purpose of the activity –emotional arousal, communication of knowledge, self-exploration, or something else?

These kinds of questions indicate how teachers can diversify their teaching methods with musical activities. In addition, students might favour a specific aspect of the musical activity, according to their interest. The teacher, for instance, can allow students to work through their interest in association with the musical material. Then the teacher must observe the students' reaction during the activity, to change and revise the activity for later sessions, if necessary. Additionally, at last, there will be also unplanned musical activities, especially upon students' requests. However, it might be expected to happen after students become familiar with the method.

To defend their position against an objection, RE teachers must always be embedded in the curriculum. The underpinning reason for using musical material must be to support educational outcomes. Otherwise, objections from an educational vantage point might be valid for RE practitioners. Moreover, given the inherent values associated with the excerpts, a musical piece might mean something different from the teacher's intention. If a song is appropriated to a political party or ideology, for example, or if it prompts unwanted behaviours, RE teachers should avoid using this kind of excerpt, even if it was not composed for that purpose. Similarly, RE teachers must be prepared

for adverse emotional responses, since listeners' emotional reactions might be different from the teacher's expectations, owing to the idiosyncratic nature of human responses to musical listening (Robinson and Hatten, 2012; Vuoskoski and Eerola, 2011). Moreover, in case of such an adverse reaction, teachers (and other school services) must be afforded the strategies for dealing with it.

In the current system, teachers do not have to use music in their teaching, because it is a personal decision. In this context, it must be underlined again that RE teachers are in general not specially trained to use music in their classes, neither in teacher education at university nor in in-service training. Regarding the groups of *Experienced*, *Hesitant*, and *Dissident* teachers, teachers' expectations and capabilities deserve special attention. Teacher groups (*The Experienced, the Hesitant, and the Dissident*) must be evaluated in the context of their unique conditions. For the *Experienced* teachers, the standard of their practices must be improved. 'Age' itself, for instance, is not a problem for this group as long as teachers have the willingness and awareness to use music motivated by its educational benefits. Teacher experience and skills might be the initial target set for novice groups. Next, the *Hesitant* teachers must be trained to acquire the relevant methods. Sharing successful activities of other teachers (the *Experienced*) and having academic support may motivate this group to use music in their teaching practice. After that, the *Dissident* teachers must be afforded opportunities to see this kind of pedagogy in practice and observe the practicality and benefits of using music in RE; while accepting the possibility that they may remain dissident.

As I underlined above, RE teachers tend to be isolated in the field; hence it is not fair to expect that they will sort everything out alone. There is a need for collaboration between education professionals, academicians, parents, and educational organisations, even though its context is as yet quite vague. As a kind of collaboration between RE teachers, there is a need to share the successful (and unsuccessful) ex-

amples of musical activities. If this experience reaches more teachers, it will encourage teachers, especially the *hesitant* ones, to use music in RE. While EBA currently provides a database for material sharing, there is a need for much more comprehensive connections between teachers. Therefore, in-service training courses might be designed consultatively for teachers by MoNE. Similarly, with the support of private institutions and NGOs, this kind of connections might be strengthened.

4.3. Limitations of the Study: Interviews

What is observed through the interviews is that participants' views of the current situation and possible improvements were saturated by their personal experience and roles. For a teacher, for example, one of the main problems regarding the inclusion of musical activities in the RE class is the lack of proper teaching materials supplied by the government. For a School Principal, the problem is financial and administrative relations between schools and the Ministry of National Education. Similarly, problems and opportunities related to teacher education and academic support for teachers are characteristic for academicians. Therefore, since each interviewee reflects the reality of their own unique experience, it required a huge effort to integrate these different perspectives to achieve a broader understanding.

One of the assumptions of the study was that the participants are competent for their field. While it was asked, for example, how musical activities can support values education approaches, it must be remembered how variable RE teachers' knowledgeable of these approaches can be. If teachers do not comprehend the contrast between inductive and deductive approaches, as indicated by Kaymakcan and Meydan (2011), their responses might be superficial when thinking about using music in accordance with values education philosophies.

Furthermore, the present chapter prioritises the view of teachers. The normative, assumed definition of the student, for instance, was constructed from the perspective of the teachers (or RE professionals).

Hence, *students'* expectations might well differ from this. Similarly, for this research, parents' considerations were for the most part ignored, as the participant group does not contain parents. Musical activities were also evaluated from the viewpoint of teachers, especially for planning and application. However, the education process is limited neither to these steps nor only to teachers. A study might be also conducted, for instance, for assessment issues or for the financial constraints on such interventions and from the viewpoint of other stakeholders, like parents.

From a broader perspective, the general objective of this research is to discuss using music for the enhancement of RE, not for the subject of Music alone. Therefore, the implications for Music classes of such an approach were also omitted here. So the transferability of this research to other school subjects would require further investigation.

Sharing 'good examples' of musical activities between teachers were stressed several times in this research. However, during the data collection and analysis, the concept of 'good example' has never reached consensus. There is no agreement among the participants on the description or the standards for the term.

It must be also noted that as the interviews were conducted in Turkish, some details might have been undermined during the translation process.

5. Conclusion

This chapter assessed the place of music in the field of RE, from the perspective of RE professionals. For this goal, the research employed semi-structured interviews within the informed grounded theory research strategy (Thornberg, 2012). Contrary to the previous quantitative chapter, there was no leading expectation to the analysis of the current chapter, until the arguments revealed when the data was processed for the analysis. Thus, the principal research question of the chapter was broad: 'how do RE professionals evaluate the place of music in RE?'. On the basis of the initial research question, the research participants were

those who have professionally engaged with RE (e.g., teacher, academician, or policymaker) and, at least, have observations to make on using music for RE (e.g., classroom-experience, publication, or thoughts).

Regarding the nature of the grounded theory research, an academic conversation between the researcher and the interviewees established a basis to investigate the participants' experience of the present conditions on using music for RE, including possible future improvements. In this perspective, the chapter was constructed through a comparison between the present and future. The interview questions (and in turn follow-up questions) evolved according to the methodological strands (such as constant comparison, theoretical sampling, and theoretical saturation) and the unique perspectives of the interviewees. Hence, the data and reality were re-constructed by means of research participants' responses to the questions. Subsequently, data collection and analysis were concurrently completed over almost two years.

This chapter reports its findings in four areas. It first describes the standards for musical material. This includes (i) the strategies for legitimization (religious, cultural, psychological, pragmatic, academic etc.) and disapproval of music (religious, cultural, self-approving, educational) in RE, (ii) reasoning for using music in RE (in the affective domain for emotional enhancement of classroom, in the cognitive domain for teaching and learning with communication of knowledge, and in the hybrid domain for behavioural improvements), and (iii) features of proper musical material (qualities, sources, and finding them).

Second, the chapter expresses the characteristics of the interview subjects, students, and the place of musical activities in RE. This is extended to (i) school/classroom (physical conditions and the mentality of the school), (ii) role and responsibility of RE teachers (the experienced, hesitant, and dissident teacher groups and their role in finding material, planning an activity, and conducting a class), and (iii) students (with their artistic, cognitive, and emotive roles) in line with the musical activities of RE.

After that, the chapter illustrates the theoretical and practical considerations for musical interventions in RE. It regards (i) the manifest and latent levels of musical activities, and (ii) the values education approaches. In this view, the manifest level of the activities is extended from the basic activities such as listening and singing, to talent-oriented activities like composing and choir works. The latent level of the activities implies that these activities shall be conducted for emotional responses, cognitive activation, or behaviour promoting. Hence, in terms of the values education approaches, the musical activities might be emotion-based for inductive approaches, knowledge-based for deductive approaches, and alternately for mixed approaches.

Last, the chapter presents (i) the problems, (ii) the expectations for the reactions upon musical activities of RE, and (iii) future possibilities. For dealing with problems and future improvements, this chapter proposes a collaboration between the partners of the education realm. While teachers do not have convenient support for the musical activities in RE in the current situation; academic, organisational, art-based, and local cooperation may boost the outcomes of the musical interventions.

The chapter discusses the findings from three perspectives. First, it assesses the outlooks of the research participants, which based on their current experience of the legitimation strategies and with the emotive, cognitive, and psycho-motor qualities attributed to music. Second, it evaluates the methodological and technical concerns. It is argued that how the participants' limited experience can enlighten the way for wider musical interventions of RE. Last, accordingly, it highlights the relationship between the objectives and the educational outcomes in the context of classroom activities, while bearing in the mind the problems teachers faced. Moreover, it addresses the limitations and future directions of the research.

In the next chapter, I will integrate the qualitative findings of the present chapter and the quantitative findings of the previous chapter, in connection with the existing literature on music and RE, curriculum, and policy documents.

Chapter VII
Issues and Questions in Educational Practice and
Concluding Analysis

1. Introduction

The principal question of the present research was: 'How should music, with its capacity to induce emotions and to facilitate the communication of knowledge, be included in the teaching of RE?'. To answer this question, Chapter 5 was dedicated to exploring: 'How do listeners (students) emotionally respond to Turkish music when they listen to it?'; and Chapter 6 investigated: 'How do RE professionals evaluate the place of music in RE?'. Now, Chapter 7 merges both perspectives in line with the literature, RE policies and curriculum, in order to address the principal research question. Consequently, the aim of the chapter is to present guidance for conducting musical activities for RE classes.

For addressing the research questions, this chapter interprets the findings by means of the circumstantial dispositions: personal/intrinsic, cultural/religious, and situational/responsive. In this distinction, cultural/religious dispositions represent the *general* comprehensions gained by individuals in a lengthy period due to living in a society. On the other hand, situational/responsive dispositions are unique to the conditions at a particular time. Hence, situational/responsive factors are more appropriate for manipulation (or convenient for being changed easily) than cultural/religious components. Then, the personal/intrinsic elements address the individual characteristics of the participants in the setting of RE's musical activities.

Thus, this chapter first *presents* and *interprets* the intersections of the answers to the research questions and then *presents*, in line with the findings, a pedagogical model of RE which includes aspects of music as a teaching and learning strategy. The chapter then critically *evaluates* the methodology used in this research more generically. Following this, implications for RE policy and practice are outlined for different educational stakeholders. Finally, the summary of the research, the limitations, and the potential for future studies are noted.

2. Addressing the Research Questions

2.1. Q1– Students’ Perspectives with GEMS

2.1.1. *Personal/Intrinsic Dispositions*

Music itself has two functions in RE according to this study. One is to enable the communication of knowledge (see Chapter 6), and another is to activate emotions (see Chapter 5). With the perspective of musical emotion induction, students in the RE classroom are encouraged by music to feel and perceive particular emotions. In other words, the assumption is that students will emotionally respond to the stimuli in a certain way when they listen to music in the classroom. Until that response is attained, music’s influence on the affective enhancement of RE cannot be demonstrated. Nonetheless, following the emotional response to music, the integration of emotions into RE practices, in line with meaning-making processes, is a matter of discussion. In this respect, (as it was for the present research) the students’ personal characteristics must be considered for classroom practices (Vuoskoski and Eerola, 2011).

As it was stated as a limitation of the self-report methods for assessing emotional responses to music (Zentner and Eerola, 2010), both students’ language literacy and their awareness of their own emotions might not be at the same level. Similarly, retrospective ratings and real-time ratings for emotion induction requires different levels of cogni-

tive ability in students. Hence, even though self-reports provide an approximation for the emotional response to a musical stimulus (Zentner and Eerola, 2010), there might be always outliers. However, being/having an outlier with an emotional response is not wrong, because, here, outlier simply means being different. Accordingly, the individual evaluation of the emotional responses in specific conditions might be relevant for proper assessment and inferences without undermining the validity and generalizability of the results presented here.

Students are not alone in the RE classroom during musical activities. Moreover, apart from the musical activity, they are not active participants in the planning and assessment of lessons, unlike teachers who set out to select musical material that can induce the intended emotions in the pupils. Chapter 5 of the present research, for instance, illustrated some ways to *predict* the induced emotions according to the makam-emotion attributions.

However, for *perceived* emotions, teachers might be more assured as long as they consider the students' current level of knowledge and background, since observing emotions (perceiving) is relatively more objective than experiencing emotions (feeling). This is because both *felt* and *perceived* emotions are an affective phenomenon, but they require distinct cognitive skills (Gabrielsson, 2001-02). Furthermore, since music with expressive qualities is knowledge-based, the perceived emotions are relatively easier to connect to the classroom subjects. This is similar for conveying knowledge via music. Hence, students can associate the emotions and knowledge, expressed by music, to the educational outcomes.

Furthermore, the educational environment consists of multiple agencies such as other education staff and parents who might be involved in the musical interventions, not just the teacher and students. Even musicians might be counted among these partners in some cases. Since all the person-related perspectives of music-emotion studies are represented in the musical activities of RE, i.e., teacher as the researcher, students as the listeners, musician, and others as the audience, the

interactions between the people of the research environment are also valid for classroom activities.

As for the interactions of students, parents' expectations and reactions to RE with musical activities must be carefully observed within the activities. Especially when students actively participate in musical activities (as musicians), they may expect to get the acclaim of their friends, teachers, and parents. This might cause both performance anxiety and dedication to work (Hallam, 2010; Woody and McPherson, 2010). For this reason, the 'artistic personality' of students may last after classroom activities. Consequently, interactions are important which extend the efficiency of RE beyond the classroom walls.

2.1.2. Cultural/Religious Dispositions

Similar to individual dispositions to music, cultural/social conditions can affect the way of hearing music and the consequent responses. In this respect, the educational culture of the RE classroom might be a significant factor in the pupils' meaning-making processes, in line with the experience of music. Since culture does not only provide the social construction and presentation of emotions (Schultz, 2016) but also indicates the norms for music listening, this partly shapes how listeners will receive and value music in terms of its origin and cultural ties. Additionally, music-related attitudes such as listening, disclosure of emotional response, identity construction, etc., are highly affected by particular cultural codes (Becker, 2010). Listening to a particular musical form, singer, or a song, for instance, might be a representation by which the listener sees him/herself –or would like to be seen (Rentfrow and McDonald, 2010).

Students' knowledge-based response to the music is not limited to musical meaning but might be also guided by other factors. For the listeners who are informed by religious belief or cultural attachment, music is a subject of evaluation. Regarding the *halal-haram* dichotomy, for instance, it is evident that music is not the driving force of the evaluation, but the religious thought is. A listener's knowledge about the

music (or musical excerpt) itself can direct his/her response. Thus, the excerpt selection process must always consider the students' cultural background. So, this indicates that the cultural accompaniment of music might work in favour of wider educational practices.

Educational methods work to the extent that teachers successfully utilise them (as reported by interviewee- *Moses*). Music will not be a successful component of learning in RE until teachers integrate musical activities comprehensively into classrooms. A similar perspective is relevant to students. Unless students become familiar with the musical activities, they may miss the objective of the lesson. Just as being a 'qualified listener' is required for experimental music-emotion studies (Davies, 2010), students must be 'qualified learners' for musical activities. Hence, improving the quality of musical interventions in RE is far beyond a single teacher's effort.

2.1.3. Situational/Responsive Dispositions

Since the environment where listening is situated can influence emotional response in several ways (Robinson and Hatten, 2012; Gabrielsson, 2001-02), classroom conditions should not be ignored for emotional responses to music in RE. It is clear that, for the experiments, the settings are one of the determinants for the emotional response (Hargreaves and North, 2010). It must be remembered that students' motivations towards listening, valuing, and responding need to be adapted according to their conditions. Hence, conducting a musical activity in a classroom or a school hall has distinct features for students in comparison to the same under laboratory conditions. This is evident, at least, in displaying the emotional responses and motor expressions (Egermann, et al., 2011).

A database of musical excerpts with expected emotional and cognitive responses would generate a set of wider standards for activities. Yet, despite the expected emotional stimulation, ideal conditions might not always be attainable due to the normal restrictions of time and classroom practice. The initial mood of the students, for instance,

might be an obstacle for the intended emotion induction, i.e., trying to stimulate joy in a sad environment. Teachers must be aware of the requirements that the classroom conditions impose. Then, the teacher can change the instructions of the musical activities for classroom conditions. Situational dispositions are relatively more open for intervention than cultural dispositions. This is to say that the emotional response to music listening might be directed by being adjusted to the particular settings of the musical activities.

As values education approaches (inductive and deductive) demand genuine teacher and student engagement (Kaymakcan and Meydan, 2011; Leming, 2010), there will be different conditions for the musical activities in terms of the conceptual comprehension of the students. Teachers are part of the context, in the way that they facilitate the learning process. Without their guidance, it is not feasible to expect the students to reach the objective of the activity. However, this does not mean students will always follow the teacher's intention, due to their personal motivations. Consequently, situational, and in turn responsive, dispositions are as many as the individuals present in the activity environment.

While, in the experimental settings, the researcher is responsible for arranging the conditions, students are much more spontaneous in their everyday environments at school. Moreover, there are dissimilar expectations for students when listening to music quietly or actively participating in musical activity. These instances are directly linked to the interactions between music, situation, and students and teachers; therefore, they must take part in the measurement and assessment of emotions.

The listening excerpts of musical activities must actually be seen as part of the teaching material of RE. There must be alignment, at least principally, between the musical extracts and the teaching subject. Musical activities in RE are always situated in a disciplinary context. In other words, the excerpt selection process is directed to finding the musical stimuli that help to reach the educational outcomes of RE, not simply entertain pupils. Even if there is a *musical* benefit of musical activities

in RE (and intuitively there might be), it is omitted from the current research. Hence, 'educational good' in the context of RE is the leading concern for the stimuli. Yet, of course there are collaboration opportunities among teachers and exciting potential for interdisciplinary learning.

2.2. Q2-RE Professionals' Views through the Interviews

2.2.1. Personal/Intrinsic Dispositions

In the view of RE professionals, there is a robust relationship between students' feelings about musical activities and teachers' expectations for students' emotional responses. Students have active and passive affective engagements during musical activities. The active role requires students to participate in the musical activities in order to explore their own emotional awareness. The assumption is to enable students to experience emotions. However, for the passive role, to induce the intended emotional responses, students are approached by teachers. There is a target-list of emotions through the musical activities, therefore, teachers are included in this emotional matrix, if only at the level of assessing students' emotional evaluations. The ground for this is because teachers can plan an activity (at the manifest level) for emotional activation (as one of the latent level activations) with strong confidence from the data here and elsewhere that the musical choices are strongly correlated with widespread and consistent emotional responses of direct relevance to the experience and teaching RE. This recalls the difference between inductive and deductive values education approaches, and the discernible responsibilities of teachers and students in those approaches (Herman, 2005; Veugelers, 2000).

For knowledge-based cognitive engagement, teachers' responsibilities are more significant in comparison to students' roles in the affective stimulation. This is because the cognitive attachments of the musical excerpts (of the musical activities) are relatively more explicit and identifiable, than the emotional qualities. Moreover, compared to the emotional response, the knowledge that is supposed to be expressed

(or communicated) by music is more objective and, hence, discoverable by the students, then it might easily be part of meaning-making process. Therefore, teachers might be more *confident* in selecting a musical excerpt due to its knowledge-based relation to a class subject.

However, there is a need for a balance in teachers' expectations of students' background knowledge. Regarding the cognitive engagement, students are expected to participate in the musical activities with their cognitive faculties, while all the activities of the manifest level might be conducted for cognitive responses (among other latent level activations). Students' contributions, for instance, in thinking, discussing, or analysing phases of the activities are aimed to support the knowledge-based outcomes of the class.

In an inclusive environment, everyone should be involved in the activities, because the aim of the musical activities is to enhance the educational outcomes of RE with respect to feeling and/or cognition. However, students' artistic expression (such as playing, singing, etc.) and roles (like interested, participant, disinterested, etc.) during the manifest level of musical activities facilitate two other dimensions of active engagement. There must be conformity between students' abilities and the features of musical extract for more effective activities and the expected educational outcomes. Thus, students' perception, for instance, of the musician, genre, or the instruments of the music, must be attentively observed so that the activity might be revised and improved in the future.

2.2.2. Cultural/Religious Dispositions

I highlighted in relation to students that the cultural codes of the classroom where the musical activity is conducted might have an extra impact on the emotional response, which might in turn be either in line with or against the musical excerpt's emotional qualities. Moreover, the cultural dispositions towards music might be varied even in society. Conditional music that suits a particular occasion, for instance, can evoke the intended emotions for those who are already awa-

re of this relationship. Celebrating *Mawlid* (celebration of the Prophet Muhammad's birthday, for example, with songs, Qur'anic recitations, and traditional musical forms) provides an opportunity to explore the meanings of 'authentic Islam' (Berglund, 2014); but only for those who already know the context. While these kinds of evaluations are evident as social group norms, it is not simple to manipulate these dispositions in a short period of classroom activity in order to control the emotional responses to musical listening. Hence, the teacher's effort to improve musical interventions will be successful to the extent that s/he addresses deeply the cultural/religious dispositions of the pupils.

There might be both positive and negative value attachments to the musical excerpts, beyond the emotional and cognitive qualities of the stimuli. The cases of legitimation and disapproval of music exemplify this matter. If music is within the approved limits of halal, the listener (assuming s/he is Muslim) can listen to it, for instance, without feeling guilty. Contrarily, supposedly illegitimate music in Islam (haram) might produce negative reactions in the same person (Harris, 2002). This kind of classification of favourable and unfavourable music is, of course, not only typical of religious thought. Just as it was in the case of conditional music, the listener analyses the context of music in terms of his/her own acceptability norms. This evaluation is, of course, not a natural part of the music itself nor the intention of musician/composer/singer, but produced by an informed listener. Hence, the suitability or unsuitability of a particular musical excerpt for the RE class is conditional. Approaching music in this way is beyond personal musical preferences, taking us to the realm of preconceptions and cultural/religious dispositions. Consequently, there might be resistance against music (or certain kinds of music/musical genres) in the RE classroom, until listeners (students and others in the field) reach a different level of comprehension facilitated by the teacher.

While, in this chapter, the cultural/religious dispositions might have been depicted negatively for RE, it does not always have to be like this. Indeed, cultural dispositions towards music may have a long-

term positive effect on values and behaviour, as far as the musical activities of RE activate cognitive and affective responses during lessons. In this respect, it should be stated that 'popular music' does not often mean 'RE-relevant music'. RE professionals reported that teachers and schools sometimes use music which might not always be aligned with the principles of the RE curriculum and pedagogy. However, the reasons for using those musical extracts were their popularity with pupils (as reported by interviewees- *Mary, Noah, and John*). Nonetheless, there is no ground, either, to be entirely against popular music. Regardless of its popularity, RE should employ music that promotes educationally meaningful outcomes and objectives. Furthermore, it might be expected that the musical activities of RE will contribute to students' perception of musical taste over a longer period (Elbih, 2015). For this reason, there is a mutual influence between cultural dispositions to music and musical stimuli preferences of RE.

2.2.3. Situational/Responsive Dispositions

Students' roles during musical activities of RE, such as talented, interested-disinterested, participant, etc., indicate individually-specific dispositions. Students' response to music might be affected by their interest, expectations, and evaluations. Just as conditional music suits a particular occasion, there might be a more relevant musical excerpt (genre, instrument, or musician) for a particular student or a group. Hence, teachers should know their students' priorities and preferences. Otherwise, using religious music, for instance, with the wrong audience or in the wrong context cannot stimulate the relevant meaning-making processes. This may remind us of the phrase 'the right music, for the right person, in the right conditions' (Gabrielsson, 2010: 569), for the importance of the situational factors and the way of students' appraisal of the context.

For students' knowledge-based cognitive engagement, teachers can alter the situational determinants for activating cognition. Teachers are more confident about situational factors in comparison to cul-

tural/religious dispositions. In other words, a teacher can more easily adjust the classroom conditions, than deal with a cultural bias against music. Especially during the activity-based learning sessions, teachers can observe the variations promoted by a different type of manifest level activities. A distinct set of conditions, for instance, during listening, watching (video clips), discussing the lyrics, or researching about the composer/singer/songwriter, demands disparate cognitive skills of students. From another perspective, musical activities of/in RE are apposite in speaking to different minds' learning habits in the classroom (Allen, et al., 2014). Students could have a favourite activity that suits their expectations among musical interventions. In this way, RE with musical activities can enhance students' motivation for learning (Babacan, 2019). Therefore, RE with musical interventions does not only facilitate the communication of knowledge, but also train the students to discover this experience at present and to use it in the future.

The very simple objective of RE with the musical interventions is to enhance action, guided with feeling and knowing. Therefore, musical effects in the classroom environment such as on emotions (with calming and entertaining), and on cognition (with promoting memory and remembering) are expected to be in direct relation to behaviour. While this objective extends beyond the school settings in a longer period, it should be also obtained and cultivated within classroom practice. In other words, future improvements should start within the 'present' moment. Promoting students' socialising with musical activities, for instance, happens during the activities, especially group tasks like singing together or choir works. These kinds of experiences, of course, need to be transferred to the out of school context. *Isaac* points this view out:

During these musical activities, students may have the opportunity to get to know and understand each other and their teachers better. For example, I do a choir study with 60 students. In order to work with these students, they need to learn how to get on stage, how to behave on stage. Even in the classroom, sometimes it can be very difficult to control 20-25 students.

But, thanks to the choir and stage work, the children have taken this discipline. In this respect, we may think that music helps children being together and organised. If everyone were going to act on their own, there would be a disorder in these studies. However, in a choir of 50-60 people, a study in which everyone starts and finishes singing at the same time reinforces the children's ability to act disciplined.

What is implicit in his view is that, with the musical activities of RE, students can develop a set of behaviours that might be called 'performer on the stage' attitudes. As these attitudes endure after the time of the musical activity, it might be expected that those students are being trained in behaviours which are not only relevant for the RE class. Consequently, students will develop a mechanism to act according to the requirements of the apparent conditions as well as focused on the disciplinary purposes of their action.

2.3. The Principal Question: A Pedagogical Model

Based on the quantitative and qualitative analysis, a pedagogical model of RE which incorporates musical interventions consists of three major components: (i) participants in the learning/teaching environment (teacher and students), (ii) their perspective and experience on the musical material and the learning/teaching environment, and (iii) outcomes of the classroom experience within the situation and the social context. Figure 27 presents this model.

This figure presents the foundations for musical interventions for the RE classroom with four agents and eight interactions highlighted. The central position of the teacher is not only just visual in the figure. This is because the teacher is the independent factor in the teaching and learning environment to the extent that s/he can coordinate other agents so that better learning outcomes can be attainable. However, the relationships between the dependent agents (student, music, and classroom) are reciprocal, and the teacher's relation with these is one-way. These agents are dependent because they are affected by other agents, owing to the interactions among music, listener, environment, and teacher.

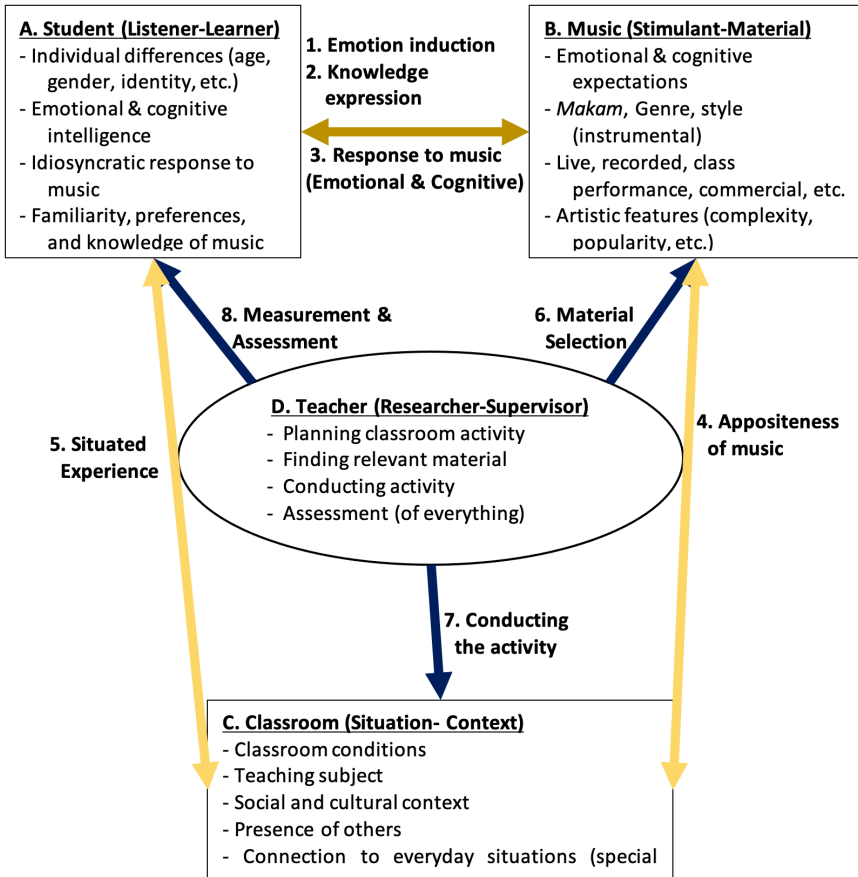


Figure 27: The Pedagogical Model of RE with Musical Interventions

2.3.1. Dependent Agents

Student: For the purpose of the current research, students/listeners must be in the RE classroom to respond to musical activity. The response requires students' *active emotional and cognitive engagement* with the musical material. For this reason, individual characteristics that influence feeling and cognition must be considered during the activity. Although musical talent is not a core requirement for RE, some musical activities, such as choral works, demand basic skills. The students have two

sets of differentiating factors. One is attached to the individual –such as age, gender, identity, intelligence (emotional and cognitive), and earlier memories. The other is related to music –including knowledge, preferences, and training of the student. These are interrelated both strictly to each other and to the response to the musical listening.

As documented in Chapter 5 (*quantitative investigations with GEMS*) and indicated in Chapter 3 (*literature review*), individuals have differentiated responses to music listening according to their personalities and backgrounds. Moreover, the music-related perspectives of the students can affect their responses. Musical preferences, familiarity with the musical excerpt, and musical training might together constitute an underlying mechanism behind the significant cognitive and emotional responses for certain students. This is distinct from passive responding and results in high engagement (Hargreaves and North, 2010). Hence, students' awareness of their own identity might be the major driver for their responses.

Music: The music itself might be analysed from different perspectives, but, for the purpose of the present research, the educational affordances and possibilities for RE were the chief concern. In order to engage the students in a complex thinking-feeling process that can be directed towards non-musical educational goals (Thaut and Wheeler, 2010), the focus in the present research is not principally on the music itself. Rather, in the context of RE, music is viewed as a means to another end: namely educational outcomes rooted in the purposes of RE (North and Hargreaves, 2010). Subsequently, there are fundamental factors that are subject to further empirical investigation, to identify the stimuli that are relevant for these educational outcomes.

First, the musical excerpt is employed in the classroom with its emotional and cognitive qualities so that feeling and cognition will be adequately included in the teaching and learning process. The musical excerpt that enhances the communication of knowledge, inducing emotions (*felt*), and expressing emotions (*perceived*) is the relevant ma-

material for the musical activities. However, as demonstrated in Chapters 5 and 6, without these qualities, for teachers, musical activities would be an attempt at trial-and-error until they establish the expectations for the stimuli. Consequently, even though musical extracts of the RE activities are not selected for Music Education, or strictly musical characteristics (such as *makam*, genre, style (instrumental or vocal), performance context (live or recorded), and artistic features (complexity and popularity), but are selected for what is significant in meeting the agreed and identified emotional and cognitive requirements.

Classroom: The classroom is not only a place between the walls: it is where the musical activities of RE are conducted. Each class is designed to attain the educational outcomes of the curriculum. There is a purpose in the teaching subject for the students to reach at the end of the teaching and learning process through the musical activities. Hence, its context and conditions are more important than its physical dimensions, because the RE classroom which uses music is situated in this context. Having said that, the wider implications of classroom conditions are worthy of comment.

Classrooms may have their own unique conditions at a given time. Since the classroom is also the place students attend daily, the initial emotional situation in the classroom, for instance, might be both an enabler or an obstacle for the aim of the musical activity. Moreover, special day celebrations, like *Mawlid* or *Eid*, might be an opportunity to disseminate the knowledge, embedded in the musical extracts, in the classroom. Furthermore, due to the presence of others (friends and teacher), students' normal social interactions may both positively support peer-learning or negatively lead to inauthentic responses copied from others.

2.3.2. *Interactions between the Dependent Agents*

Emotion induction, Knowledge expression, and Emotional & cognitive response to music: Learning is commonly understood as the acquisition of knowledge and skills; however, it is also related to emotions, attitu-

des, and beliefs (Hallam, 2010), as discussed above, has been recognised now for many years in Educational Studies. For musical stimuli, there are emotional and cognitive expectations. These expectations are integral to the function of music in RE. The expectations are chiefly that when students listen to the musical stimuli (or participate in the musical activity), they will perceive emotions (knowledge-based) and emotionally respond to the music with *felt* emotions (feeling-based). Furthermore, the musical excerpt is subject to students' cognitive enquiry (cognition) and thereby music will facilitate the communication of knowledge.

The most crucial interaction central to learning is the students' response to music (number 3 in Figure-27). This response might be both emotional and cognitive. Musically evoked emotions usually involve synchronised responses at many different levels (Sloboda and Juslin, 2010), regarding the component-process model of emotion (Scherer, 2004). The educational value of these emotional experiences with music is not only a matter of making reflective judgments or acquiring knowledge expressed in music, but also of making affective appraisals and having attention focused on the events (Robinson, 2005). Hence, the emotional involvement with the classroom activities in RE founded on musical interventions is psychologically and morally important and with profound ethical implications for education (Nussbaum, 2001). In RE, music can facilitate the intellectual and emotional engagement of students with the subject (Fiedler and Beier, 2014; Skinner, et al., 2014). This might be called the 'dialogical engagement' which has a significantly different form from a passive or functional 'speaking and listening' structure (Stern, 2004).

The feeling and cognition components in relation to the musical activity in RE can be directed to learning and behaviour by the teacher and/or by the student him/herself. It is routinely suggested in Music Education theory that positive emotional experience in the classes will provide greater enthusiasm and motivation, which in turn heightens levels of engagement, enhances knowledge and skills, and promotes the attainment of higher levels of expertise (Hallam, 2010: 808). With the em-

phasis on emotional elements and self-expression, teachers also accrue a benefit, because it is, of course, easier to teach well-motivated students (Hallam, 2010). This is equally applicable for RE with contextualised musical activities. If students can/do adequately respond to emotional and cognitive qualities of the music, the musical activity should be part of RE to enhance students' feeling- and knowledge-based experiences.

Appositeness of music (to the context): The interactions between music and the features of the situation are of foremost importance in explaining the emotional and cognitive response to music. The classroom conditions of RE where music is heard can vary widely. The relationship between music and classroom conditions indicates that stimuli of certain genres, styles, and performance contexts might be seen as relevant or irrelevant according to varying features of particular listening conditions. There is not an automatic musical fit for RE, but there can be a situational appropriateness.

In considering an example, the intended emotion induction must be relevant for the teaching subject. For instance, while designing a class for love/compassion related values in RE, the teacher must consider what kind of music might be helpful for students to experience those emotions. If sadness, for instance, is not a required emotion to stimulate in that class, there is no need to use music intended to make students sad. However, the music that induces negative emotions might be appropriate in another relevant context. Similarly, regarding the communication of knowledge through music, when world religions, for example, are taught in RE, musical excerpts belonging to particular belief systems might be relevant, but only if used in the right context. Any impropriety in such situations is usually neither because of music nor the teaching subject in isolation, but most often attributable to failings in the reciprocal relationship between these factors.

If this relationship is not taken into account appropriately, then students' response to music will not be rich enough to be connected

to a teaching subject. In such a case, music might be only a free-time activity in the RE class, a soundtrack, because it does not become a part of the learning process. Of course, students can have fun or relax with the musical activities in RE. However, even these feelings must be at the service of the learning environment –if the teacher plans, for instance, to introduce variations to his/her class context with the help of those emotions.

Situated experience (of the students): As shown in Figure 27, listeners/students have two kinds of reciprocal relationships: namely, the level of engagement with music and the extent to which they engage with the listening environment. To enhance meaning-making processes in the RE classroom with musical interventions, the relationship between music and students must be considered within the social-cultural context.

Students are in a position of ‘recurrent or ongoing evaluation’ in relation to their preferences and tastes for the musical stimuli –and, in turn, for their responses to music listening in the RE classroom. They may have immediate, short-term responses to particular musical stimuli in particular conditions. These responses create patterns of musical preferences. Repeated multiple times and in proper conditions, these patterns can combine and accumulate to shape long-term musical preferences (Hargreaves and North, 2010). In this way even unfamiliar musical excerpts may in time find a niche among students’ preferences (Elbih, 2015).

Modern developments in digital technologies mean that students can listen to music in an almost infinitely wide range of settings beyond the classroom walls. Given the ubiquity of music listening (Spitzer, 2021; Hargreaves and North, 2010), students can bring their music listening habits with them, with the help of portable devices. This might cause resistance towards teacher-selected musical stimuli, but once students are familiarised with the music of RE, they can extend their enjoyment and consumption after class time.

So to support learning with musical interventions, the teacher needs students to *discover* the connection between the musical material and the classroom subject. Similarly, students may use music in specific classroom environments as a means of achieving their own goals (Carver and Scheier, 2014). Thus, there can be a co-existence of teacher and student goals. The value of responding to music in RE is defined in relation to the context/situation in which students and teacher are engaged with the activity.

2.3.3. *Independent Agent: Teacher*

Owing to his/her independent and authoritative position, the teacher can change and evaluate everything in the musical activity environment of RE. Yet this is not on his/her own whims, but to boost the benefits for the students. Self-evidently, the teacher has the authority to control, change, and adjust the parameters related to the students, the musical material/activity, and the environment. Nonetheless the teacher can be indirectly affected by the other dependent factors. Hence, in return, the teacher carries the main burden of responsibility.

If the musical activity offers a better way to teach a subject, there is a moral and professional responsibility for teachers to use that method. Although RE teachers can in general find institutional support and collaboration, unfortunately, they do not consistently find effective support for confidently developing musical interventions. Even deciding whether to use music in the first place must be contemplated carefully by the teachers. Hence in schools some tend to become a group of enthusiastic, 'early-adopter' individual leaders of the teaching and learning environment. This requires combining the expertise in the subject field, pedagogy, and, at least, a basic awareness of musical culture. However, it then needs wider infrastructure and support.

The teacher plans the musical activity of RE, including finding proper material, conducting the activity, and its measurement and assessment. In this plan, the teacher must comply with the targets set

by the curriculum, to which musical activities might be of assistance. Regarding values education initiatives, a manifest level activity is chosen for a latent level engagement by the teacher. However, in this process, the teacher must consider the students' characteristics and the features of the classroom subject. In other words, the connection between the subject, music, and students' roles and aptitudes may vary –for instance, in terms of emotional and cognitive capacities. The teacher establishes a partnership with the students for a better learning environment, where the students are not expected to discover alone the links between the musical activity and the subject, without the teacher's leadership and guidance.

2.3.4. Teacher's Interactions with the Dependent Agents

Material selection: RE teachers are expected to find relevant musical material and to plan their class for musical activities. In particular, the distinct classroom activities might be significant in determining specific musical features of the stimuli. If a discussion or Q&A session, for example, follows a listening session, then the stimuli must be appropriate to lead into that activity. Music with lyrics might be more relevant for those activities in comparison to instrumental music. Conversely, if the teacher aims to induce a particular emotion, then s/he must find relevant musical material that evokes the intended emotion. When a teacher proposes to conduct a class for a celebration of a special day or the teaching of a distinct religious viewpoint, then this particular religious context will heavily influence the musical selection process. Furthermore, students' capabilities in relation to the musical activities must be pre-ascertained for the material selection and, in turn, for conducting the activity. To illustrate this, if the material is too demanding in terms of students' skills, the teacher must consider the way s/he uses the stimuli in the classroom. To sum up, the relationship between the manifest level of the activities and the latent level activations dominates the material selection process.

Just as there is a base for this provided in Chapter 5 of the present research, the teacher needs to appeal to the existing literature and/or his/her own experience to judge confidently the emotional stimulation linked to the extracts. Similarly, for knowledge-based musical activities, teachers must find connections between the musical material, the curriculum, and students' extant knowledge. By finding the right material, teachers can adjust their activities according to all the other unique environmental factors. An established structure and procedure can support reliable pedagogical practices for many other musical activities.

Conducting the activity: In relation to the appositeness of music (to the context) and the situated experience (of students), teachers design and conduct their class within a set of conditions. This also brings together teacher's competencies in the subject field, in pedagogy, and in understanding of the musical material. Musical material in the hands of the teacher is always an educational asset for supporting teaching and learning— though the asset must be exploited informedly and assuredly. From a very concrete level, teachers will consider the technical equipment of the classroom for certain musical practices. As an example, watching a video clip needs distinct standards from listening activities. Likewise, having a 5-minute listening session in a class is much easier than conducting a choir after class time, both for teacher and students.

Assessing classroom conditions includes both students' personal characteristics and class group's social and cultural backgrounds. In most cases, the students' ages will also be a significant factor for the activity process, as well as the material selection, with regard especially to age-related developmental musical tastes and susceptibilities. Similarly, if the students do not know the meaning of the lyrics, then it may not be suitable to conduct a discussion session using a song. Moreover, emotion induction and cognitive responses to music may not be equally achievable together at an

activity at a particular time. Each student may also not attain or exhibit these qualities at the same level. Hence, the teacher should observe the students so that s/he can differentiate the activity according to their needs. Overall, the teacher must consider the benefits of *all* the manifest level activities for the realisation of educational objectives, because these activities will justify themselves as long as they are effective for the latent level engagements. Given the moral responsibility of the teacher, if RE is *not* enriched by musical activities, there is no justification for employing them.

Measurement & assessment: While teachers measure individual students' performance, an evaluation of the whole process is also essential. Students may not be successful (enough) because of the poor material, because of the lack of motivation, or because of the teacher's lack of awareness of the context, etc. Therefore, individual assessment and teacher evaluation are both valuable to the extent that they enlighten the route to improvements for the adopted system. In the eyes of the teacher, pupil assessment should indicate the points in which s/he can make progress.

As an example, the musical material may not satisfy relevant conditions for enabling the communication of knowledge or emotional stimulation. Students' background knowledge, for instance, may not be enough for understanding the meanings expressed within the musical example. Comparably, if the students' initial feelings are ignored, emotion induction through music listening may not be achieved. Shortcomings in these elements may mean that related teaching/learning activities might not be effective. For these cases, both measurement of pupils' responses and class evaluation should signal the weak points of intervention. Assessment and evaluation should both be embraced as ways of caring for students' needs—especially for such a relatively new intervention that is the musical activities of RE.

2.4. Evaluation/Discussion of Methodology

2.4.1. *Personal/Intrinsic Dispositions*

In many respects parallel to the teacher's substantially different roles in inductive and deductive values education approaches (Leming, 2010), musical activities require teachers to assume discernible responsibilities for emotional stimulation and knowledge communication. While not favouring one over another, the cognitive response to music is relatively music-oriented, in contrast to the emotional response to music. Teaching with music by communication of knowledge has a relatively strictly defined purpose for RE (Berglund, 2008). Thus, teachers are in a relatively more assured position to identify and plan for the cognitive responses to the musical activities (namely the relationship between the manifest and latent level of musical activities, discussed in Chapter 6). Similarly, for teachers, the cognitive outcomes of the musical activities are easier to assess than emotional and behavioural objectives. Although there is a need for the further development of curriculum and pedagogy, RE teachers might even now meet these requirements for communication of knowledge within musical activities. Indeed, it seems that the cognitive dimension of RE with musical activities in schools can be well established by high quality teacher training (Gray, 2010).

However, considering the personal dimension of emotions, the reference person of the musical activities in the RE classroom is always the student. Hence, beyond the musical and emotional character of the music, the teacher must take into account the degree to which students will respond to such features. Similarly, familiarity with music (*makam*, genre, excerpt, and musician) is not a generalised term, but to a certain extent specific to each listener. In other words, recognising the obvious and immediate factors for individuals' feelings such as personality, age, gender, and state of health (Nias, 1996) might support the teaching of RE with music.

It is also worth noting that while students' emotional and cognitive responses to music, and teachers' roles in conducting musical activities, were prioritised in the present research, there are additional stakeholders in the field of education (Gray, 2010). It is of course obvious that these groups are not homogeneous. On the contrary, owing to many factors, there are significant differences, for example, between (especially) musicians (Khan, 2007). Hence, their reactions might be substantially different. RE teachers must also be sensitive to the needs of the community in which the school is located (Power, 2007) and be ready to respond to the various reactions. This might be a way of building partnerships in education for 'art-based knowledge transfer' (Kukkonen and Cooper, 2017) between multiple and interconnected agents, for students' benefit (Day and Harris, 2016).

2.4.2. Cultural/Religious Dispositions

Values education is needed to give meaning to the (list of) values promoted by the curriculum and to make them part of the lived experience of the learners (MEB, 2018c; 2010a; 2010b). Even if RE teachers became competent in musical activities and students successfully responded to music in RE class, there is a need for much stronger theoretical grounding to underpin the use of music in RE. While there is a leading role for teachers in values education, schools are complex systems that extend beyond teachers (Gray, 2010; Revell and Arthur, 2007). In attempting to improve quality, it is not reasonable to think that teachers will solve the problems alone. However, it is sensible to expect a collaboration among scientific, academic, organisational, and educational agencies to explore how schools and teachers might be supported. This is not only for sharing workload but also for maximising the benefit to pupils from different fields of expertise.

Of course, prevailing educational orthodoxies often have problems in dealing with emotions and values in schools (Cefai and Cavioni, 2014; Crick, 2010). As we have seen, emotions are central to

classroom interactions, motivation, and learning (Meyer and Turner, 2006), but emotions experienced in school settings reach beyond those associated with achievement. For Berglund (2008), students may feel cultural belonging and socialising in relation to musical stimuli of RE classroom. However, the instruments needed for measuring students' emotions, other than anxiety, were largely lacking until the end of the twentieth century (Pekrun, 2016).

In more recent times, the benefits of using music in RE are beginning to be reported not only for academic achievement (Babacan, 2019), but also in reflecting and expressing the values of the school community and its goals for communication, inclusivity, and connectedness (Power, 2007). To deal with the challenges associated with measuring affective experiences, any consideration of assessment for emotions must be grounded in a coherent model or theory of emotion (Linnenbrink-Garcia, et al., 2016). Distinguishing cognition and feeling in practice has proved difficult in education, yet moral education recognises that we need both (Yob, 1997). A competent teacher recognises the effect of emotions on students' learning across the disciplines (Immordino-Yang and Damasio, 2007). If music is a part of young people's lives (Berglund, 2008), why should it not become a part of school life, as long as it brings together intellect and feeling in valid ways and enables pupils to develop RE skills (Stern, 2004)? These are nothing less than the skills that are best developed through the variety of activities children take part in willingly every day in schools (Brown, 1991)! All we need to do is recognise and codify this convincingly.

2.4.3. Situational/Responsive Dispositions

Assuming that emotions are successfully induced by music listening, and valued in the classroom, then the point is to integrate these emotions into the learning process. As stated above, this is the difference of the mentality in the present research from the so-called Mozart Effect, or at least from the typical misrepresentations of the Mozart Effect. For

this research, inducing (even the intended) emotions by using music as a stimulant is not the end, but maybe the starting point for integrating emotions into learning and teaching. However, it is not easy to do this on the ground where teachers are often required to teach the curriculum verbatim (Interview with *Job*, Chapter 6); where 'national exams' are concentrated to assess knowledge (Crick, 2010); where emotions are seen as detrimental to learning in a traditional teaching mentality (Mercer, 2019); and where emotions are considered to be independent of cognition, motivation, and effective learning (Meyer and Turner, 2006). In such an environment, it is not a success simply to 'induce emotions'.

The relationship between music and emotions is now being highlighted more directly, both in the present research and in the literature. Furthermore, students can directly learn from musical activities in RE (Babacan, 2019), because, for learning, music provides the aspects of involvement, awareness, responding, discriminating, and communicating that are increasingly widely accepted as integral to successful education (Brown, 1991). Singing is, for instance, a way of communicating the knowledge the song is about (Berglund, 2014). In this regard, lyrics often have a significant value for direct teaching (Apaydın and Arslan, 2015). In addition, this might be also an indirect way of incorporating values, embedded in the songs (Berglund, 2008) so that RE with musical interventions provides a context to bring cognition and emotion together (Immordino-Yang and Damasio, 2007). At the same time, singing is about more than conceptual content. It is an experience of emotional literacy and expression, collaboration, and achievement.

Because emotions have consequences for learners in both constraining and enabling opportunities to learn (Lewis and Crampton, 2016), teacher leadership must not be limited to the cognitive dimension of the education process but should be extended to care for student's broader sensibilities (Gümüş, 2019). It is recognised that the challenge of translating values or principles into practice is immense (Leeds, 2010; Gray, 2010). Even though it is not broadly discussed in

the present research, the emotional and cognitive benefits of RE with musical activities can potentially be converted to behavioural changes. That is to say that classroom activities can have a lasting effect on behaviour outside the school context, beyond the short-term emotional response and for relatively longer cognitive engagement. This might be considered as part of the ongoing debate for the development of moral decision-making and moral emotion attributions (Hasegawa, 2016; Seidel and Prinz, 2013; Wonderly, 2009). This resonates with James's view that moral behaviour must be grounded in moral emotions (1902), and Kohlberg's argument on the relationship between moral reasoning and moral behaviour (Leming, 2010). As 'knowing' does not imply that students will be able to use their knowledge outside of school, we need approaches to enhance meaning and motivation for real-world implementation based on confident appreciation of the cognitive and emotional intersections (Immordino-Yang and Damasio, 2007). The work and ideas documented in this study illustrate one important area where the partnership of Music and RE can strengthen and demonstrate these insights.

Moral significance has been attributed to music on the basis of its power to influence and shape moral character (Carr, 2010a, 2010b). In order to navigate the above-mentioned pitfalls for values education, music can support students in building a strong identity by offering a way to acquire cultural and societal awareness of, and immersion in, a diversity of religious traditions (including, where appropriate, their own) (Berglund, 2008). Therefore, being taught their identity and group norms, students are educated not only in the context of the state of knowledge today but also for future citizenship.

3. Implications for RE Policy and Practice

In accordance with the pedagogical model of RE set out in the present research, the following recommendations are proposed for different stakeholders in education.

1. *Guidance for RE practice and assessment*

In order to enhance RE practice with musical activities in terms of planning, measurement, and assessment, Bloom's respected taxonomies might provide a template for developing the connections between classroom activities and the educational outcomes. To illustrate the method of assessment, teachers can evaluate the students' performance by determining on which levels and domains of Bloom's taxonomy the musical activity was conducted. Bloom's cognitive taxonomy (Bloom, et al., 1956) and affective taxonomy (Krathwohl, et al., 1964) refer to the skills from basic to higher-order levels that are needed to accomplish a task in the respective domain. The cognitive taxonomy, for instance, lists the levels of thinking as (with Krathwohl's revision (2002) in parenthesis):

- Knowledge (remembering)
- Comprehension (understanding)
- Application (applying)
- Analysis (analysing)
- Synthesis (evaluating)
- Evaluation (creating)

Conversely, the order for affective taxonomy is (Krathwohl, et al., 1964):

- Receiving
- Responding
- Valuing
- Organising
- Characterising/Internalising Values

For each level, learners are required to combine the skills of previous lower levels. For example, *valuing* in a musical activity in RE requires students to give evidence of the emotional processes at the *responding* and *receiving* levels of the affective taxonomy. For the assessment of the emotional responses in the musical activities of RE (as

well as for planning), teachers can make evaluations confidently in line with the affective taxonomy. For teachers, the relevant questions might include, but are not limited to, these:

- Receiving –*is the student expected just to listen to music passively and to discover the emotional expressions?*
- Responding –*how do students actively participate in the listening sessions so that they can emotionally respond to the music?*
- Valuing –*what are the strategies for students to attach value to their own emotions or to associate their emotions to the class subject?*
- Organising –*how do students organise their own emotions and values? And do they compare, relate, and synthesise them with others' emotions and values?*
- Characterising/Internalising Values –*how do students' emotional evaluations (or value systems), as abstract concepts, regulate or influence their behaviours?*

With the same perspective, a comparable set of questions might be asked for the cognitive responses to musical activities in RE. This can generate a ground not only for assessment but also for planning the classroom activities. Subsequently, the levels of the cognitive taxonomy may indicate the target of the musical activity. *Analysis* and *synthesis* within the musical activities, for instance, require more complex thinking abilities in comparison to *remembering* and *understanding*. Consequently, the design of the musical activities and, in return, the assessment process should address these levels. This indicates the importance of the thoroughly crafted musical sessions in RE.

2. Teachers:

RE teachers should be active in ensuring that there are proper and frequent opportunities for using music in the RE classroom. In the context of musical interventions in RE, teachers have roles and responsibilities in two distinct domains: one concerns the teacher's relationship with students, and the other the teacher's leadership and competencies for e.g., excerpt selection, conducting activities, and measurement and assessment of progress and outcomes.

While musical activities are theoretically for everyone in the classroom, the teacher must consider students with their unique conditions, including personal characteristics; social and cultural conditions; musical preferences and knowledge; students' background knowledge, motivations, readiness, the initial conditions and developmental stages and, finally, the interactions between these. Accordingly, the teacher must be the professional who can find coherence between the emotional and cognitive qualities of music and students' capabilities to respond to them. While there is no reason to think that teachers currently cannot do this, there is an apparent need for RE teacher training to address these conditions in the context of musical activities.

For the teacher's leadership and competencies, first, the teacher should be a professional who is open to the use of musical materials in the classroom and prepared to respond constructively to students' engagements with musical material and activities. The teacher must be able to address cultural/religious dispositions, be aware of the requirements the classroom conditions impose, and recognise students' dispositions towards these. During the material selection process, conducting an activity, and the assessment process, the teacher must contemplate the emotional and cognitive features of the musical excerpt and students' capabilities to respond to them. In this way, the teacher may connect pupil responses to the affective, cognitive, and behavioural outcomes of the classroom subject. In other words, musical activities must be in line with the subject and its goals.

For measurement and assessment, the teacher should comply with the outcomes of the musical activities in line with the Bloomian (or reliable alternative) cognitive and affective taxonomies. Hence, the teacher should be dedicated to developing pedagogic, emotional, musical, and religious/theological awareness within the classroom, considering the affective, cognitive, and behavioural improvements of RE in partnership with musical interventions. The teacher needs therefore to be competent in the fields of music and RE for musical activities of

RE to be successful. However, when his/her expertise is not enough for the musical activities of RE, s/he should seek appropriate opportunities to find help both within the school and beyond. Teachers must seek ways for continuing professional development. Relatedly, the establishment of relevant networks among RE teachers for experience sharing is particularly recommended from this project.

RE teachers (and other professionals) are not isolated within the school. On the contrary, they are a part of the school community in general and supported by an educational network run by the Ministry (and Educational Agencies) for the development of textbooks, teaching materials, curriculum, and national exams, in particular. However, RE teachers who already use music in their classroom are a group of individuals who may indeed feel isolated regarding this aspect of their professional life. This is because using music in RE is a relatively new initiative and is not adequately represented within the present educational materials and practices. The professional development of RE teachers and establishing appropriate networks among them is crucial for RE professionals until such time as RE-relevant musical materials and pedagogies will be extensively expanded.

3. School Principals, Parents, and Others in the school:

There is a need to create a safe and supportive environment for RE with musical activities. The importance of other professionals' responses at school and parents' support at home should not be underestimated. Hence, the educational and institutional environment must be monitored to respond appropriately to the endeavour of using music in the RE classroom. As it is anticipated that musical activities in RE will excite some negative responses, these activities should not be directed by immediate reactions. However, RE teachers and School Principals must be sensitive to the needs of the community in which the school is located and be ready to respond appropriately to feedback. The Principals/leaders of the schools should provide an environment for RE where, at least, the relevant sources for musical activities are provided, shared with parents, and RE teachers then supported in their work.

At this point, there is a need to restate the role and responsibilities of the school leaders for improving RE with musical interventions. There is a wide spectrum of leadership types among this cadre. It ranges from faith leadership of a kind seen e.g., in Scottish Catholic schools (Rymarz and Franchi, 2019; Franchi, 2018; Coll, 2008; McKinney, 2007), to the School Principals of secular education structures (Ogretici, in press; Ayhan, 2004). In both cases, the importance of the role of the school leadership lies in establishing enabling circumstances for RE with musical interventions in the schools. For this key function, however, the Principals also need support in understanding their own contribution to this. Hence, a strategy is needed to support the school leadership in discharging its responsibilities in this area of the curriculum.

At less formal levels, students may expect to get the acclaim of their friends, teachers, and parents when they actively participate in musical activities (as a musician). As parents' reactions to the musical activities of RE may both positively and negatively affect the outcomes, there is a need to define and develop the parental involvement in the education process. Similar to the peer-learning process among students, there must be strategies to generate positive working relationships between parents, students, and teachers. Parents' expectations and reactions to RE with musical activities must be carefully evaluated and then addressed within the activities.

4. Government/Ministry/Central Education Agencies:

While using music in RE currently is a teacher's decision, improving the quality of musical interventions in RE reaches beyond a single teacher's efforts. Hence, the Government needs a strategy to establish suitable roles and responsibilities across all of the education stakeholders if these goals are to be realised. Beyond the preferences of the individual at a certain time in the educational environment, the pedagogical and practical standards need to be set by the educational authorities (*while respecting the different jurisdictions of central or local authorities in managing the education system*). In this respect, there is a need to revise the system with its current assumptions about, and prejudices against, the value of emotions and music in RE. In other words, teachers should

not be in an ongoing struggle to convince others, but this must be affirmed by the authorities. This might be thought as of the Government's express support for the RE environment, neutralizing the negative reactions to music in RE, and encouraging RE teachers to focus on their job.

The Government must provide formal opportunities such as teacher training and in-service education for teachers to use music in RE creatively. RE teachers might be competent in religion and education, but the Government should support them, at least for the majority, in the field of music –especially for defining the difference between the 'educational/pedagogical good' and the 'musical good'.

The Government could also create a database of musical excerpts expertly identifying the expected emotional and cognitive responses of students. Just as demonstrated in Chapter 5, there is a need to broaden the musical excerpts with the pre-determined intended emotion induction. Similarly, stimuli with a strong connection to the curriculum must be provided to promote the communication of knowledge in teaching. In order to inspire the teachers to use music in RE, the curriculum and teaching materials must be designed with the musical activities integrated. That way, musical activities will be conducted in line with the subject and its educational goals.

For further promoting the use of music in RE, publishing RE textbooks and teacher guides that comprise musical activities can also be an effective strategy. RE materials such as textbooks and activity books, prepared by the education agencies, must include musical activities and relevant musical materials. These materials might then be disseminated online. This will not only reduce the workload of teachers, but also set standards for musical materials and activities, beyond a single school's or teacher's experience.

As documented in Chapter 6, experienced teachers have the 'good and bad' examples of musical activities of RE. The Ministry should also work together with the experienced teachers to put initiatives in place to support the novice RE teachers in applying musical activities. Establishing relevant networks and workshops between these groups might be valuable.

5. *Collaboration between other stakeholders:*

For managing the workload of the teacher and assuring benefit from different fields of expertise, it is sensible to foster a culture of collaboration among scientific, academic, organisational, and educational interests concerned with musical activities of RE.

As indicated within the implications for teachers' section, there is a need for an educational perspective to evaluate the outcomes of the musical activities of RE (Skinner, et al., 2014). Universities, for instance, can provide much more explicit academic guidance for the musical activities of RE. Moreover, beyond the educational and religious interpretations, there is an obvious need for a more interdisciplinary approach, in order to broaden the perspective for the evaluation of the musical emotions in the context of RE. Even if musical activities, for instance, can induce the intended emotions in the classroom, there is still uncertainty in formally measuring students' emotional responses to music in school-settings. Teachers must be afforded the ways of, for instance, measuring emotions in classroom settings (Turner and Trucano, 2014).

The collaboration between education and music professionals is relatively indistinct. However, musicians can also help education professionals to develop an educational confidence in finding (or creating) musical extracts. Moreover, some expert musicians may support teachers, for example, in understanding the music of religions or *other* worldviews. Furthermore, since RE teachers are not expected to be professional musicians, the music industry might present more and better resources to be used in RE activities.

Schools should be also in search of relevant ways to invite the parents into the process of musical activities in RE. While it may not be essential, this will increase the benefits of such efforts. In addition to the current theoretical discussions of the role of music in RE, and the role and responsibilities of the state, there is also a need to discuss these factors with other civic institutions and bodies.

Chapter VIII
Concluding Judgements

1. Summary of the Research

The principal research question of the present book was: 'How should music, with its capacity to induce emotions and to facilitate the communication of knowledge, be included in the teaching of RE?'. In this respect, the research was carried in the context of the Turkish RE system (especially in its Values Education domain). By drawing upon the theories of musical emotions, its aim was to explore how the incorporation of music in RE lessons could enhance the emotional, cognitive, and behavioural responses of students in Secondary schools.

I have consistently argued in this book that studying musical emotions in the context of Turkish RE adds another critical perspective for contemplating music in Turkish Islamic discourse. I have also claimed that studying musical emotions in connection with the emotional attributions of the Turkish *makam* music is a fruitful area for broadening the perspective of music-emotion studies in cross-cultural contexts and dialogue. Furthermore, I have asserted that these perspectives have important implications for RE.

In Chapter 2 (The Conceptual Framework) and 3 (Literature Review), the book critically assessed the prevailing theories of emotion, cognition, meaning-making, values, and music; in order to identify the ways

in which RE practices may more meaningfully and effectively benefit from these concepts. In this respect, it was argued (in Chapter 2) that the concept of musical-emotions of the component-process-model (Scherer, 2004) is the apposite conceptualisation to study emotions in the context of RE. Following that, despite the misrepresentation of halal-haram discussion, the educational perspective offers a meaningful change for studying music in the context of Islamic interpretations, along with philosophical, aesthetic, medical, and religious purposes. Next, the Turkish RE system with its domain of Values Education has a relevant capacity to discuss the role of music in RE and to contemplate future improvements.

In Chapter 3, it is argued that Turkish music with its makams has a generalizability ground for emotion induction, therefore it must be considered as an educational material for RE. Following this, the Western perspective has provided respectable insights and scientific tools to measure and evaluate the emotional response to music listening – that was actually employed in the experimental part of the research. Next, it was expressed how music-emotion research perspective can safeguard and uphold RE purposes owing to emotion, cognition, and meaning-making processes.

Owing to the interdisciplinary nature of the research and its conduct with mixed research methodologies over a long period of time, the researcher was in a position to enter the field of study at different locations (as explained in Chapter 4). The empirical part of the research was conducted to analyse the emotional response to music listening, to investigate the reality in the eyes of the RE professionals, and to discuss the potential for developments in the RE subject –when students' emotions and teachers' efforts of the musical intervention in RE actively meet around the concept of musical emotions which incorporates the affective, cognitive, and psycho-motor responses.

In a strict relation with the principal question, this research then empirically examined these sub-themes: In Chapter 5 (Quantitative Analysis), listeners' (students') emotional response to Turkish *makam*

music when they listen to it (self-report of felt emotions) was measured and analysed owing to the GEMS tool. Chapter 6 (Qualitative Investigation) focused on the RE professionals' views to evaluate the place of music in RE. Chapter 7 discussed the quantitative and qualitative findings in line with the existing literature, curriculum, and policies in order to indicate the improvement potential for using music in RE.

One of the most important outcomes of this research (in Chapter 5) is the claim that the experimental validation of the emotional response to Turkish music provides convincing grounds for generalizability, due to the makam-emotion attributions. This is because the stimulus set of the research is successful in inducing *peacefulness* via Buselik and Hüseyini, *nostalgia* via Saba, *joyful-activation* via Rast, and *power* via *Neva*. Similarly, it is partly successful in inducing *wonder* via Irak, *power* via Nihavend, *transcendence* via Segah, and *sadness* via Zirefkend; and in reducing tension via Isfahan. These results are in alignment with the makam-emotion attributions, as they were predicted before measuring emotional responses. However, there is no confirmation for the emotion attributions of Mahur and Hicaz. Consequently, this research validates the expectations of emotional response for 10 makams.

After that, another significant outcome of this research (in Chapter 6) has been confirming that the role of the RE teacher is the key to the musical interventions in the context of RE. This is the case even though there are various perspectives in the present picture of using music in RE. These include the strategies for justification of using musical material, the roles and responsibilities within the teaching/learning environments, and the theoretical and practical considerations of the musical interventions of RE. However, it is evident that RE teachers require substantial support to improve the quality of musical activities in the RE classroom. Nonetheless, there are attainable opportunities in the current situation for using music to enlarge the educational outcomes of RE.

Finally, I gave attention to the multifaceted nature of emotions and the need for the interdisciplinary approach to study the musical

emotions in the context of RE (in Chapter 7). Thanks to the triangulation of data and methodology, this research was able to evaluate the multiple and interconnected factors for the subject of RE that utilise these insights through the multi-disciplinary applications. For the musical activities of RE, this research re-defined the independent and dependent agents and their interconnected relationships. The dependent agents are student (as a listener), music (as an educational material), and classroom (as the learning/teaching environment), whereas the independent agent is teacher (as a researcher/leader). Consequently, for future interventions, the present research presented a pedagogical model of RE with musical activities.

Eventually, the present research argues that carefully planned musical activity sessions in RE can vouchsafe student opportunities to increase their capacities through active engagement with musical emotions. Therefore, as appreciated in theoretical and empirical aspects of the present research, engaging with and valuing the musical emotions in RE support students' affective, cognitive, and behavioural developments owing to their meaning-making processes.

2. Limitations of the Research

This research brought together an in-depth critical-theoretical appraisal and several empirical research methods drawn from the social and educational sciences –including questionnaires with pupils and interviews and dialogue with RE professionals. Thus, it was claimed in this research that the data from the literature, questionnaires, and interviews has fully enabled the researcher to examine the current position and future potential of using music in RE.

Yet, despite its robust and comprehensive rationale, it is accepted that this research has a number of limitations and much of this has already been discussed. However, recognising the limitations of this research project is necessary especially for recognising implications and future possibilities.

These limitations may be seen as forming a set of boundaries in three categories: contextual, theoretical (methodological choices), and technical (experimental conditions). Applying the concept of 'musical emotions' in this research, for instance, is a contextual decision taken by the researcher. Similarly, measuring listeners' emotional response to music listening by means of the GEMS tool is a methodologic choice that is substantially affected by the conceptual background.

To illustrate this more evidently, within the experimental part of the research, in Chapter 5, the objective was to measure listeners' emotional response to the stimuli (Turkish *makam* music) by means of the GEMS tool. The stimuli that comprise 12 makams is the selection of the researcher. Different excerpts in these makams or a distinct set of makams might indicate dissimilar results (though without breaching the connection). Moreover, the emotional response to music listening (felt emotions) was measured by means of self-reports.

Furthermore, in Chapter 6, the aim was to evaluate the field with the experience of RE professionals. Due to the purposive sampling strategy and not observing the music-specific and personal characteristics of the participants, there is, for instance, a gender imbalance in the sample. The sample was drawn from the academic and educational professionals in the field of RE. While there are many female members in this field, the imbalanced male perspective is apparent in the sample. Even though this is not a single-sex sample, the three female participants (two are as RE teachers and one is as a policymaker at the Ministry level) provided invaluable perspectives. It must also be recognised that the researcher as a male was interviewing a predominantly male sample. Focusing on the views of RE professionals also means that the views of other education stakeholders were less evident in the present research. The perspectives of parents or musicians, for instance, might be valuable for studying musical activities in the context of RE. Additionally, this research, especially in conducting interviews, has focused on the experiences of those RE professionals in the state sector who have experience of (or at least have given serious

consideration to) the role of music in RE. Teachers in other domains (such as in private schools) or teachers with opposed views may indicate another perspective for this kind of study. Hence the sample with its size and diversity is meaningfully indicative, but may not be representative of the entire RE discipline.

There were some other points in this research, particularly in the aspects of implications, other limitations can be acknowledged without prejudice to the quality of the findings. Due to the encouragement of RE professionals for sharing their experience of using music, interviewees may have produced strategic responses in line with the research purpose. I am aware of this and applied several strategies, such as negative cases and adverse explanations, to deal with it.

As this chapter brought the quantitative and qualitative findings together, the limitations mentioned above are equally applicable for Chapter 7. Beyond these limitations, though, this chapter was founded on rich data strengthened by methodologic triangulation. Despite the breadth of the data here presented, there remains a relative scarcity of studies on music and emotions in the RE context. The present research thus opens a new and potentially fruitful avenue for study. It is not feasible to expect this research alone to fill this gap. There remains a great need for much more research and for more diverse perspectives on this field.

Finally, while the findings of this research were interpreted in the field of RE in general, and the implications and the recommendations were in the Turkish context in particular, these were chosen because of the unique place of RE within the Turkish state-education system. Hence, the Turkish-Islamic perspectives for using music are of the essential importance to this research. In another national or religious context, religious and cultural interpretations might not be significant to such a degree. However, from another perspective, this indicates that this research has the features of external validity and comparativist transferability for another educational context. This requires additional reflection for further cross- or inter-cultural comparative investigation.

3. Areas of Future Studies

This is not the first study to consider the relationship between music and emotions, or emotions and education, or music and RE, but is the first to apply the concept of musical emotions into RE, as far as the researcher is aware. As mentioned previously, this research has focused on the emotional responses of the students and on the views of RE professionals for the place of music in RE. Further exploration could be of value for the perspectives of others across the RE ecosystem. This could also range beyond the established definition of the ‘stakeholder’ to e.g., clergy, mosques, religious organisations, etc.

With reference to the quantitative analysis of the emotional response to music listening, since the subjective feeling component is not the *only* aspect of the response to music listening, other response characteristics might be studied in greater depth (Immordino-Yang and Christodoulou, 2014). In this view, the physiological aspects of the emotional response to music listening, for instance, might be studied in the classroom situations (Meyer, 2014). Likewise, self-reports and GEMS are not the only empirical means to evaluate the emotional response to music listening and there is an opportunity to use other measurement tools for different approaches (Pekrun and Böhner, 2014; Reisenzein, et al., 2014). Regarding the stimuli selection, supplementing the present research, future studies might utilise different genres, makams, and excerpts to test the generalisability of the findings. Additionally, while the purpose of the present research was not to explain the emotional response to music listening in terms of the participants’ characteristics, Chapter 5 (section 5.3.2.3 and 5.4.1.3) presents useful insights. For further investigations, there is a need for more purposive sampling strategies. In this way, the emotional response to Turkish *makam* music might be accurately addressed in terms of particular listener characteristics.

Regarding the qualitative aspects of the interviews, similarly, this research has examined a number of the RE professionals’ views according to particular teaching and learning perspectives. However,

the musical activities of RE need to be investigated in terms of musical material preparation, textbooks, assessment of activities and learning etc., too. The views of other stakeholders in the education system, such as parents, School Principals, local authorities, and even musicians, should also be included in such studies, beyond the capacity of a solo doctoral researcher. There is a need to broaden the diversity and size of the samples for the future studies. Arguably, rather than conducting interviews, different research methods such as focus groups, questionnaires, and classroom observations could enrich such investigations.

I examined the role of music in the context of RE, especially in the domain of Values Education. I never argued that these activities are of merit only for RE, but that they might well be also valuable for other school subjects. Hence the efficacy of musical activities could be explored in connection with other kinds of activities and subject areas. Such potential diversification needs further research. In addition, this research showed that many teachers, willing to teach RE by using music materials, find themselves in a non-supportive environment. Hence, the teachers' professional development strategies ought to be examined further so that support can be provided at the convenience of the teachers to improve their skills for using music in the classroom context.

In Chapter 7, the interviews with the RE professionals provided the insight to review the findings of quantitative analysis of the questionnaires (GEMS results), then the existing materials (literature, curriculum, and policies) suggested the themes for vouchsafing further the objectives –in the sense that music in RE can strengthen teaching and learning, because music connects feeling, cognition, and behaviour through musical emotions. Hence, the interrelated key terms (music, student, situation, and teacher) were coordinated in the process of discussion, and it is highly reasonable to explore further the relationship between these factors in the context of curriculum and educational theory.

Because of the interdisciplinary nature of the musical interventions of RE, the quality of musical interventions in RE classroom cannot be

properly understood unless two other elements are critically contemplated: hostile attitudes to music in certain religious groups (Harris, 2002) and the status of RE among other subjects at school (Conroy, et al., 2013). Any improvements in these areas would positively amplify the musical interventions, even though musical activities of RE are not there to deal directly with either. Then, in return, musical activities may actually promote improvements in these attitudes. Until this happens, both teachers' and students' perceptions of the musical activities in the RE classroom will undoubtedly be affected by these cultural and religious dispositions –and we need more research into them.

Finally, the conceptual relationship between emotion, knowledge, and behaviour (feeling, knowing, and acting/or heart, mind, and body/or emotion, cognition, and action) is interesting, complex, and worthy of further research. This enquiry is not specific for RE. However, regarding the scarcity of research on music and emotion in the context of RE, a deeper understanding of the interplay between musical emotions and education would be a welcome addition to the construction of the field of RE. For achieving this, I hope this research becomes the foundation of a new relationship, a bricolage, between RE, emotions, and music.

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List of Appendices

Appendix-1: The Makam-Emotion Relationships in the Traditional Resources

Makam	Emotion	Translation	Source	Reference	
Acemaşiran	Creativity, infinitude	Yaratıcılık, sonsuzluk		Güvenç, 2006	
Arabân	Geçmiş anmak, karamsarlık (nostalji)	Remembering the past, pessimism, or nostalgia	Hızır Ağa	Uslu, 2019	
Babatahir	Uyku	Sleep	Hızır Ağa	Uslu, 2019	
Bayati, Hüseyinî, Uşşak, Nişâbur and Segâh	Kişiyi rahatlatır	Relaxation	Hızır Ağa	Uslu, 2019	
Bestenigar (Saba + Irak)	Zühd	Devoutness	Ezgi, 1933-53	Kalender, 1987	
	Relaxation	Rahatlama		Güvenç, 2006 Altınölçek, 2013	
Buselik	Kuvvet	Power	Farabi	Güvenç, 1985 Kalender, 1987	
			Farabi in Yiğitbaş, 1972	Somakçı, 2003	
			Haşim Bey	Uygun, 1996	
			Urmawi in Mehmed Çelebi	Kalender, 1987	
Büselikaşiran	Hayvanî ruhu neşelendirir.	Cheers up	Hızır Ağa	Uslu, 2019	
Büzürg, Rehavî, Zirefkend, Zengüle, Hüseyinî	Hüzün, Sakinlik	Sadness, calmness	Urmawi	Uygun, 1996	
Büzürg, Râhevî, Hisar, Şehnaz, Zirefkend, Sabâ,	Hüzünlendirir	Sadness	Merâgî(C)	Sezikli, 2007	
Büzürg, Zirefkend, Rehavî	Hüzün	Sadness	Merâgî(M)	Karabaşoğlu, 2010	
	Korkaklık	Cowardice	Urmawi(E) in Şirvânî(M)	Akdoğan, 1996	
Büzürk	Gets rid of fear and apprehension. Clears the mind.	Korku ve endişeyi giderir. Zihni temizler.		Güvenç, 2006	
	Korku	Fear		Farabi	Altınölçek, 2013 Güvenç, 1985 Kalender, 1987
				Farabi in Yiğitbaş, 1972	Somakçı, 2003
			Haşim Bey	Uygun, 1996	

Dûgah	Sinirli ve gamlı kişileri gevşetir.	Relaxing nervous and sad people.	Hızır Ağa	Uslu, 2019	
Ebuselik	Kuvvet	Strength	Urmawî(E) in Şîrvânî(M)	Akdoğan, 1996	
Eviçbuselik and Eviçmuhalif	Kalp yumuşaklığı, safa ve iç genişliği oluşturur	Creates the softness of the heart, purity and inner calmness	Hızır Ağa	Uslu, 2019	
Hicaz	Humbleness	Tevazu		Güvenç, 2006	
			Ak, 1997	Somakçı, 2003	
			Farabi	Altınölçek, 2013	
				Güvenç, 1985	
				Kalender, 1987	
	Alçakgönüllülük, tevazu	Humility, humbleness, modesty		Farabi in Yiğitbaş, 1972	Somakçı, 2003
				Farabi in Yiğitbaş, 1972	Akpınar, 2001
				Haşim Bey	Uygun, 1996
				Urmawî in Mehmed Çelebi	Kalender, 1987
	Güzel, hüznün, hicran, istirahat	Melancholy (Beauty, desire, sadness, sorrow)	Ezgi, 1933-53	Kalender, 1987	
Hicazi	Tevazu	Humbleness	Urmawî(E) in Şîrvânî(M)	Akdoğan, 1996	
Hicazî, Mâyê, Hüseyni, Evc, Zengüle, Dûgâh,	Hayret, zevk	Amazement, pleasure	Merâgî(C)	Sezikli, 2007	
Hicazî, Zengüle, Irâk	Hayret	Amazement	Merâgî(M)	Karabaşoğlu, 2010	
Hisar	İnsanların birbirleriyle konuşup kaynaşmasını sağlar	Allows people to talk and close with each other	Hızır Ağa	Uslu, 2019	
Hümayun	Cömertlik ve af duygularına sevk eder	Generosity and forgiveness	Hızır Ağa	Uslu, 2019	
Hüseyni	Peace, calmness, relaxation	Huzur, sakinlik, rahatlama		Güvenç, 2006	
			Ak, 1997	Somakçı, 2003	
	Sükûnet, barış	Calmness, serenity, peace		Farabi	Altınölçek, 2013
				Farabi	Güvenç, 1985
	Sükûnet, rahatlık	Calmness, comfort, tranquillity		Farabi in Yiğitbaş, 1972	Somakçı, 2003
				Farabi	Kalender, 1987
	Barış/Sulh	Peace		Farabi in Yiğitbaş, 1972	Akpınar, 2001
				Haşim Bey	Uygun, 1996
				Urmawî(E) in Şîrvânî(M)	Akdoğan, 1996
	Anlaşma	Covenant		Urmawî in Mehmed Çelebi	Kalender, 1987

Hüzzam	Şevk, neşelenme	Enthusiasm, cheer	Hızır Ağa	Uslu, 2019
	Şiddetli hüznün	Severe sadness	Ezgi, 1933-53	Kalender, 1987
Irak	Helps learning, understanding, concentration. Removes fear, exasperation	Öğrenme, anlama, odaklanmaya yardım eder. Korku, kızgınlıktan arındırır		Güvenç, 2006
	Tat ve çeşni	Relish, zest, taste	Ak, 1997	Somakçı, 2003
	Lezzet	Flavour, pleasure	Urmawî in Mehmed Çelebi	Kalender, 1987
			Urmawî(E) in Şîrvânî(M)	Akdoğan, 1996
İsfahan	Removes negative thoughts; clears the mind; increases intelligence, mobility, and self-confidence	Olumsuz düşünceleri ortadan kaldırır; zihni temizler; zekâ, hareketlilik ve kendine güveni artırır		Güvenç, 2006
	Hareket becerisi, güven	Movement, confidence	Farabi	Altınölçek, 2013
			Farabi in Yiğitbaş, 1972	Güvenç, 1985
				Somakçı, 2003
	Cevr, eziyet, sehâ	Hardship, suffering, torment	Farabi	Kalender, 1987
		Haşim Bey	Uygun, 1996	
Cömertlik	Generosity		Urmawî in Mehmed Çelebi	Kalender, 1987
			Urmawî(E) in Şîrvânî(M)	Akdoğan, 1996
Kuçek	Hüzün, elem	Sadness, suffering	Farabi	Altınölçek, 2013
				Güvenç, 1985
			Farabi in Yiğitbaş, 1972	Kalender, 1987
			Haşim Bey	Somakçı, 2003
			Uygun, 1996	
Mahur	Kuvvet, cesaret, tam bir rahatlık	Contentment, complete relief, strength, courage	Urmawî	Kalender, 1987
			Şîrvânî(M)	Akdoğan, 1996
Muhayyer-buselik	Dinleyenin konuşma arzusunu uyandırır	Awakens the desire to speak	Hızır Ağa	Uslu, 2019

	Removes negative thoughts; induces relief and happiness	Olumsuz düşünceleri ortadan kaldırır; rahatlama ve mutluluk sağlar		Güvenç, 2006	
Neva	Lezzet, Ferahlık	Flavour, spaciousness	Farabi	Altınölçek, 2013	
				Güvenç, 1985	
			Kalender, 1987		
				Farabi in Yiğitbaş, 1972	Somakçı, 2003
				Haşim Bey	Uygun, 1996
				Ak, 1997	Somakçı, 2003
Yiğitlik Cesaret		Bravery, courage	Urmawi in Mehmed Çelebi	Kalender, 1987	
			Urmawî(E) in Şîrvânî(M)	Akdoğan, 1996	
Neva, Buselik, Uşşak	Güç, kuvvet, tam bir ferahlık	Power, strength, spaciousness	Urmawi	Kalender, 1987	
				Altınölçek, 2013	
Nevaaşiran	Sakinlik, melankoli	Calmness, melancholy	Hızır Ağa	Uslu, 2019	
Nevruz, Pencgah, Zavil, Gerdaniye	(orta) Rahatlık, hoş bir lezzet	Comfort (mid), pleasant taste	Şîrvânî(M)	Akdoğan, 1996	
Nihanevd	Relaxation, peace / confidence, determination	Rahatlama, huzur / güven, kararlılık		Güvenç, 2006	
	Güç, cesaret ve tam bir ferahlık	Strength, courage, complete relief	Urmawî	Kalender, 1987	
			Şîrvânî(M)	Akdoğan, 1996	
Nihavendkebir, Nihavendrûmî	Ferahlık verir.	Giving relief	Hızır Ağa	Uslu, 2019	
Nihaventsagir	İştihayı artırır	Increases taste	Hızır Ağa	Uslu, 2019	
Nişabur	Ferahlık verir.	Giving relief	Hızır Ağa	Uslu, 2019	
Nişaburek	Zihni açar, neşelendirir	Opens the mind and cheers up	Hızır Ağa	Uslu, 2019	
Pencgah	Aşkların aşklarını tazeler, heyecanlarını harekete geçirir	Renews the love and activates excitement	Hızır Ağa	Uslu, 2019	
Rahatfeza	Rahatlatıcı ve sefa verici	Relaxing and giving pleasure	Hızır Ağa	Uslu, 2019	

Rahatülervah	İrfan ehli ve latife sevenler için ilaç sayılır	Like a medicine for the wise and kind people	Hızır Ağa	Uslu, 2019
Rast	Joy, enjoyment, comfort	Sevinç, keyif, rahatlık		Güvenç, 2006
	Sefa, Neşe, Huzur	Peace, joy, tranquillity	Farabi	Altınölçek, 2013 Güvenç, 1985
			Farabi in Yiğitbaş, 1972	Somakçı, 2003
	Sevinç	Pleasure	Farabi	9.Kalender
			Farabi in Yiğitbaş, 1972	Akpınar, 2001
	Safa	Tranquillity	Haşim Bey	Uygun, 1996
Rast, Büzürk	Hüzün, gevşeklik	Sadness, slackness	Urmawî	Kalender, 1987
Rast, Çargâh	Ciddiyet, cesaret, kuvvet	Seriousness, courage, strength	Ezgi, 1933-53	Kalender, 1987
Rast, Irak, Isfahan	Hafif bir ferahlık, zevk	Spaciousness (low), pleasure	Urmawî	Kalender, 1987
	(orta) Rahatlık, hoş bir lezzet	Comfort (mid), pleasant taste	Şirvânî(M)	Akdoğan, 1996
Rast, Hüseyinî, Isfahan	Genişlik, ferahlık	Amplitude, spaciousness	Merâgî(M)	Karabaşoğlu, 2010
Rast, Nevruz, Irak, Isfahan	Coşku	Excitement	Urmawi	Uygun, 1996
	Rahatlattıcı, lezzetli, latif	Relaxing, tasteful, niceness	Merâgî(C)	Sezikli, 2007
Rehavi/Rahevi	Eternity, infinitude, relaxation	Ebedilik, sonsuzluk, gevşeme		Güvenç, 2006
			Haşim Bey	Uygun, 1996
	Beka, sonsuzluk	Infinitude	Farabi	Altınölçek, 2013 Güvenç, 1985
			Farabi in Yiğitbaş, 1972	Somakçı, 2003
			Farabi	Kalender, 1987
			Ak, 1997	Somakçı, 2003
	Ağlama	Crying	Urmawi in Mehmed Çelebi	Kalender, 1987
		Urmawî(E) in Şirvânî(M)	Akdoğan, 1996	

Saba	Hazin, Hüzünlendirici	Sorrow, gloom	Hızır Ağa	Akdoğan, 2002 Uslu, 2019
	Cesaret, yiğitlik, kuvvet, kahramanlık	Courage, bravery, strength, prowess	Farabi	Altınölçek, 2013 Güvenç, 1985 Kalender, 1987
			Farabi in Yiğitbaş, 1972	Somakçı, 2003 Akınar, 2001
			Haşim Bey	Uygun, 1996
	Religious feelings, bravery, strength	Dini duygular, cesaret, güç		Güvenç, 2006
Segâh	Bravery, relaxation	Cesaret, gevşeme		Güvenç, 2006
	Cesaret verir, güçlendirir	Encouraging, empowering	Hızır Ağa	Uslu, 2019
Segâh, Irak	Zühd, takva	Religious feelings, Piety	Ezgi, 1933-53	Kalender, 1987
Şehnaz, Şehnazbuselik	Ferahlık ve cömertlik hissi	Sense of spaciousness and generosity	Hızır Ağa	Uslu, 2019
Şehnaz, Hisar, Sabâ	(az) Rahatlık, hüznün, sükunet	Comfort (low), sorrow, calmness	Şirvânî(M)	Akdoğan, 1996
Suzinak (Hicaz+Rast)	Her iki makamın etkisi	Both makams (Hicaz+Rast)	Ezgi, 1933-53	Kalender, 1987
	Sleep, laughter	Uyku, gülme		Güvenç, 2006
Uşşak	Gülme hissi	Laughing	Ak, 1997	Somakçı, 2003
			Farabi	Altınölçek, 2013 Güvenç, 1985 Kalender, 1987
			Farabi in Yiğitbaş, 1972	Somakçı, 2003 Akınar, 2001
		Haşim Bey	Uygun, 1996	
		Urmawî(E) in Şirvânî(M)	Akdoğan, 1996	
Uşşak, Beyati	Hakiki aşk	Sincere love	Ezgi, 1933-53	Kalender, 1987
Uşşak, Neva, Büselik	Kuvvet, cesaret, (tam) rahatlık	Power, courage, comfort	Merâgî(M)	Karabaşoğlu, 2010
			Merâgî(C)	Sezikli, 2007
			Şirvânî(M)	Akdoğan, 1996

Vechiarazbar	Cömertliđi teşvik eder	Encouraging generosity	Hızır Ađa	Uslu, 2019
Zirefkend	Üzüntü, hüzn	Sadness, sorrow, grief	Urmawi in Mehmed Çelebi	Kalender, 1987
			Urmawî(E) in Şirvânî(M)	Akdoğan, 1996
Zirefkend, Hicaz, Zengüle, Büzürg, Rahevi, Hüseyini	(az) Rahatlık, hüzn, sükunet	Comfort, sadness, calmness	Şirvânî(M)	Akdoğan, 1996
Zirefkendküçek	Şevk ve ferahlık vericidir.	Giving enthusiasm and spaciousness	Hızır Ađa	Uslu, 2019
	Dinleyene gariplik hissi verir	Revives the feeling of strangeness.	Hızır Ađa	Uslu, 2019
			Ak, 1997	Somakçı, 2003
				Altınölçek, 2013
			Farabi	Güvenç, 1985
Zirgüle/Zengüle				Kalender, 1987
	Uyku hissi	Sleep	Farabi in Yiđitbaş, 1972	Somakçı, 2003
			Haşim Bey	Uygun, 1996
			Urmawi in Mehmed Çelebi	Kalender, 1987
			Urmawî(E) in Şirvânî(M)	Akdoğan, 1996

Appendix-2: Ethics Approval



College of Social
Sciences

5 February 2019

Dear Yusuf Ziya Ogretici

Project Title: An Exploration of the Emotional Response to Turkish Music in the Context of Effective Religious Education

Application No: 400180088

The College Research Ethics Committee has reviewed your application and has agreed that there is no objection on ethical grounds to the proposed study. It is happy therefore to approve the project, subject to the following conditions:

- Research can only begin once permissions have been obtained from the University of Glasgow.
- Project end date: _ 01/10/2020
- The data should be held securely for a period of ten years after the completion of the research project, or for longer if specified by the research funder or sponsor, in accordance with the University's Code of Good Practice in Research:
(http://www.gla.ac.uk/media/media_227599_en.pdf)
- The research should be carried out only on the sites, and/or with the groups and using the methods defined in the application.
- Any proposed changes in the protocol should be submitted for reassessment as an amendment to the original application. The *Request for Amendments to an Approved Application* form should be used:
<http://www.gla.ac.uk/colleges/socialsciences/students/ethics/forms/staffandpostgraduateresearchstudents/>

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Muir Houston'.

Dr Muir Houston
College Ethics Officer

Muir Houston, Senior Lecturer
College of Social Sciences Ethics Officer
Social Justice, Place and Lifelong Education Research
University of Glasgow
School of Education, St Andrew's Building, 11 Eldon Street
Glasgow G3 6NH
0044+141-330-4699
Muir.Houston@glasgow.ac.uk

7. Do you regard yourself as belonging to any particular ethnicity?
 Yes (Please, explain: _____) No
8. In the day you are taking the questionnaire, do you have any health conditions or illnesses affecting your hearing?
 Yes No Do not know Prefer not to say
9. "Music is important for me", for that statement, which response is valid for you?
 Disagree strongly
 Disagree
 Neither agree nor disagree
 Agree
 Agree strongly
10. Is that your understanding that 'Music is prohibited/banned under Islamic teaching'?
 Yes No I don't know No answer Other
(Explain: _____)
11. Which one of these most closely matches your music listening habit? ' I listen to music...'
Several times a day
 Once a day
 Several times a week
 At least once a week
 A couple of times a month
 Once a month
 Less often than once a month
 Never
 I do not know
 Prefer not to say
 Other

12. What kind of music do you like to listen to?

- Pop
- Rock
- Classical
- Religious
- Folk
- Rap/Hip-Hop
- I do not know
- Prefer not to say
- Others (Please, explain: _____)

13. Do you have any formal training in any musical instruments or singing?

- Yes (Please, explain: _____)
- No
- I don't know
- Prefer not to say

14. Could you, please, choose from the following list of expertise levels, if any of them apply to you? 'I am ...'

- 'non-musician',
- 'occasional playing musical instruments/singing (only for fun)',
- 'amateur (serious interest in playing/singing, but non-professional)',
- 'semi-professional (earning some income by music)'
- 'professional (playing music or singing professionally)'
- other (Please, explain: _____)

17 Calm

18 Joyful

19 Tearful

20 Soothed

21 Energetic

22 Dreamy

23 Mellowed
(Softened-up)

24 Allured

25 Triumphant

26

27

28

3.2. Online Questionnaire

English: <https://forms.gle/R13T4AjTQW6UkLWn8>,

Turkish: <https://goo.gl/forms/iextfikUNUcQPUQG3>,

The stimuli only:

<https://www.youtube.com/watch?v=AD9SsqjjphE&list=PL6uoFJpYmKiNrSImie8wOzF41WTVhkQK1>

Appendix-4: Summary of the Findings for the Scottish and Turkish Subsamples, the GEMS Results (Table-11) and Factor Mean Values (Table-12)

For the Scottish subsample, Summary of the GEMS Results (Table-11)

↓ Adjective Terms	→ Musical Excerpts	C.	1	2	3	4	5	6	7	8	9	10	11	12	-
		Pre-Test	Mahur	Irak	Nihavend	Segah	Buseelik	Isfahan	Hicaz	Saba	Hüseyni	Rast	Zirekënd	Neva	Sum
1	Moved					X	X								2
2	Fascinated	*	X	X	X	X	X	X	X	X	X			X	10
3	Strong	*			X		X					X		X	4
4	Tender					X									1
5	Nostalgic														0
6	Serene	*					X				X				2
7	Animated	*	X		X			X				X		X	5
8	Sad					X	X							X	3
9	Tense	*					X	X							2
10	Bouncy	*	X		X			X				X		X	4
11	Filled with Wonder	*	X	X	X										3
12	Sentimental	*													0
13	Affectionate	*													0
14	Overwhelmed	*													0
15	Agitated	*						X						X	2
16	Feeling of Transcendence					X									1
17	Calm	*	X	X		X	X				X				5
18	Joyful	*	X	X	X			X				X		X	6
19	Tearful														0
20	Soothed	*				X	X				X				3
21	Energetic	*	X		X			X				X		X	5

22	Dreamy	*	X	X					X								3
23	Mellowed (Softened-up)	*	X														1
24	Allured																0
25	Triumphant	*			X		X									X	3
-	TOTAL		7	6	8	8	9	7	1	2	4	5	1	8			-64

For the Turkish subsample, Summary of the GEMS Results (Table-11)

↓ Adjective Terms	→ Musical Excerpts	C.												-	Sum		
		Pre-Test	Mahur	Irak	Nihavend	Segah	Buselik	Isfahan	Hicaz	Saba	Hüseyni	Rast	Zirekend			Neva	
1	Moved		X		X	X		X	X	X							6
2	Fascinated			X	X	X		X			X		X				6
3	Strong	*	X	X	X						X			X			5
4	Tender	*	X		X	X		X		X							5
5	Nostalgic		X	X	X			X	X	X	X	X	X	X	X		8
6	Serene	*	X	X	X	X	X	X	X	X	X	X	X	X	X	X	12
7	Animated	*			X			X					X		X		4
8	Sad			X			X		X		X			X			4
9	Tense								*							*	0
10	Bouncy	*			X								X		X		3
11	Filled with Wonder	*															0
12	Sentimental	*	X	X		X	X		X	X	X						6
13	Affectionate	*	X	X	X	X		X	X			X		X	X		7
14	Overwhelmed																0
15	Agitated								*							*	0
16	Feeling of Transcendence		X		X							X		X			4

17	Calm	*	X	X		X	X	X	X	X	X	X	X	10	
18	Joyful	*	X		X							X	X	4	
19	Tearful			X		X		X		X			X	4	
20	Soothed										X			0	
21	Energetic	*			X		X					X	X	3	
22	Dreamy	*		X		X	X		X	X				5	
23	Mellowed (Softened-up)	*				X			X				X	2	
24	Allured			X									X	1	
25	Triumphant				X		X						X	1	
-	TOTAL		6	13	8	12	8	5	9	5	9	10	3	13	-101

Factor Mean Values for the Excerpts (Table-12)

For the Scottish subsample

Musical Excerpts	C	1	2	3	4	5	6	7	8	9	10	11	12	factor-mean
	Pre-Test	Mahur	Irak	Nihavend	Segah	Buselik	Isfahan	Hicaz	Saba	Hüseyni	Rast	Zirefkend	Neva	
Wonder	1.79	1.95	1.92	1.82	1.94	1.94	1.70	1.84	1.63	1.86	1.67	1.64	1.74	1.80
Transcendence	2.01	2.01	1.85	2.00	2.08	1.88	1.88	1.85	1.79	1.76	1.74	1.73	1.88	1.87
Tenderness	1.91	1.62	1.81	1.52	2.10	1.69	1.47	1.76	1.65	1.78	1.54	1.36	1.37	1.64
Nostalgia	2.03	1.53	1.72	1.57	2.17	1.75	1.53	1.56	1.94	1.79	1.47	1.48	1.41	1.66
Peacefulness	2.34	1.77	2.07	1.65	2.44	2.28	1.59	1.67	1.80	2.57	1.61	1.58	1.60	1.89
Power	2.33	2.09	1.73	2.64	1.60	1.86	1.99	1.42	1.35	1.39	2.14	2.01	2.84	1.89
Joyful Activation	2.49	2.58	1.77	2.63	1.65	1.42	2.33	1.33	1.31	1.46	2.80	1.59	2.57	1.95
Sadness	1.78	1.45	1.62	1.30	1.74	2.02	1.23	1.62	1.58	1.62	1.17	1.92	1.28	1.53

Tension	2.10	1.71	1.62	1.80	1.61	1.90	2.02	1.87	1.74	1.57	1.55	1.83	2.01	1.77
excerpt-mean		1.88	1.80	1.91	1.95	1.84	1.76	1.65	1.64	1.77	1.77	1.62	1.87	

For the Turkish subsample

→Musical Excerpts ↓ GEMS FACTOR	C	1	2	3	4	5	6	7	8	9	10	11	12	factor-mean
	Pre-Test	Mahur	Irak	Nihavend	Segah	Buselik	Isfahan	Hicaz	Saba	Hüseyni	Rast	Zirefkend	Neva	
Wonder	1.97	1.61	2.29	1.64	2.32	1.95	1.54	1.84	1.68	1.97	1.85	1.68	2.36	1.89
Transcendence	1.42	1.70	2.35	1.50	2.66	1.84	1.70	1.90	1.67	1.82	2.19	1.80	2.38	1.96
Tenderness	2.40	2.03	2.51	1.83	2.69	1.98	1.86	1.98	1.81	2.07	2.18	1.84	2.52	2.11
Nostalgia	1.89	2.17	2.78	1.80	2.52	2.32	1.98	2.28	2.20	2.51	1.93	2.11	2.16	2.23
Peacefulness	2.48	2.48	3.04	2.02	2.93	2.48	2.18	2.23	2.19	2.36	2.27	2.11	2.39	2.39
Power	2.17	1.88	1.95	2.52	2.26	1.74	1.76	1.53	1.39	1.50	2.91	1.64	3.86	2.08
Joyful Activation	2.61	2.11	1.89	3.35	1.88	1.50	2.12	1.47	1.40	1.40	3.16	1.60	3.71	2.13
Sadness	1.72	1.44	2.36	1.16	2.25	2.06	1.43	2.09	1.97	2.41	1.47	1.74	1.37	1.81
Tension	1.70	1.18	1.22	1.27	1.62	1.69	1.27	1.60	1.41	1.52	1.37	1.43	1.41	1.41
excerpt-mean		1.89	2.30	1.95	2.38	1.96	1.79	1.88	1.75	1.95	2.20	1.79	2.55	

Appendix-5: The Coding Frame for Interview Analysis

CATEGORIES/Concepts		
A. Participants		
B. Justification		
B1. Legitimation		B2. Disapproval
Religious Cultural Natural Aesthetic and musical Realistic and communication Pragmatic and purposive Psychological and emotional Self-referring and self-legitimation Academic and Legal		Religious Cultural Negative effects Self-approving and educational
C. Defending music in Religious Education: Why?		
C1. Affective domain-Emotional enhancement of class environment	C2. Cognitive domain-Teaching, learning, and knowledge communication	C3. Hybrid/mixed domain- Behavioural and general improvements
Feeling; Responding to music emotionally; Promote positive attitudes of students to the subject, the teacher, and the information; Addressing the emotional diversity; Empathy; Motivation, enthusiasm	Educational tool; A better teaching method; Music to present, express, and knowledge communication; Meeting different minds' learning habits; Attention, readiness; Promoting memory / remembering	Directing morality and behaviour change; A communication channel; Promoting student's socialising; Self-expression, self-confidence; The calming and entertaining effect; The variations: an informative, enjoyable, lasting, and internalised RE class; Having pleasure with the RE class; Widening the school's territory; Discipline at the class: unifying, being together and organised; Respect to and passion for each other in the choir.
D. Approaches in Values Education and music: How?		
D1. Inductive Approach for Feeling (Emotion Based)	D2. Deductive Approach for Learning (Cognition Based)	D3. Mixed-Approach, Alternately (Hidden Curriculum)
<i>Student-centred</i>	<i>Dominated by Teacher</i>	<i>Collaboration</i>

E. Proper music: *What/Where it is?***E1. Proper musical excerpts**

Educational - pedagogical good and musical quality
 Relevance for the subject- the way the subject will be taught
 Religious music vs other genres
 Instrumental vs. Vocal music (Role of Lyrics and Instruments)
 Recorded music /video clips vs performing music in class
 Students' priorities (child's development)
 Affective vs cognitive responses
 External realities: school's technologic capacity
 Makam's suitability
 Content (not to be against Islamic principles)

E2. Finding relevant material

Solely teachers' responsibility
 Unsupportive teaching materials (textbook, teacher guides)
 Suffering from not having standards for the existing materials
 Deciding the activity
 Conformity between musical material and subject
 To facilitate teaching activities
 Searching online databases
 Producing music in class

E3. Sources for relevant materials

Teachers' workload and responsibility
 EBA- low visual and artistic standards
 YouTube- banned in school networks
 RE-specific material webpages- sharing similar materials

F. Proper 'school/class': *What kind of place?***F1. Physical Conditions****F2. Mentality (of the school/class)**

Sound-proofing
 classes

Technological equipment

Seeking ex-
 perts' advice

Approaches to the stu-
 dents

G. Proper 'student': *Who is s/he?***G1. Musical activities are for****G2. Expectations- Role of student**

Everyone
 (grade or age-
 related restric-
 tions)

Students as
 talented, dis/
 interested, or
 participant
 (Tags on the
 students)

Artistic: Singer /
 choir member;
 listener / audience;
 player / performer

**Cogni-
 tive:**
 Thinking,
 talking,
 discuss-
 ing

Self-exploring:
 Emotional re-
 sponse

H. Role and responsibility of the teacher: Who is s/he?

H1. Who is the teacher?

The Experienced (<i>already using music</i>)	The Hesitant (<i>not use; want to use; not know the way</i>)	The Dissident (<i>not use and not would like to use</i>)
Profession in RE and music	The willingness and awareness	Not knowing the way
Improved teacher education standards	Uncertainty about the method	Not leaving the personal comfort zone
Familiarity to use technology	The necessity of training	Having traditional outlooks in education
Lower average age	needs and supportive environment	

H2. Responsibilities of teachers

Finding proper music and connecting it to the subject/of the class	Selecting relevant activity for application	Conducting application process in the class	Caring for students' needs during the process.
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J. Musical activities: What it is/Why?

J1. Manifest Level (What?)

Main Activities, for everyone: Listening, singing, watching (with video clips), thinking / talking / discussing / conversation (Q&A session) about music

Talent-oriented class activities: Song / Lyrics writing, composing songs / chants (and rhythm / slogan patterns), playing instruments, homework / term-papers

Group works/dissemination: Participating in choirs; concert programmes, special-day programmes

Further professionalism: School-wide, local, and national competitions

Supportive for other activities: Storytelling, case analysis, playing-games, drama, music in break-times

Combination with other methods

J2. Latent Level (Why?)

Cognitive activation	Emotional response	Behaviour promoting
Teaching / Learning	Feeling	Acting / Attitudes

K. Reactions caused by music

Positive Negative Educational- against the intrinsic values

M. Problems

Lack of organisational support, Limited academic research	Personnel in the field	Structural aspects, Teacher education	Financial and technical resources
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N. Future directions

Government-centred thinking Collaboration (Academic-organisational- Local) Art-based- Or- Experience Sharing, Training for teachers

