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EXTENDED SUMMARY

Psycho-Social Aspects of Music Education Career Choice in Israel

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CHAPTER 1: LITERATURE REVIEW

This chapter introduces the theoretical background of the studies included in the doctoral thesis. The main topics that constitute the ground of this research are: social and cultural influence theories, musical development of children and adolescents, and attitudes towards teaching music in Israel.

1.1. Bronfenbrenner's theories, and Vygotsky's social-cultural approach

Bronfenbrenner developed two theories of human development (Bronfrenbrenner, 1979). The ecological theory categorized a range of environmental influences on the individual beginning from the closest environment such as the home defined as the *micro-system*, to more distal environments such as the educational system defined as the *meso-system*, to the most distant environments such as culture defined as the *macro-system* (Tudge, et al, 2009). An extension of this theory is the bio-ecological theory which also took into consideration the individual and interactions that continue to occur and develop throughout the individual's lifespan (Bronfenbrenner, 1977).

Vygotsky's Social-Cultural approach centred on the way humans are influenced by social, cultural and historical conditions (Daniels, Cole, & Wertsch, 2007; Miller, 2011). According to Vygotsky, human behaviour can be understood only in connection to the personal background of the individual (Miller, 2011).

1.2. Musical development

Music making appears across cultures (Cross, 2009) and the literature regarding musical development indicates that humans have an innate musical ability (Cross, 2009; Trehub, 2016). Connecting through sounds begins at birth and continues throughout adulthood (Sloboda, Wise, & Peretz, 2005). Lehman, Sloboda, and Woody (2007) pointed out that music activities at home, and especially with parents (defined as the *micro-system* environment by Bronfenbrenner) promote musical interest.

The *meso-system* environment (Bronfenbrenner, 1979) of schools in Western countries, expose children to musical experiences appropriate to their grade and age. In upper elementary grades and upon entering secondary school, adolescents tend to adopt beliefs and knowledge about the social implication of playing music from the surrounding society (Hargreaves & Marshall, 2003; Lamont, 2002). Music learning opportunities other than the school system include private music lessons or ensemble participation (Overland, 2017). Once music engagement continues into teenage years, it may promote the development of a musical identity (Kokotsaki & Hallam, 2007).

Musical activities contribute to musical achievements and to the social sense of belonging (Kokotsaki & Hallam, 2007). Hudziak et al. (2014) found that children who play musical instruments go through an earlier maturation of the brain's cortical thickness, which affects the development of movement skills. Psychological benefits of playing include a sense of self-achievement and increased self-confidence, self-esteem, and a sense of mental well-being (Kokotsaki and Hallam, 2007).

Children and adolescents who study with a private music teacher experience a solitary path in which parent support is highly important. Types of parent support include behavioral support, cognitive/intellectual support, and personal support (Creech, 2006).

1.3. Motivation for teaching

Motivation, generally defined as the energy that activate a movement to do something (Ryan and Deci, 2000), is a significant factor in the practice of music (Creech, 2010). Several theories have been developed to explain motivation. **The self-concept theory** addresses the perceptions of people about themselves, as these perceptions are influenced by the way other people evaluate them (Greenberg, 1970). These concepts begin to take shape early in life, at the stage when children are able to compare themselves to others on task performance (Greenberg, 1970). **The self-efficacy theory** developed by Bandura (1993) addresses the personal beliefs in one's self-capabilities to organize and take the necessary actions to perform a task (Bandura, 1993). This is seen amongst children who when learning to play a musical instrument arrange their own practice schedule, and decide on the best practice techniques required to achieve their musical aims (Lehmann, Sloboda, & Woody, 2007). **The self-determination theory**, developed by Deci and Ryan (2008), perceives motivation as a multi-faceted compound. At the core of this theory is the assumption that humans are active beings, that are motivated to get, process, and assimilate new information (Adams, Little, & Ryan, 2017). When people experience support and encouragement while developing their abilities, they can flourish (Adams, Little, & Ryan, 2017). **The flow theory** developed by Csikszentmihalyi (1990) describes the state of optimal experience where engagement in a task reaches a point of losing track of time, fatigue, and external stimuli, while there is a state of high immersion in the task. This high involvement includes a feeling of strength, alertness, and effortless control all of which lead to reach the peak of personal abilities.

In the field of education three major types of **motivations for choosing a teaching career** were identified. **Intrinsic motivation** which is accompanied by a notable amount of joy, satisfaction, creativity and interest in the personal doing (Heinz, 2015; Osguthorpe & Sanger, 2013), **altruistic motivation** which is connected to the value of social contribution (Heinz, 2015; Katsir, Sagee, & gilat, 2004; Kyriacou & Coulthard, 2000; Osguthorpe & Sanger, 2013), and **extrinsic motivation** which refers to aspects that are utilitarian such as higher status, better payment, and job security. Research in non-Western countries found that extrinsic motivation had the greatest impact on the choice for a career in education (Heinz, 2015).

1.4. Pursuing a career in education and music education

Aspiring for a career in education is related to past positive experiences with learning and teaching (Kyriacou & Coulthard, 2000; Osguthorpe & Sanger, 2013). Individuals who fulfilled their teaching aspirations, had a sense of self-satisfaction which, in turn, enhanced their achievements and led to an overall feeling of well-being (Gati & Levin, 2012).

Aspiring for a **career in music education** can be related to positive past experiences with music during one's school years (Rickels et al., 2013) as well as the love of music (Thornton, 2013) and the love of teaching or sharing music (Jones & Parkes, 2010). Teacher role models were also of importance whether be it a school teacher (Rickels et al., 2010), a private teacher (Davidson, Moore, Sloboda, & Howe, 1998; Rickels et al., 2010), or ensemble directors (Rickels et al., 2013).

1.5. Cultural affiliation

Cultural affiliation is defined during the process of a child's socialization and enculturation (Ilari, Chen-Hafteck & Crawford, 2013). The cultural affiliation of a child and the level of

family religiosity affects possible participation in musical activities, and music learning (Gaunt & Hallam, 2009). Musical cultures are differentiated by many aspects, among them the importance attributed to music in the society, and ideas concerning music. Children are exposed to the musical heritage of their family and community, and these provide the initial musical exposure (Gaunt & Hallam, 2009). Lack of approval or financial limitation can present obstacles in learning to play music (Gaunt & Hallam, 2009). Not all children can avail themselves of a musical education, be it for reasons of geography, finances, or even religious beliefs that restrict or even ban musical activities.

1.6. Religious cultures within Israel

The state of Israel has a multicultural society, with a Jewish majority and a large Arab minority. Of a population of 7.8 million in 2011, 75.4 % were Jews, 20.6% Arabs, and 4% others (Central Bureau of Statistics, 2013). The majority (84%) of the Arab population was Muslim (Central Bureau of Statistics, 2013) while the minority (15%) were about half Druze and half Christian Arabs (Central Bureau of Statistics, 2013). The attitudes of the four religions towards music range from complete acceptance of music as exemplified in the Jewish and Christian religions, to the complete banishment of music and music activities as exemplified within the orthodox Muslim and Druze religions.

A historical overview regarding the attitudes towards music of these four monotheistic religions according to their chronological development, reveal that in **Judaism** musical practices existed amongst the ancient Israelites. These musical practices were influenced by the regional people – the Bedouins (Kraeling & Mowry, 1991). Grout (1980) assumes that the first **Christians,** who were originally a Jewish sect, created their religious ceremonies with similarity to the ceremonies that they knew (Burkholder et al., 2006; Grout 1980). In the New Testament, the first musical activity mentioned is singing of hymns by Jesus and his disciples. During **pre-Islam period**, singing and playing had always been an integral part in the life of the people living in the Arabian Peninsula while the leading centers were Mecca and Medina (Shiloah, 1999). The **beginning of Islam** is marked by concurring journeys of the Prophet Mohammad and his disciples. Their occupation of new territories brought many artists and musicians to the Arabian Peninsula (Shiloah, 1999). During the seventh century, two conflicting views concerning music activities evolved within **Islam**, both based on varying interpretations of the Quran: one view saw no contradiction between the Prophet's teachings and musical activities, whereas the other banned all types of musical activities which had secular characteristics (Shiloah, 1999). **The Druze** orthodox leaders adopted the Islamic attitude of prohibiting secular music (Hood, 2007).

Transitions, cultural boundaries and trends of music integration in the lifestyle of Arab Israeli inhabitants

In 2016 it was reported that 58% of the Muslims in Israel declared that they would like to live by the Islamic law (Pew Research Center, 2016). In the Islamic history, the religious law had a profound impact on the daily life, as it served as the most important source of legitimacy (Litvak, 1997). A brief historical overview gives insights to social processes the Arab population went through since the establishment of the state of Israel in 1948. In 1967, after the Six-day War, the borders of the State of Israel expanded to include the Sinai Peninsula, the West Bank (and Gaza strip), the Golan heights, and the Old City of Jerusalem (Lorch, 2013).

The inclusion of the West Bank reconnected the Arab population of Israel with those from the West Bank, from whom they had been cut off since the establishment of the state of Israel in 1948 (Aburaiya, 2005). The renewed connection with the Arab religious leadership led to strengthening of Islamic religious ideology (Aburaiya, 2005; Lavie, 2016).

During the last several years, and clearly from results of the elections to the Israeli parliament in 2015, there was a pragmatic approach of the Arab sector in Israel that tended to focus on its status as a national minority (Lavie, 2016). This integration process, as well as social changes related to modernization, caused a process of adaptation or change in which the individual or the ethnic group adapts to the cultural values of the majority group (Al-Krenawi, 2007). The Palestinian generation living in Israel that are currently around ages 20-30 years have ceased to accept the cultural boundaries regarding music activities that were imposed by the orthodox leadership (Karkabi, 2013). Karkabi (2013) describes a generation that views music and dance as an integral part of their lives, a fact that reflects the cultural change that is currently taking place.

1.7. The music education system in Israel: schooling, music learning and pursuing career

The Israeli education system is divided into three main branches – state, state-religious, and state Arab. The state education is divided according to ages from K-12, and all children are expected to attend school under the Compulsory Education Law of 1949. Children's school placement into kindergartens and schools is affected by language (Hebrew or Arabic) and level of religious orthodoxy. The Ministry of Education in Israel is responsible for the core curriculum as well as for the suggested elective subjects. Regarding music, the majority (85%) of Jewish elementary schools in Israel have music programs as well as many of the kindergartens. This is not the case with the Arab schools and kindergartens (B. Kupervaser, personal communication, July 2016). In the Jewish educational system there are about 130 high-school music programs (The Knesset Research and Information Center, 2016), whereas in the Arab educational system there are to date only four high-school music programs (B. Badarne, personal communication, 2018).

Music performance is studied at conservatories and music centers, as well as with private music teachers (Knesset, Research & Information Center, 2016). Geographical location of one's residence and financial cost affects the possibilities to study music. In 2010, 81.4% of the Jewish population and only 39.6% of the Arab population resided in urban localities (Gharrah, 2013). The result of this is that since most music teachers reside in urban areas, the majority of the Arab population do not have access to music teachers in their vicinity. Also according to Gharrah (2013), the average income of an Arab household is 40% lower than that of a Jewish household in Israel. Therefore, there would be less likelihood of meeting the financial costs of music studies by the Arab population.

The majority of Israeli students that pursue an education careers are females. In 2016, women accounted for approximately 90% of the students in teacher-education programs in academic colleges in Israel (Central Bureau of Statistics, 2016).

1.8. Justification of the doctoral research – Gap in knowledge

There is a gap in the knowledge of the different psycho-social characteristics of Israeli Jewish and Arab music education students in regard to (1) cultural aspects concerning music and music

education, (2) individual aspects concerning the musical upbringing of Jewish and Arab Israeli students, (3) and attitudes towards teaching music.

The Israeli Jewish and Arab music education students come from two cultural groups and from different backgrounds. Their cultural affiliation affects possible participation in musical activities, and music learning.

This doctoral research is designed to inquire differences and similarities between Jewish and Arab music education students in Israel, as well as the current trends of cross-cultural music integration in relation to aspects of psycho-social wellbeing and music career choice in Israel.

Importance of the research

- To create awareness of differences between Jewish and Arab cultural attitudes toward music. These differences may serve as guidelines to develop educational programs regarding the value of music learning and playing during childhood and the importance of social support (family, schools, society) in this process.
- The existence of two views of Quran interpretations regarding music activities, of hardliners and of lenient views, may point to the need of explaining the wider context of making music in class and of learning musical instruments.
- Realizing the differences between Israeli children, Jewish and Arab, in their upbringing and in exposure and possibilities to study music may indicate a need for promoting conversations with parents in regard to the value and contribution of music learning.
- The differences in the musical background may serve as a guideline for academic programs that may use the information while creating curriculum.
- Understanding the reasons for the restrictions regarding music making may lead to a path of creating contact with Arab community leaders in order to promote and get an approval for music learning of Arab children.
- There is an applied value of identifying the attitudes of Jewish and Arab students toward teaching music. These attitudes may shed light on current directions regarding music education of the two cultural groups and may mark current sociological changes.

CHAPTER 2: METHODOLOGY

This section is a description of the research paradigm selected for the doctoral research and the rationale for choosing it.

2.1. Research paradigm

A mixed methods research paradigm (quantitative and qualitative methods) was used in order to answer the research questions. The aims for using the mixed methods paradigm in this doctoral research are:

- To identify the categories of psycho-social background information and attitudes toward music education career that can be included in the development of a research tool, in this case, a questionnaire;
- To collect quantitative data from students in music-education college programs in Israel;
- To gather data from interviews with two focus groups (Jewish and Arab graduates of music education programs who are currently music teachers), aiming to achieve a deeper understanding of the reasons and choice of music education career in Israel;

- To analyze the findings of the questionnaire and the information from the focus groups and produce triangulation of the findings regarding the differences between the two ethnic groups of Israeli students in music education (Jewish and Arab).

2.2. The three research studies

The doctoral research consisted of three studies

Study 1: The construction of a Questionnaire – Cultural Attitudes toward Music Experience and Education (CAMEE), aiming to assess the psycho-social variables (cultural and individual) related to music education career choice.

Study 2: A quantitative study in which the CAMEE questionnaire was distributed to the Arab and Jewish music-education students and results were statistically analyzed.

Study 3: A qualitative study, which consisted of interviews with two focus groups of Jewish and Arab music teachers who were graduates of music education programs.

2.3. Research population

Study 1 included 20 Israeli musicians**,** 9 of which were Jewish and 11 Arab. 25% of the participants were 25-30 years of age, 40% were 31-40 years of age, and 35% were 41-50 years of age.

Study 2 included 50 Israeli music education students, 26 of which were Jewish and 24 Arab. 50% of the participants were 18-24 years of age, 32% were 25-30 years of age, 12% were 31-40 years of age, and 6% were 41-50 years of age. The majority of the Arab students (79%) were 18-24 years old compared to only 23% of the Jewish students that were within that age group. The majority of the Jewish students (58%) were 25-30 years old. The age difference between the groups is attributed to the fact that Jewish students generally begin their higher education after their military service whereas Arab students usually enter university or college directly from high school thereby beginning their studies around age 18.

Study 3 included 7 Israeli music teachers between the ages of 25-40 who had graduated from a music education program. Two focus groups were formed: one Jewish group (n = 4) and one Arab group (n = 3). The researcher personally contacted each of the Arab music teachers. Six participants confirmed their participation. One graduate has cancelled her participation the evening before the meeting, and two did not show up. Jewish graduates were contacted by a music teacher that was a contact person.

2.4. Research tools

CAMEE questionnaire (Cultural Attitudes toward Music Experience and Education)

A research tool named the CAMEE questionnaire was constructed based on the analysis of previous questionnaires from studies targeting the attitudes towards music and music education. The CAMEE questionnaire was designed to collect information regarding psycho-social (cultural and individual) aspects of Jewish and Arab Israeli students who choose a career in music education in Israel. These aspects include information regarding music studies during their childhood, cultural and individual aspects related to the choice of music education career, and attitudes toward teaching. Psychometric properties, such as reliability of the CAMEE instrument were assessed based on the computation of the internal consistency (Cronbach's Alpha). The reliability values were computed for the general scale, as well as for the sub-scales

of the questionnaire according to the sub-themes that were designated from the participants' responses.

Qualitative in-depth interviews

For the third study (qualitative research), the focus group and content analysis (theme-based) methods were used. Focus group method allows researchers to effectively identify attitudes and perspectives of the participants (Hennink, 2017). As the focus group brings forth different opinions that exist within the group, it is crucial that each participant be able to express himself or herself so that the information gained will be as full as possible (Shkedi, 2012). This becomes especially important in the case of cross-cultural study where two different ethnic groups are being studied (Hennink, 2017). The themes for the focus-group meeting were specifically designed by the researcher. These themes were based on the research literature review, the research goals, and the findings from the questionnaires. The focus group **themes** include: ***Demographic information*** (age, ethnicity, residential area, previous music background, academic background, and current occupation), ***Insights regarding research topics*** (musical knowledge, attitudes toward teaching music, parents and music teacher support), Insights regarding ***Cultural aspects related to music experience*** (the participant's childhood family and community, current attitudes toward music learning), ***Personal musical experiences as graduate student and music teacher*** (music experiences during and after graduation).

2.5. Triangulation and generalization

Triangulation involves an organization of data from various research methodologies (Teddlie & Tashakkori, 2009). Greene et al. (1989) claimed that triangulation can decrease bias and increase the validity of a single research.

Generalizability allows the researcher to extend the findings of a research to other cases, environments, and populations (Goertz & Mahoney, 2012; Shkedi, 2012). The quantitative research aims for objectivity in collecting data using standard tests and statistical analysis (Shkedi, 2012). The qualitative interviews supported and added in-depth cultural and personal related information to the quantitative data derived from the CAMEE questionnaires. Thus, because the present study combined several research methods that confirmed and complemented each other, the conclusions can be cautiously generalized to similar global cases related to Western students, and Middle Eastern Arab students who study music education.

2.6. Ethical considerations

The researcher maintained clear ethic rules and behavior in this research in accordance to the national and international legislative frames regarding ethics in academic research.

Participants' anonymity consent: The students who completed the questionnaire signed an informed-consent letter. They received information on the research objectives and on the anonymity and discretion that would be maintained regarding their names and identifying details. Permission to distribute the questionnaires was accepted either by Ethical Committees, or heads of the departments.

2.7. Statistical analysis of the data

Statistical analysis of the data used the following tests: Chi-square test, t-test, Cluster analysis, and EFA (exploratory factor analysis). All statistical analyses of variance were conducted using IBM SPSS statistics version 22. Normality distribution of the data was checked before proceeding to the statistical analysis in accordance to the hypotheses of each of the studies.

CHAPTER 3: ORIGINAL RESEARCH CONTRIBUTIONS

3.1. Study 1: Development and validation of the CAMEE (Cultural Attitudes toward Music Experience and Education) questionnaire

3.1.1 Introduction

This study focuses on several psycho-social differences between Jewish and Arab Israeli students that were enrolled in music education programs. A thorough research review which included previous studies in education (Katsir, Sagee, & Gilat, 2004), music education (Bergee et al., 2001; Henry, 2015; Mclellan, 2011; Rickels et al., 2013; Rickels et al., 2010; Taylor & Hallam, 2011), and research tools (Bergee et al., 2001; Henry, 2015; Mclellan, 2011; Rickels et al., 2013; Taylor & Hallam, 2011) was conducted. Following the research review the following key concepts were found to be relevant: music and religion, encouragement and support in music instrumental learning, music exposure, music education, and music education career choice.

The objective of study 1 was to construct and validate a questionnaire in order to identify psycho-social differences and similarities between Jewish and Arab Israeli students in relation to music education.

3.1.2. Methodology

The methodology used in the study in order to construct and validate the CAMEE questionnaire included a pilot study, and a reconstruction of the questionnaire, according to findings of the validation process.

Questionnaire construction

The questionnaire included adapted questions from several questionnaires: the *Music Education Career Choice Survey* (Bergee et al., 2001), the High School All-State Musicians Survey (Henry, 2015), the *Attitudes Toward Teaching Questionnaire* (in Hebrew; Katsir, Sagi, & Gilat, 2004), the *Parental Influence on Self-Concept as a Music Educator Survey* (PISCAM; McClellan, 2011), the *University Parental Involvement Measure* (UPIM; McClellan, 2011), the *University Parental Influence on Decision* (UPID; McClellan, 2011) questionnaires, and the *Survey of Music Education Audition* Candidates (Rickels et al., 2013). In addition, several questions relating specifically to this study were developed by the researcher.

The pilot version of the CAMEE questionnaire included the following information categories: demographic information, musical experience during childhood, musical experience as a student, cultural aspects regarding general music experience, attitudes towards teaching, and cultural influences. Open questions regarding the impact of society on the decision to study music and optional free additional information were also included.

Questionnaire validation

The process of validation of the questionnaire included **Content-related** discussions with experts in order to identify themes, adaptation and translation of questions into Hebrew, questionnaire review by experts for content validation. Four graduate students (Jewish and Arab) were asked to fill out the questionnaire and were interviewed regarding the clarity and

wording of the questions. **Reliability validation and sub-scales identification** were based on a pilot study which included 20 professional Jewish and Arab musicians.

3.1.3. Findings

Reliability of the CAMEE pilot questionnaire was assessed based on the computation of the internal consistency (Cronbach's Alpha). According to Tavakol and Dennick (2011) an accepted Cronbach's Alpha values are between α = .70 to .95. The items and reliability values of the sub-scales of the questionnaire are presented in Table 1.

Table 1. Cronbach's Alpha values for the five categories of the CAMEE questionnaire (pilot version).

Question number	**Exposure to music at home** (4 items)	**α = .769**
17.1	Listened to music	
17.2	Sang songs	
17.3	Sang prayers or hymns praises	
18	Played musical instruments	
	Personal motivators for playing (4 items)	**α = .654**
28.1	I started to play because I loved the sound of my musical instrument	
28.2	I started to play because I wanted to play in a band/ensemble	
28.5	I started to play because I wanted to be a music teacher	
28.6	I started to play because I wanted to be a musician	
	Social motivators for playing (2 items)	**α = .484**
28.3	I started to play because my parents thought it is important	
28.4	I started to play to be socially accepted	
	Educational & ideological motivations for teaching music (7 items)	**α = 831**
29.1	I choose to teach music so I can keep on developing in the field of music	
29.2	It is a way of working in a loved profession	
29.3	It is a way to influence children to play a musical instrument	
29.4	It is a way to keep children out of the street with a positive activity	
29.9	I love teaching	
29.10	It is a way to contribute to the society through educating the young generation	
29.11	I feel a sense of calling	
	Utilitarian reasons for teaching music (4 items)	**α = .872**
29.5	Teacher is an occupation that raises social statues	
29.6	Teaching is a needed profession	
29.7	It enables mobility to teach other subjects at school	
29.8	The salary is good	
	Importance attributed to music skills and knowledge required to be a good music teacher (7 items)	**α = .890**
30.4	A good instrumental playing ability	
30.5	A good singing ability	
30.7	A good music analytic ability	
30.8	An ability to direct band/ensemble	
30.9	Knowledge in a variety of music style	
30.12	Good knowledge in music teaching methods	
30.13	Good Solfege knowledge	
	Importance attributed to personal qualities required to be a good music teacher (3 items)	**α = .835**
30.1	To have good relationship with children	
20.2	To love teaching	
30.3	To love teaching music	
	Knowledge of Western & Eastern classical music and theory (4 items)	**α = .728**
30.10	Good knowledge of Western Classical music	

30.11	Good knowledge of Middle Eastern Classical music	
30.14	Good knowledge of Western Classical music theory	
30.15	Good knowledge of Middle Eastern music theory	

3.1.4. Discussion, conclusions and limits

The aim of study 1 was to construct and validate the CAMEE questionnaire. The original questionnaire consisted of eight internal sub-scales. All but two of the sub-scales had good internal consistency values ranging from α =.728 to α =.890. The sub-scale of personal motivation for playing had a low to medium consistency value (α = .654) which probably was due to the small sample size, *N* = 20. The sub-scale of social motivators for playing had a low value of α (.484) and was therefore omitted from the final questionnaire. The findings of this study support the reliability of the CAMEE questionnaire.

The first study of this PhD research contributes to the development of a questionnaire that can examine the factors related to music education and music career choice not only in Israel, but also in other countries and cultures, thereby making a methodological valuable contribution to the screening of cultural influences on students studying music education.

3.2. Study 2: Comparative investigation of the psycho-social factors (cultural and individual) related to music education career choice of Israeli students

3.2.1 Introduction

The cultural affiliation of a child affects possible participation in musical activities, and music learning (Gaunt & Hallam, 2009). Study 2 centers on the identification and analysis of cultural differences and similarities in psycho-social factors of Israeli Jewish and Arab students in music education.

The aim of the second study was to compare Israeli Jewish and Arab music education students regarding (1) musical preferences and family involvement in music studies during their childhood, (2) musical experiences during childhood and while studying for an academic degree, and (3) attitudes towards teaching; motivations, skills, and personal characteristics.

3.2.2. Methodology

Participants were 50 Israeli students, 26 Jewish and 24 Arab. 50% were 18-24 years of age, 32% were 25-30 years of age, 12% were 31-40 years of age, and 6% were 41-50 years of age. The majority of the Arab students (79%) were 18-24 years old compared to only 23% of the Jewish students were within that age group. The majority of the Jewish students (58%) were 25-30 years old. About 70% of both groups were females, and 30% were males.

Instruments

The CAMEE questionnaire was used for data collection in study 2.

3.2.3. Findings

Reliability of the CAMEE instrument was assessed again. Computation of the internal consistency (Cronbach's Alpha) was based on the responses of the 50 participants and are shown in Table 2.

Table 2. Cronbach's Alpha values – sub-scales of the CAMEE questionnaire.

Exposure to music at home (4 items)	**α = .710**
Personal motivators for playing (4 items)	**α = .731**
Educational and ideological reasons for teaching music (7 items)	**α = .904**
Utilitarian reasons for teaching music (4 items)	**α = .911**
Importance attributed to music skills and knowledge required to be a good music teacher (7 items)	**α = .946**

Importance attributed to personal qualities required to be a good music teacher (3 items)	**α = .960**
Knowledge of Western and Middle Eastern classical music and theory (4 items)	**α = .913**

Compared to the pilot version of the CAMEE questionnaire (study 1), it was observed that Cronbach's Alpha values for the sub-scales on the CAMEE questionnaire were higher on the second study (all of them were above 0.7).

Findings concerning the first research question and the related hypotheses.

The first research question was: Is there a difference in the type of musical preferences and family involvement in music instrumental studies of Jewish and Arab Israeli students? The related hypotheses were: 1) There will be differences in music styles listening preferences, in music styles performed, and in music instruments played between the two ethnic groups (Jewish and Arab); 2) There will be a difference in the reported involvement of family members as an influencing force in favor of studying music between the ethnic groups (Jewish or Arabs). The reported level of influence of family members in favor of studying music will be higher among the Jewish than among the Arab students.

Findings are presented according to the following seven themes: Musical style listening preferences, Musical instruments played by Jewish and Arab students, Music styles played in ensemble during adulthood, Solfege studies, Music theory studies, Self-Reported Personal skills in regard to Music Theory knowledge, Encouragement and support in music learning while being a child.

A. Musical style listening preferences

A cluster analysis was performed to profile students within groups of preferred musical styles

listening preferences. Figure 1 show the clusters that express preferences for music styles.

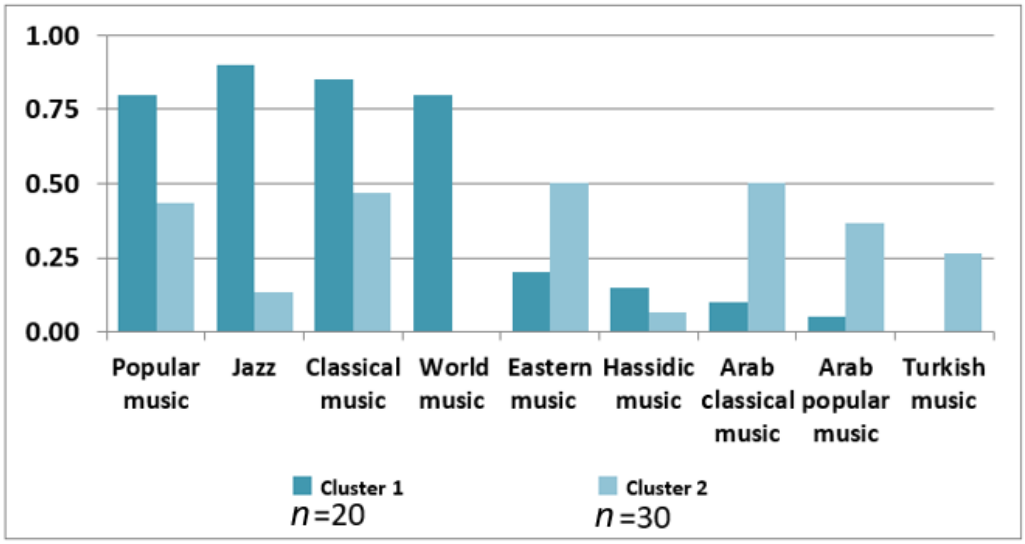

Figure 1. Preferred musical styles Clusters that express preferences for music styles.

The findings showed two types of musical style listening clusters. The first musical style listening cluster included predominantly Western style genres of jazz, Western classical music, and popular music, as well as world music. The second musical style listening cluster included predominantly Arabic style genres of Middle Eastern Arabic music, Arab classical music, Arab popular music, and to a lesser degree Turkish music. The results of the chi-square test indicated significant differences between the two clusters ($\chi^2 = 24.69$, $p < .001$, $N = 50$). The first musical style listening cluster characterized the listening preferences of 20 students (40%) of whom almost three quarters were Jewish students (73%) and only one of them was an Arab student

(4%). The second musical style listening cluster characterized the listening preferences of 30 students (60%) which included all but one of the Arab students (96%) and just over a quarter of the Jewish students (27%).

B. Musical instruments played by Jewish and Arab students

49 participants that responded to the question *"What musical instruments do you play?"* yielded a total of 13 types of instruments. Some instruments were mentioned only once (clarinet, bass guitar) or twice (saxophone, drums) and only by the Jewish students. It was therefore decided to form seven musical categories: piano, electric keyboard, strings (which included guitar, bass guitar, and violin), percussion (which included darbuka – a Middle Eastern drum, and drums), wind (which included saxophone, recorder, and clarinet), voice and oud (i.e. a typical Middle Eastern stringed musical instrument). As shown in figure 2, findings showed two significantly different musical instrument clusters of the Israeli Jewish and Arab music education students.

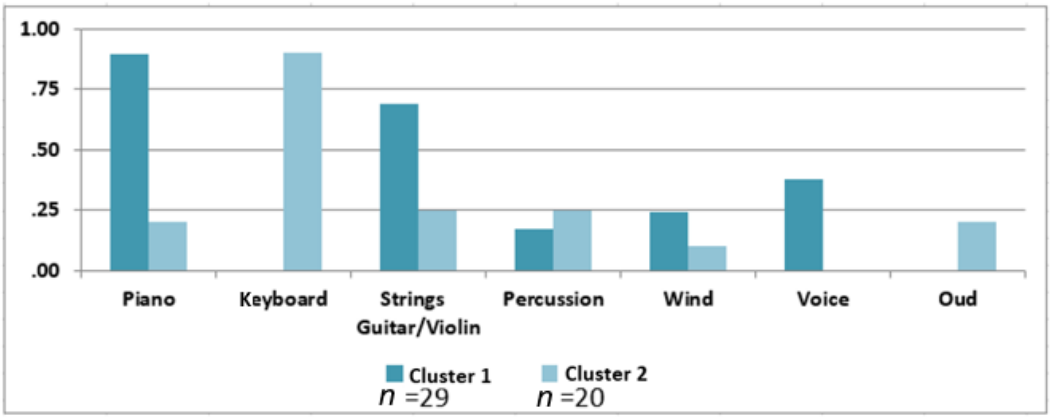

Figure 2. Cluster of musical instruments played by Jewish and Arab music education students.

Chi-square analysis of the two musical instrument clusters show significant difference in the frequency distribution of musical instruments that were played by the students of both ethnic groups ($\chi_1^2 = 31.34$, $p < .001$, $N = 49$). Among the Jewish students, most reported voice, strings, and piano as their instrument, whereas most Arab students reported keyboard, strings, and percussion as theirs instrument. Voice was typically reported by the Jewish students and keyboard and oud were reported only by the Arab students.

C. Music styles played in ensemble during adulthood

Table 3 presents the two significantly different musical styles played in bands by Arab and Jewish students (results of the chi-square analysis).

	Arab		**Jewish**		**All**		χ^2
Musical style	**Freq.**	**%**	**Freq.**	**%**	**Freq.**	**%**	
Western	2	40	9	90	11	73.3	4.26*
Middle Eastern	3	60	1	10	4	26.7	

*$p < .05$. **$p < .01$. ***$p < .001$

The Chi-square analysis shows the frequency distribution between Western and Middle Eastern musical styles played, and indicates that there is significant difference ($p < .05$) between the musical styles played in bands by the two ethnic groups. Western music was significantly more prevalent among Jewish students than among their Arab peers.

D. Solfege learning and reported personal ability

No significant differences were found in the Chi-square analysis ($p > .05$) between the groups regarding solfege study, although more Jewish students had studied solfege (56%) than Arab students (29.2%). Self-reported level of solfege skills of the Jewish and Arab students *t*-test analysis for independent samples indicated no significant differences between the groups ($p > .05$; Arab $M = 4.04$, $SD = 1.07$ Jewish $M = 3.72$, $SD = 1.10$). The reported mean of both groups signifies middle-range level solfege skills.

E. Music theory studies

Significant differences in Western and Middle Eastern theory studies were found between the Jewish and Arab students.

Table 4. Music theory studies of the Jewish and Arab students (Chi-square analysis).

		Arab		**Jewish**		**All**		χ^2
		Freq.	**%**	**Freq.**	**%**	**Freq.**	**%**	
Did you study Western music theory?	No	11	45.8	3	12.0	14	28.6	6.90**
	Yes	13	54.2	22	88.0	35	71.4	
Did you study Middle Eastern Arab maqam [musical scales] music theory?	No	3	12.5	23	92.0	26	53.1	31.07***
	Yes	21	87.5	2	8.0	23	46.9	

*$p < .05$. **$p < .01$. ***$p < .001$.

The Chi-square analysis indicates significant differences between the groups in their Western and Middle Eastern music theory studies. 88% of the Jewish students studied Western music theory while 54% of the Arab students did so ($\chi^2 = 6.90$, $p < .01$, $N = 49$), and 88% of the Arab students studied Middle Eastern music theory, whereas only 8% of the Jewish students did so ($\chi^2 = 31.07$, $p < .001$, $N = 49$). *Most Jewish students had studied Western music theory and most Arab students had studied Middle Eastern music theory***.**

F. Self-reported personal skills of music theory knowledge

The *t*-test analysis for independent samples shows that there was a significant difference between the Jewish students ($M = 1.59$, $SD = 0.90$) and the Arab students ($M = 4.55$, $SD = 1.06$) as to self-reported knowledge in Middle Eastern music theory. Arab students self-reported a much higher level of knowledge in Middle Eastern music theory ($t_{42} = -9.95$, $p < .001$]. There were no significant differences between the groups regarding Western music theory ($p > .05$).

G. Encouragement and support in music learning while being a child

Table 5. Encouragement and support in music learning as a child among Jewish and Arab students (Chi-square analysis).

		Arab		**Jewish**		**All**		χ^2
		Freq.	**%**	**Freq.**	**%**	**Freq.**	**%**	
Were there people during your life that encouraged you to learn a musical instrument?	No	7	31.8	2	7.7	9	18.8	4.60*
	Yes	15	68.2	24	92.3	39	81.3	
My mom encouraged me	No	17	70.8	6	23.1	23	46.0	11.46**
	Yes	7	29.2	20	76.9	27	54.0	
My dad encouraged me	No	14	58.3	8	30.8	22	44.0	3.85*
	Yes	10	41.7	18	69.2	28	56.0	
My relatives encouraged me	No	18	75.0	16	61.5	34	68.0	1.04
	Yes	6	25.0	10	38.5	16	32.0	
	No	19	79.2	19	73.1	38	76.0	0.25

My friends encouraged me	Yes	5	20.8	7	26.9	12	24.0	
A community musician encouraged me	No	23	95.8	25	96.2	48	96.0	0.03
	Yes	1	4.2	1	3.8	2	4.0	
My school teacher encouraged me	No	22	91.7	25	96.2	47	94.0	0.45
	Yes	2	8.3	1	3.8	3	6.0	
My music teacher encouraged me	No	20	83.3	15	57.7	35	70.0	3.91*
	Yes	4	16.7	11	42.3	15	30.0	

* $p < .05$. ** $p < .01$. *** $p < .001$

Significant differences were found between Jewish and Arab students regarding encouragement in their music learning. This included: **a) people who encouraged the students to learn to play** ($\chi^2 = 4.60$, $p < .05$, $N = 50$). 92% of the Jewish students compared to 68% of the Arab students reported people who had encouraged them; **b) mothers' encouragement** ($\chi_1^2 = 11.46$, $p < .01$, $N = 50$). 77% of the Jewish students compared to only 29% of the Arab students listed their mother as the person who encouraged them; **c) fathers' encouragement** ($\chi^2 = 3.85$, $p < .05$, $N = 50$). 69% of the Jewish students compared with 42% of the Arab students listed their fathers as the person who encouraged them; **d) music teachers' encouragement** ($\chi^2 = 3.91$, $p < .05$, $N = 50$). 42% of the Jewish students and only 17% of the Arab students listed their music teacher as the person who encouraged them. Some level of encouragement (without statistical differences) was identified between the groups regarding **relatives** (Jewish 39%, Arabs 25%) and **friends** (Jewish 27%, Arabs 21%). Low encouragement was identified from community musicians (Jewish 4%, Arabs 4%), or school teachers (Jewish 4%, Arabs 8%). It is notable that while for the Jewish students the mother is listed by more students (77%) than the father (69%) as the main source of encouragement, for the Arab students it is the father who is listed more (42%) than the mother (29%).

The first hypothesis was confirmed. Cultural differences between the two ethnic groups, Jewish and Arab students, were found in music-style listening preferences, music styles played, and theoretical knowledge. The Jewish students tended to listen to Western-style music, play it, and know about Western music and theory, whereas the Arab students tended to listen to Middle-Eastern style music, play it, and know about Middle Eastern music and theory. The choice of musical instruments differed between the ethnic groups.

The second hypothesis was confirmed. Cultural differences were shown also by the different level of encouragement and support to learn music, where Jewish students received more encouragement for music instrumental studies.

Findings concerning the second research question and the related hypothesis.

The second research question: Is there a difference between Israeli Jewish and Arab students in their musical experience during childhood, and in their musical skills and activities while studying for an academic degree in music education? The related **Hypothesis 3** was: There will be a difference between the two ethnic groups regarding their musical background during childhood, and their musical activities while studying in their academic program. Jewish students will report more experience during childhood with music and instrumental playing than will their Arab peers.

Findings are presented in two sections. Section I relates to music experiences during childhood and includes the following five themes: A) Exposure to music at home, B) Music classes at school, C) Grade levels at which music lessons were offered, D) Instrumental and vocal learning, E) Participation in ensemble playing. Section II relates to musical skills and activities while studying for an academic degree and includes the following three themes: A) Practice sessions during the week while being a student, B) Ensemble participation while being a student, C) Performing with music ensemble.

Section I: Findings related to musical experiences during childhood

A. Exposure to music at home

The comparative analysis between the Jewish and Arab students regarding exposure to music at home was performed by using a *t*-test analysis for independent samples, due to normal distribution of the data (Table 6).

Table 6. Exposure to music at the home of Jewish and Arab students (independent t-test).

	Arab		**Jewish**		**All**		***Df***	***t***
	Mean	***SD***	**Mean**	***SD***	**Mean**	***SD***		
Listened to music	4.68	1.49	5.42	1.07	5.08	1.32	37.20	1.95
Sang songs	3.41	1.87	4.88	1.31	4.21	1.74	36.69	3.12**
Sang prayers or hymns praises	2.73	1.83	2.50	1.75	2.80	1.77	46	-0.44
Played musical instruments			3.35	1.83	3.00	1.90	46	1.38

* $p < .05$. ** $p < .01$. *** $p < .001$.

The *t*-test analysis shows a significant difference between the Jewish students' exposure to singing songs at home ($M = 4.88$, $SD = 1.31$) and that of the Arab students ($M = 3.41$, $SD = 1.87$). Jewish students reported higher level of singing at home ($t_{36.69} = 3.12$, $p < .01$) than Arab students. No differences were found regarding listening to music at home (Jewish $M = 5.42$, Arab $M = 4.68$, $p > .05$). Low exposure was reported regarding playing musical instruments at home (Jewish $M = 3.35$, $SD = 1.83$, Arab $M = 2.59$, $SD = 1.94$, $p > .05$), and singing prayers or hymns (Jewish $M = 2.50$, $SD = 1.75$, Arab $M = 2.73$, $SD = 1.85$, $p > .05$). Note that none integer degrees of freedom is the result of unequal variance assumption based on a preliminary Levene's test (Field, 2009).

B. Music classes at school

The chi-square analysis that was conducted to reveal differences in exposure to music classes at school shows no significant difference ($p > .05$) between the ethnic groups regarding exposure to music classes at school. 92% of the Jewish students and 83% of the Arab students had music classes at school.

C. Grade levels at which music lessons were offered

Table 7. The grade levels at which music lessons were offered while the students were at school (chi-square analysis)

	Arab		**Jewish**		**All**		χ^2
	Freq.	**%**	**Freq.**	**%**	**Freq.**	**%**	
Grade 1	4	16.7	22	84.6	26	52.0	23.09***
Grade 2	4	16.7	20	76.9	24	48.0	18.15***
Grade 3	12	50.0	19	73.1	31	62.0	2.82
Grade 4	17	70.8	20	76.9	37	74.0	0.24
Grade 5	16	66.7	16	61.5	32	64.0	0.14
Grade 6	11	45.8	15	57.7	26	52.0	0.70
Grade 7	6	25.0	3	11.5	9	18.0	1.53
Grade 8	4	16.7	2	7.7	6	12.0	0.95

Grade 9	4	16.7	4	15.4	8	16.0	0.02
Grade 10	1	4.2	8	30.8	9	18.0	5.98*
Grade 11	1	4.2	8	30.8	9	18.0	5.98*
Grade 12	1	4.2	8	30.8	9	18.0	5.98*

$p < .05$. $^{**}p < .01$. $^{***}p < .001$

The Chi-square analysis shows significant differences between students in 1st grade ($\chi_1^2 = 23.09$, $p < .001$, $N = 50$) and in 2nd grade ($\chi_1^2 = 18.15$, $p < .001$, $N = 50$). Most Jewish students had music classes in 1st and 2nd grades (85%, 77%) compared to very few of the Arab students (17%, 17%). Moreover, a significant difference was found in the music lessons that were offered at the high-school level (grades 10-12) between the Jewish and Arab students. At these grades eight (31%) of the Jewish students had music classes compared to only one (4%) Arab student ($\chi_1^2 = 5.98$, $p < .05$, $N = 50$]. No significant differences were found between the groups during 3rd-9th grades.

D. **Instrumental and vocal learning**

Table 8. Instrumental and vocal music learning during childhood in the two ethnic groups (chi-square analysis).

		Arab		**Jewish**		**All**		χ^2	***N***
		Freq.	**%**	**Freq.**	**%**	**Freq.**	**%**		
Did you play a musical instrument during your childhood?	No	12	50.0	2	7.7	14	28.0	11.08**	50
	Yes	12	50.0	24	92.3	36	72.0		
Did you sing during your childhood?	No	6	27.3	4	15.4	10	20.8	1.02	48
	Yes	16	72.7	22	84.6	38	79.2		

$^{*}p < .05$. $^{**}p < .01$. $^{***}p < .001$

The chi-square analysis shows a significant difference in playing a musical instrument during childhood between Jewish and Arab students. Most (92%) of the Jewish students had played a musical instrument ($\chi^2 = 1.08$, $p < .01$, $N = 50$) whereas only half (50%) of the Arab students had. As for singing, many students from both ethnic groups sang during their childhood, 84.6% of the Jewish students and 72.2% of the Arab students.

E. Instrumental and vocal learning

Table 9 shows the mean number of years that the students studied their primary and secondary instruments.

Table 9. The age the students started to play or sing during childhood (chi-square analysis)

	Age	**Arab**		**Jewish**		**All**		χ^2
		Freq.	**%**	**Freq.**	**%**	**Freq.**	**%**	
At what age did you start playing?	3-9	4	23.5	18	75.0	22	53.7	10.60***
	10-19	13	76.5	6	25.0	19	46.3	
At what age did you start singing?	3-9	9	50	18	81.8	27	67.5	4.57*
	10-19	9	50	4	18.2	13	32.5	

$^{*}p < .05$. $^{**}p < .01$. $^{***}p < .001$.

In order to find whether there were differences between the Jewish and the Arab students, the ages were divided into two age groups: group 1 which was defined as ages 3 to 9 included the age categories of 3-7 and 8-9, and group 2 which was defined as ages 10-19 included the age categories of 10-14, 15-18, and 19 and more. A significant difference was found between the Jewish and Arab students regarding the age at which they started playing a musical instrument. 75% of the Jewish students started to play between ages 3-9 compared to only 23.5% of the Arab students. 76.5% of the Arab students, started playing between ages 10-19, as compared with only 25% of the Jewish students ($\chi^2 = 10.60$, $p < .001$, $N = 41$). A significant difference was also found between the Jewish and Arab students regarding the age at which they started singing, with 82% of the Jewish students starting between ages 3-9 as compared with only 50% of the Arab students. Of the latter, 50%, began singing between ages 10-19, as compared to only 18% of the Jewish students ($\chi^2 = 4.57$, $p < .05$, $N = 40$).

The comparative analysis between the Jewish and Arab students regarding the number of years the students learnt to play their musical instruments with teacher was performed by using a *t*-test analysis for independent samples, due to the normal distribution of the data. Tables 10 and 11 show the number of years the students from both ethnic groups learnt to play their musical instruments.

Table 10. Number of years an instrument was learnt with teacher in the two ethnic groups.

	Ethnic group	**Number of participants**	**Number of years learnt with teacher – Mean**	**Std. Deviation**	**Std. Error Mean**
Primary musical instrument	Jewish Arab	24 18	6.94 2.97	4.299 1.913	.878 .451
Secondary musical instrument	Jewish Arab	21 9	4.52 2.56	3.112 2.639	.679 .880
Second secondary musical instrument	Jewish Arab	12 3	2.04 1.17	1.287 .289	.372 .167

Table 11. Number of years an instrument was learnt with teacher in the two ethnic groups (t-test).

Number of years learnt with Guidance	**Levene's test for Equality of Variance**		***T***	***df***	**Sig (2-tail)**	**Mean Differences**	**Std. Error Differences**	**95% Confidence Interval of the Difference**	
	F	**Sig**						**Lower**	**Upper**
Primary musical instrument									
Equal variances not assumed	14.72	.000	4.02	33.58	.000***	.3.97	.987	1.959	5.971
Secondary musical instrument									
Equal variances assumed	.061	.806	1.66	28	.109	1.97	1.189	-.468	4.404
Second secondary musical instrument									

Equal variances assumed	2.54	.135	1.14	13	.275	.875	.768	-.784	2.534

*$p < .05$. **$p < .01$. ***$p < .001$.

There is a significant difference ($p < .001$) between the groups regarding the number of years the primary musical instrument was studied ($t_{33.58} = 4.02$, $p < .001$), with Jewish students having studied longer ($M = 6.94$, $SD = 4.30$) than Arab students ($M = 2.97$, $SD = 1.91$). There were no differences regarding the secondary instruments, although the same tendency was kept (Jewish 2nd instrument $M = 4.52$, $SD = 3.11$, and 3rd instrument $M = 2.04$, $SD = 1.29$, Arab 2nd instrument $M = 2.56$, $SD = 2.63$, 3rd instrument $M = 1.17$, $SD = 0.29$).

Instrumental studies with teacher or on one's own (Chi-square analysis) revealed no statistical differences ($p > .05$) between the ethnic groups regarding studying to play or sing with guidance of a teacher. Regarding the primary musical instrument, most students from both groups learnt to play with music teachers (Jewish 92%, Arabs 86%). There were no differences regarding studying with teacher of the secondary musical instruments as well.

F. Participation in ensemble playing

Table 12. Participation in ensembles, choir, or orchestra of the two ethnic groups (Chi-square analysis).

		Arab		**Jewish**		**All**		χ^2
		Freq.	**%**	**Freq.**	**%**	**Freq.**	**%**	
Have you participated in group music activities in the past?	No	4	19.7	7	26.9	11	22.0	0.77
	Yes	20	83.3	19	73.1	39	78.0	
Ensemble playing/singing at a music center or conservatory?	No	15	62.5	14	53.8	29	58.0	0.40
	Yes	9	37.5	12	46.2	21	42.0	
Ensemble playing/singing at a community center	No	18	75.0	22	84.6	40	80.0	0.72
	Yes	6	25.0	4	15.4	10	20.0	
Ensemble playing/singing at Elementary school	No	14	58.3	18	69.2	32	64.0	0.64
	Yes	10	41.7	8	30.8	18	36.0	
Ensemble playing/singing in middle/high school	No	18	75.0	25	96.2	43	86.0	4.64*
	Yes	6	25.0	1	3.8	7	14.0	
Singing in a choir	No	19	79.2	16	61.5	35	70.0	1.85
	Yes	5	20.8	10	38.5	15	30.0	
Playing in an orchestra	No	24	100	25	96.2	49	98.0	0.94
	Yes	0	0.0	1	3.8	1	2.0	
Ensemble playing/singing with friends	No	13	54.2	17	65.4	30	60	0.65
	Yes	11	45.8	9	34.6	20	40	

The Chi-square analysis shows significant differences between the ethnic groups regarding participation in ensemble playing or singing in middle school or high school. As seen, 25% of the Arab students participated in ensembles during those school years as compared with 7% of the Jewish students ($\chi^2 = 4.64$, $p < .05$, $N = 50$). No differences ($p > .05$) between the groups were found regarding participating in music activities at music centers or conservatories (Arab 83%, Jewish 73%), community centers (Arabs 25%, Jewish 15%), elementary-school years (Arab 42%, Jewish 31%), singing in a choir (Arabs 21%, Jewish 39%), playing in an orchestra (Arab 0%, Jewish 4%), or singing or playing with friends (Arab 46%, Jewish 35%).

G. Practice sessions during the week while being a student

Practice sessions during the week for the two ethnic groups (chi-square analysis) showed no differences ($p > .05$). The majority (about 70%) of the students reported practicing four times a

week or more. Similarly, time allotted for practice did not show differences ($p > .05$), about 40% of both groups reported 1 hour and more, although 29.2% of the Arab students reported 2 hours and more practice time at each session as compared with 7.7% of the Jewish students.

H. Ensemble participation while being a student

Music ensemble participation (chi-square analysis) in the two ethnic groups of music education Israeli students showed no significant differences between the groups; 46% of the Jewish participants and 36% of the Arab participants played in music ensembles.

I. Performing with a music ensemble

Table 13. Performing with the ensemble in the two ethnic groups (chi-square analysis).

		Arab		**Jewish**		**All**		χ^2
		Freq.	**%**	**Freq.**	**%**	**Freq.**	**%**	
Do you perform with 1st Ensemble?	No	3	42.9	0	0	3	16.7	5.66*
	Yes	4	57.1	11	100	15	83.3	
Do you perform with 2nd Ensemble?	No	2	66.7		0			5.83*
	Yes	1	33.3	7	100			

*$p < .05$. **$p < .01$. ***$p < 001$.

The chi-square analysis shows significant differences ($p < .05$) between the ethnic groups regarding performing with the first and second ensembles. It was found that 100% of the Jewish students performed with both ensembles, and 57% of the Arab students performed with their first music ensemble, and 33% of the Arab students performed with their second music ensemble.

The third hypothesis was partially confirmed.

Cultural differences between the two ethnic groups, Jewish and Arab students, were found**.** The Jewish students reported more exposure to music activities during their childhood – more singing at home, music classes at school for a longer time, earlier age of beginning to play a musical instrument, and a longer time of learning to play.

Both groups reported similar practice sessions while being students. However, the Jewish students reported more performance activities than the Arab students.

Findings concerning the third research question and the related hypothesis

The third research question: What type of motivation, skills, and personal characteristics are considered important in the decision to study music education and/or in being a skilled music teacher in the two ethnic groups (Jewish and Arab Israeli students)?

Hypothesis 4 was: There will be differences between the two ethnic groups (Jewish and Arab) regarding motivation for studying music education and future plans. The Arab students, more than their Jewish peers, will be more favorable toward utilitarian motivations.

The findings for the fourth hypothesis are presented by the following five themes: A) Reasons to start playing a musical instrument, B) Reasons for teaching music as an occupation, C) Features and skills required for a skilled music teacher, D) Musical skills that enable ensemble leading, E) Future plans to teach music.

A. Reasons to start playing a musical instrument

Table 14. Personal motivators for playing in the two ethnic groups (*t*-test analysis).

Personal motivators for playing	**Arab**		**Jewish**		**All**		***T***	***Df***
	Mean	***SD***	**Mean**	***SD***	**Mean**	***SD***		
I wanted to be a music teacher	4.65	1.75	1.28	0.84	2.90	2.17	-8.40***	31.11
I wanted to be a musician	5.13	1.60	3.16	1.97	4.10	2.05	-3.78***	46
I loved the sound of my musical Instrument	4.57	1.12	3.60	1.92	4.06	1.64	-2.15*	39.27
I wanted to play in ensemble	3.61	1.53	2.44	1.73	3.00	1.73	-2.47*	46

*$p < .05$. **$p < .01$. ***$p < .001$.

The *t*-test analysis for independent samples showed significant differences regarding personal motivators for playing. In all items, the Arab students had higher motivation than their Jewish peers. The Arab students' motivations to **become a music teacher** were significantly higher ($t_{46} = -8.40$, $p < .001$) than the Jewish students (Arab students $M = 4.65$, $SD = 1.75$, Jewish students $M = 1.28$, $SD = 0.84$). The Arab students' motivation to **become a musician** was significantly higher ($t_{46} = -3.78$, $p < .001$) than that of the Jewish students (Arab students $M = 5.13$, $SD = 1.60$, Jewish students $M = 3.16$, $SD = 1.97$). The **love for the sound of the musical instrument** was ranked significantly higher among the Arab students ($t_{46} = -2.15$, $p < .05$) than among the Jewish ones (Arab students $M = 4.57$, $SD = 1.12$, Jewish students $M = 3.60$, $SD = 1.92$). The **will to play in an ensemble** was ranked significantly higher among the Arab students ($t_{46} = -2.47$, $p < .05$) than among their Jewish peers (Arab students $M = 3.61$, $SD = 1.53$, Jewish students $M = 2.44$, $SD = 1.73$).

Table 15. Comparison between ethnic groups regarding personal motivators for playing.

	Arab		**Jewish**		**All**		***T***	***Df***
	Mean	***SD***	**Mean**	***SD***	**Mean**	***SD***		
personal motivators for playing	4.49	1.06	2.62	1.08	3.52	1.42	-6.04***	46

*$p < .05$. **$p < .01$. ***$p < .001$

The *t*-test analysis for independent samples revealed significant differences between the groups regarding **personal motivators for playing.** The Arab students were in higher agreement with the statements ($M = 4.49$, $SD = 1.06$) than their Jewish peers ($M = 2.62$, $SD = 1.08$), ($t_{46} = -6.04$, $p < .001$).

B. Reasons for teaching music as an occupation

To further investigate the number of items included in Question 29 regarding reasons for teaching music, an exploratory factor analysis was conducted using a principal axis factor extraction which recommended a two-factor solution. For interpretation of the two factors, the Promax with Kaiser normalization oblique rotation method was used. The first factor was defined as the construct of **ideological reasons for teaching music**. This construct explained 55.78% of the variance (Cronbach's alpha = .90). The second factor, the construct of **utilitarian reasons for teaching music**, explained 14.45% of the variance (Cronbach's alpha = .91). Total variance explained was 70.24%.

Table 16. Reasons to teach music – Exploratory Factor Analysis.

	Factor loading	
	Factor 1	**Factor 2**
Ideological reasons for teaching music		
It is a way of working in a loved profession	0.89	-0.17
It is a way to influence children to play a musical instrument	0.84	0.03
It is a way to contribute to the society through educating the young generation	0.81	-0.01
I love teaching	0.71	0.06
Children Out Street - I chose to teach music because it is a way to keep children out of the street with a positive activity	0.71	0.10
I chose to teach music because I feel a sense of calling	0.70	0.13
Develop - I chose to teach music so I can keep on developing in the field of music	0.56	0.08
Utilitarian reasons for teaching music		
Social Class - I chose to teach music because being a teacher is an occupation that raises social status	-0.08	0.96
Needed Occupation - I chose to teach music because teaching is a needed profession	0.03	0.86
Teach Other Subjects - I chose to teach music because it enables mobility to teach other subjects at school	0.03	0.81
Good Income - I chose to teach music because the salary is good	0.07	0.76
Eigenvalue	6.14	1.59
% of variance explained	55.78	14.45
Total variance		70.24%
Reliability	.90	.91
Means	4.55	3.24
SD	1.25	1.66

Table 17. Comparison between ethnic groups regarding the reasons for studying music (t-test analysis).

	Arab		**Jewish**		**All**		***T***	***Df***
	Mean	***SD***	**Mean**	***SD***	**Mean**	***SD***		
Ideological reasons for teaching music	5.03	0.93	4.09	1.36	4.55	1.25	-2.84**	42.54
Utilitarian reasons for teaching music	4.52	1.07	2.01	1.11	3.24	1.66	-8.06***	47

*$p < .05$. **$p < .01$. ***$p < .001$

Although the *t*-test analysis for independent samples shows similar tendencies of agreement between the ethnic groups regarding **ideological reasons for teaching music**, significant differences were found, with the Arab students ($M = 5.03$, $SD = 0.93$) being in higher agreement with the statements than the Jewish students ($M = 4.09$, $SD = 1.36$), ($t_{42.5} = -2.84$, $p < .01$). Major differences between the groups were found **regarding utilitarian reasons for teaching music**, whereas the Arab students ($M = 4.52$, $SD = 1.07$) were in very high agreement while the Jewish students ($M = 2.01$, $SD = 1.11$) were in very low agreement ($t_{47} = -8.06$, $p < .001$).

C. Features and skills required for a skilled music teacher

To further investigate the items included in Question 30 regarding the qualities and skills needed to be a good music teacher, an exploratory factor analysis (EFA) was conducted using a principal axis factor extraction, which recommended a two-factor solution. However due to

high loadings of several questions on both factors, and a relatively low percent of variance explained, it was decided to exclude five questions from the factor analysis, as they failed to help distinguish between the two factors (Hefetz & Liberman, 2017). An EFA was conducted on the remaining 10 items using a principal axis factor extraction which recommended a two-factor solution. For interpretation of the two factors, the Varimax with Kaiser normalization orthogonal rotation method was used. The first factor was defined as the construct of **musical skills needed for being a good music teacher**. This construct explained 71.79% of the variance (Cronbach's alpha = .95). The second factor was defined as **personal qualities needed for being a good music teacher**. This construct explained 10.45% of the variance (Cronbach's alpha = .91). Total variance explained was 82.24%.

Table 18. Exploratory factor analysis: Features and skills required for being a good music teacher.

	Factor loading	
	Factor 1	**Factor 2**
Musical skills required for a good music teacher		
Good Solfege knowledge	0.88	0.27
Good music analytic ability	0.85	0.34
Knowledge of a variety of music styles	0.84	0.30
An ability to direct band/ensemble	0.78	0.35
A good singing ability	0.78	0.34
Good knowledge of music teaching methods	0.75	0.40
A good ability to play a musical instrument	0.73	0.51
Personal qualities needed for a good music teacher		
Love teaching music	0.33	0.93
To have good relationship with children	0.35	0.88
Love teaching	0.41	0.86
Eigenvalue	7.18	1.05
% of variance explained	71.79	10.45
Total variance		**82.24%**
Reliability	.95	.96
Means	4.47	5.34
SD	1.24	1.09

Table 19. Comparison between ethnic groups regarding features and skills required for skilled music teacher (t-test analysis).

	Arab		**Jewish**		**All**		***T***	***Df***
	Mean	***SD***	**Mean**	***SD***	**Mean**	***SD***		
Musical skills required for a good music teacher	4.85	1.08	4.11	1.30	4.50	1.24	-2.17	47
Personal qualities needed for a good music teacher	5.68	0.69	5.03	1.31	5.35	1.09	-2.20***	36.70

*$p < .05$. **$p < .01$. ***$p < .001$

The *t*-test analysis for independent samples regarding **musical skills required for a good music teacher** shows no significant differences ($p > 0.5$) between the Jewish students (M = 4.50, SD = 1.24) and Arab students (M = 4.85, SD = 1.08). Significant differences between the groups were found regarding **personal qualities needed for being a good music teacher** ($t_{36.70}$

= -2.20, p <.001). The Arab students were in higher agreement (M = 5.68, SD = 0.69) with the statements than the Jewish students (M = 5.03, SD = 1.31).

D. Musical skills that enable ensemble leading

Table 20. Self-reported level of musical skills that enable various ensembles leading in the two ethnic groups (chi-square analysis).

		Arab		Jewish		All		χ^2
		Freq.	**%**	**Freq.**	**%**	**Freq.**	**%**	
Can you conduct a choir?	No	8	34.8	3	11.5	11	22.4	3.80
	Yes	15	65.2	23	88.5	38	77.6	
Can you lead an ensemble?	No	9	39.1	3	11.5	12	24.5	5.02*
	Yes	14	60.9	23	88.5	37	75.5	

*p < .05. **p <.01. ***p < .001.

The Chi-square analysis shows significant differences between the Jewish and Arab students in their *leading ensemble* skills. 88.5% of the Jewish students reported they can lead an ensemble, as compared with 61% of the Arab students (χ^2 = 5.02, p < .05, N = 49). No differences were found between the groups in their self-reported *choir conducting* skills (p > .05).

A misunderstanding was found regarding Question 35: *Can you lead an orchestra*? The findings regarding orchestra leading were that 52% of the Arab students and 24% of the Jewish students reported they can lead an orchestra. This finding raised the question as to the reasons for this surprising outcome, as orchestra leading and conducting requires highly skilled musicians, usually with an academic background in conducting. The researcher met with two Arab lecturers, seeking to clarify the meaning of "orchestra" for the Arab students, and learned that these students referred to the school orchestra in the elementary school where they taught. This, in turn, revealed that Arab and Jewish students attribute a different meaning to the word "orchestra." The Jewish students understood it to mean a classical philharmonic orchestra that plays classical Western music, and the Arab students – the elementary-school ensemble with all the instruments. These two interpretations led to the conclusion that the formulation of the question was misleading, and the answers to it were not included in the research findings.

E. Future plans to teach music

Plans to teach music as an occupation in the two ethnic groups (t-test analysis) showed no differences between the ethnic groups in teaching music (p > .05). More than half of the students from both ethnic groups plan to teach music in the future.

Teaching plans in kindergarten and elementary school (Chi-square analysis) showed no differences between the groups. However, the Chi-square analysis showed significant difference between Jewish and Arab students regarding **teaching music in secondary/high school** item. Here, 65% of the Jewish students reported that they wanted to teach music in secondary/high school, as compared with 38% of the Arab students (χ_1^2 = 3.89, p < .05, N = 50).

Hypothesis 4 was partially confirmed.

Expected differences were found between the two ethnic groups regarding **utilitarian reasons for teaching music**. The Arab students were in higher agreement with all the utilitarian statements.

Required features and skills for being a skilled music teacher differed in musical styles, playing ability, practical knowledge and theoretical knowledge. The Arab students considered **Middle**

Eastern Arab Classical music, and **Middle Eastern Arab music theory** to be important requirements for being skilled music teacher. **Playing ability, solfege knowledge**, and **Western Classical music theory** were also considered higher among the Arab students although both groups showed an agreement with these items.

3.2.4. Discussion, conclusions and limitations

Discussion related to the first research question and hypothesis 1

The findings of study 2 show that the cultural differences between the Jewish and Arab students are also reflected in their musical culture. Musical differences between cultures are part of the process of socialization and enculturation (Ilari, Chen-Hafteck & Crawford, 2013; Gaunt & Hallam, 2009).

Discussion related to the first research question and hypothesis 2

The study findings showed that the Jewish students in Israel were encouraged and supported more by their mother, father, and music teacher as compared with the Arab students. Research studies regarding encouragement and support in musical studies (e.g. Creech, 2006, 2009, 2010) were done in Western countries. The findings of Creech studies are in accordance with the current research findings regarding the Jewish students. The Jewish students in this research received encouragement from their parents and they started their instrumental learning at an earlier age compared to the Arab students who received less encouragement from their parents and started learning a musical instrument at a later age. This difference reflects the lack of approval for music activities and learning in the Arab culture. These findings are supported by Gluschankof (2008) who claimed that music specialists in the Israeli Arab community were almost nonexistent two decades ago in the late 1990s. The lack of music specialists as described by Glushankof, and the lack of encouragement towards musical activities as was found in this research point to the fact that a lack of approval towards musical activities in the Arab community is still common. However, results of this study in which some Arab students were encouraged by their parents to study music testifies to a possibility that there is a gradual change in the Arab community towards more positive attitudes regarding music learning.

Discussion related to the second research question and hypothesis 3

The findings showed significant differences regarding musical experiences during the childhood of Jewish and Arab students as well as their musical activities while studying in the music education academic program. Gaunt and Hallam (2009) claimed that ethnic affiliation defines the cultural background of a person, and this is especially noticeable with children. The micro-system (Bronfenbrenner, 1979) affects childs' exposure to music at home. There is value to parents' promotion of musical interest (Lehman, Sloboda, & Woody, 2007). Repressing musical activities or making negative comments can have the opposite effect. The negative attitudes toward music activities of the Arab Muslim society seem to impact also the Druze and Christian minorities (Otterbeck & Ackfeldt, 2012; Cahn & Rusu, 2016; Shiloah, 1999).

Regarding exposure to music at home, the Jewish students reported more singing at home than did the Arab students. However, both groups reported that as children, they heard a great deal of music at home. The report of the Arab students regarding less exposure to singing activities may suggest less parental involvement in a playful singing activity with the child.

The majority of the Jewish students were exposed to music classes in elementary school from the 1st grade whereas only few of the Arab students were exposed to music classes in 1st and 2nd grade. This difference between the two cultures may be accounted for by the school principals' choices of electives. Music is not the top priority for the Arab population, and therefore other

subjects are chosen as electives. In high school, a third of the Jewish students had music classes in grades 10-12, compared to only one Arab student. One reason for this significant difference may be the requirements necessary to be accepted to such a program. According to the Israeli Department of Education Registration Section (2015), to qualify for a high-school music program, the applicant must pass a proficiency exam (playing or singing) and show a commitment to private tutoring – at least once a week – either for the main instrument for instrumentalists of voice lessons for singers. The proficiency exam in playing or singing was established to guarantee a minimum playing level that will enable students to prepare for the matriculation exams. The requirement regarding continued private lessons can pose an economic strain on the family's budget. The findings of the current study showed that only one Arab student had studied in a high-school music program, while about a third of the Jewish students did.

The findings of this study also point to differences between the groups regarding learning to play or sing as children. Three quarters of the Jewish students began playing a musical instrument between ages 3 to 9, compared to a quarter of the Arab students. The same tendency was found regarding singing. The different attitudes of the two cultures toward music, as reflected in the findings, mean that Arab students have fewer opportunities to study music, and, in turn, this lower exposure is expressed by less experience in playing and singing of the Arab students.

Playing or singing from a young age has many positive effects on a child. Thus, music practice, which is a solitary activity, develops children's ability to arrange their own time, and to decide the practice techniques that are best suited for them (Cogdill, 2015; Lehmann, Sloboda, & Woody, 2007), leading to self-efficacy (Cogdill, 2015). These processes require years of formal private learning, during which personal-organization abilities are being developed. The ongoing learning requires parents' support, support which is of great importance, especially if the nature of this support changes according to the changing needs of their growing child (Creech, 2009; Steinberg et al., 1992). This research revealed that fewer Arab students enjoyed the positive effects that are the outcome of having learned to play a musical instrument. As many of them began their playing at adolescence or young adulthood, they had undergone fewer years of study, and received less parental support and encouragement than their Jewish peers.

Choir singing and ensemble playing are social activities with many positive outcomes. Choir singing develops the child's musical, emotional, cognitive, and creative skills (Pitlick et al., 2015), contributes to positive effects on mood (Unwin, Kenny, & Davis, 2002), as well as to the development of social skills (Pitlick et al., 2015). Ensemble participation develops many social skills, while psychological benefits include sense of self-achievement, increased self-confidence, self-esteem, and a sense of mental well-being (Kokotsaki & Hallam, 2007). During elementary and middle school there were no differences in ensemble participation between the Jewish and Arab students. The differences that were found regarding high school music ensemble participation where a quarter of the Arab students reported participation in either choir or instrumental ensemble as compared to few of the Jewish students is misleading. The Jewish students' report regarding participation in ensemble by playing or singing is contradictory due to the fact that although slightly less than a third of the Jewish students reported they had studied music during high school in music programs, only a few reported that they played in ensembles. This contradiction is due to the fact that part of the required curriculum in high school music programs is participation in either ensemble, a choir or an orchestra (Supervision of Musical Education, 2015). Therefore, it can only be assumed that for some reason a third of the Jewish students that had reported that they had studied in high school music programs, had not reported their ensemble participation. It can be speculated that either the question was misleading in some way, although it went through a process of validation, or that there are some other reasons that should be further researched in another study. Ensemble

participation in high school will be treated as the same, and by that it can be concluded that the Jewish and the Arab students alike had been exposed to the benefits of ensemble participation.

Ensemble participation during adulthood was similar between the Jewish and the Arab students, whereas differences were found regarding performing music, with more Jewish students performing with their ensembles. One possible explanation can be that Jewish students, who had started their musical training at an earlier age, were more proficient. Another explanation, equally plausible, is that the Arab students in Israel had fewer opportunities to perform music in their society due to either lack of interest of the Arab sector, or fewer halls for performance. The last explanation goes along with Karkabi (2013) description of the shortage of halls for performances for the Arab sector.

Discussion related to the third research question and hypothesis 4

Significant differences between the Jewish and the Arab students were found regarding motivation to start playing musical instruments. The Arab students ranked motivation to become a music teacher and wanting to become a musician significantly higher than did their Jewish peers. The later age at which Arab students started playing may explain this finding. For the most part, the Arabs started playing as adolescents, and may have already begun to form ideas about a future occupation. At late adolescence, a relatively stable self-concept is built, and it can serve as a foundation for a feasible career choice (Gottfredson, 1981; Leung, 2008). The Jewish students, who had begun playing at an earlier age showed low agreement with these reasons. A possible explanation can be that when children begin playing, they are not concerned with their career.

Motivation for teaching music were divided between ideological motivation and utilitarian ones. The Arab students rated both types of motivation significantly higher than the Jewish students. **Ideological motivation** included working in a loved profession, influencing children to play a musical instrument, a way to contribute to society through educating the young generation, love of teaching, a way to keep children off the street with a positive activity, a sense of calling, and a way to keep on developing in the field of music.

Utilitarian motivations for teaching music included the fact that being a teacher is an occupation that raises social status, there is a demand for teachers, teaching music can lead to teaching other subjects at school, and the income is good. These findings may suggest that in general the Arab students are more motivated to become music teachers than Jewish students. The findings that Arab students gave high ratings to utilitarian reasons for teaching are consistent with those of Heinz (2015) regarding non-Western societies such as China, Turkey, and Malaysia.

Attitudes regarding **musical skills** and **personal qualities** required for a skilled music teacher revealed similarities regarding **musical skills** needed for being a good music teacher. These include good knowledge of solfege, good ability to analyze music, knowledge of a variety of music styles, an ability to direct an ensemble, good singing ability, good knowledge of music teaching methods, and a good playing ability on one's instrument. These are the core skills that appear in different music programs of Western countries. They can be presented in different order presenting degree of importance attributed to the different musical skills as shows in the Israeli and American curriculum for the elementary school (Department of Planning and Curriculum Development, 2011; National Association for Music Education, 2018).

Two different music practical abilities were examined in this research, i.e. the ability to lead an ensemble and choir conducting. The students' reports of their ability to lead an ensemble showed significant differences between the ethnic groups. Most of the Jewish students reported that they could lead an ensemble, compared to less than two thirds of the Arab students. Regarding choir conducting, no differences were found between the groups, with students from

both groups reporting that they could conduct a choir. The musical skills that are required for choir conducting are similar to those required for leading an instrumental ensemble. The fact that many of the Arab students believe that they can successfully lead a choir show that there is a possibility that other skills are involved in choir conducting. Pitlik (1999) as well as Rozner (2013) noted that many teaching techniques can be used when conducting a choir, and this variety allows choir conductors to choose the techniques that will best fit their own personal abilities. Moreover, there are many social and administrative responsibilities that are included in choir conducting.

The **personal qualities** required for being a good music teacher included the love of teaching music, having a good relationship with children, and a love of teaching. Significant differences between the Jewish and the Arab students were found regarding their rating of these personal qualities. Although both groups rated personal qualities in a positive direction, the Arab students rated the personal qualities significantly higher than the Jewish students.

Research in the Western world revealed three major types of motivation for choosing a teaching career: intrinsic, altruistic, and extrinsic (Heinz, 2015). Intrinsic motivation is about joy, satisfaction, creativity, and interest in one's teaching (Heinz, 2015). The Jewish and Arab students had the same attitudes toward musical skills required from a good music teacher and personal features, and in both groups, the direction of answers was positive. However, we should consider the possibility that Likert-scale rankings may differ between the ethnic groups. Ranking statements of requirements for a skilled music teacher, and personal features showed that the Jewish students tend to rank their agreement in lower numbers than their Arab peers. Therefore, the differences between the groups whereas the Arab students "highly agree," and the Jewish students "agree" should be treated with caution, as perhaps there is no real difference between the two ethnic groups regarding attitudes toward teaching.

Future plans to teach music showed no differences between the ethnic groups. More than half of the students from both groups plan to teach music in the future, in kindergarten and in elementary school. Significant differences between the Jewish and the Arab students were found regarding teaching music in middle school and high schools. Almost two thirds of the Jewish students (65%) reported they want to teach music in middle school or in high school, as compared with slightly more than a third of the Arab students (38%). This outcome reflects the actual state of public occupational opportunities for both ethnic groups in kindergartens and elementary schools. There is a need for music teachers, and those who want to teach at these school levels will probably find a music teaching job. The differences in teaching plans regarding middle school and high school reflect reality in the education system, where some 130 Jewish high schools offer music programs, and only four Arab high school does so. The Arab students realize that their chances to find work in the higher grades are very limited. As was mentioned before, part of the career choice process of people includes the elimination of possibilities that are not feasible (Gottfredson, 1981). It seems that the outcome reflects this process.

The findings showed no differences between the ethnic groups regarding plans to teach private music lessons. About two thirds of the students from both ethnic groups were planning to teach private music lessons. Regarding the Arab group it may point to a change in society's attitudes toward music learning. There is much more interest in music learning nowadays than there was in the past. Karkabi (2013) wrote that young Arab adults in their twenties and thirties consumes music and look for places to celebrate their music. Abdel Rahman Hamza (2014) claimed that, as for today, parents in their thirties are pro music lessons in their children's classes. This trend may mark a change that is gradually taking place in regard to acceptance of music learning in the Arab society in Israel.

Significant differences were observed between the Jewish and the Arab students regarding teaching private theory lessons. Slightly less than half of the Arab students planned to teach private theory lessons as compared with none of the Jewish students. An explanation

may be that there is a greater need in the Arab sector for instrumental and theory teachers. Therefore, those who have the knowledge plan on teaching both.

Conclusions

Conclusions regarding the first research question

From the findings it can be concluded that: a) Cultural affinity is the major force that has an effect over the musical styles' preferences and related knowledge of music education students; b) Cultural affinity conveys overt and covert messages related to the cultural attitude toward music – such as musical instruments choice; c) A student with Jewish cultural affinity has a much better chances to study playing music from an early age than an Arab student and d) A student with Jewish cultural affinity will receive much more encouragement and support in the musical path than an Arab student.

Conclusions regarding second research question

From these findings it can be concluded that: a) Cultural affinity can impact the exposure to music profession-related activities and further music education and b) Music instrumental practice training during childhood affects the frequency of music performance activities later on.

Conclusions regarding third research question

From these findings it can be concluded that: a) utilitarian reasons such as *good income*, *high social statues*, and *occupational opportunities* were major motivation for the Arab students for enrolling in music education programs; b) the Arab students regarded *Middle Eastern Classical music*, and *Middle Eastern music theory* as relevant for a skilled music teacher; c) students from both ethnic groups, Jewish and Arab, regarded musical skills such as *playing ability, solfege knowledge, Western Classical music theory*, and personal qualities such as *love of teaching music, having good relationship with children*, and a *love of teaching* important for a music teacher; d) the Jewish students' decision to engage in music education as a career is done with the realization that their choice is not a high-status one in their society, but it fulfills their inner will for occupation in the field of music; e) it can be speculated that there is a greater need in the Arab sector for instrumental and theory teachers, and those who have the knowledge plan on teaching both; f) teaching preferences of the Arab students were realistic according to available educational institution; g) the Arab students identified the change in attitude of the Arab population toward music learning that occurs nowadays and realized that teaching music become realistic and a feasible career and h) the Arab students that choose to study music education are pioneers in their way. By enrolling in music education programs, they show that music education and activities are of value. These students are agents of cultural change in the Arab society.

The Jewish students' decision to engage in music education as a career is led by their inner will for occupation in the field of music. The Arab students' decision to do so is more complex because of the historical Islamic ban on music activities. **Many of the Arab music education future teachers will become cultural change agents.** Music education is about promoting musical knowledge. These future teachers are going to face the need to convince educational staff, students, parents and other people in their community of the value of their occupation.

Limitations: a) This research centered on students that chose to study music education for their Bachelors' degree or for teaching certificate. Findings if applicable to students studying in other music programs which are not music education programs should be treated with caution. b) This research is based on self-report of the participants regarding their musical ability and knowledge. No other objective assessment ways of academic and professional performances were used in this study.

3.3. Study 3: Qualitative investigation of the psycho-social factors related to music education career in Israel in relation to the ethnicity.

3.3.1. Introduction

In order to receive a better understanding of the quantitative results as well as other cultural differences regarding music education in the society and school, it was necessary to carry out a qualitative study with Israeli Jewish and Arab music teachers who were former graduates of music education programs. These participants could provide personal insights regarding the different aspects that had been addressed in the questionnaire.
Several other themes that were addressed included personal experiences, future professional development of the Israeli, Jewish and Arab, music teachers and the differences that the Jewish and Arab music teachers encounter in the school environment.

Aim of the study

The aim of this study was to gain a deeper understanding related to the cultural and individual differences of the musical upbringing of Israeli Jewish and Arab students, and to gain understanding concerning experiences as music teachers in their cultures.

3.3.2. Methodology

Focus groups

The findings presented in this section were obtained from interviews of two focus-groups, one Jewish and one Arab. Focus groups allow researchers to effectively identify attitudes and perspectives of the participants and it is especially important in the case of cross-cultural studies (Hennink, 2017).

Participants

Participants included seven music teachers between the ages of 25-40 years. Of them 4 Jewish, and 3 Arabs (Muslim, Christian, Druze), 3 men (1 Jewish, 2 Arabs), and 4 women (3 Jewish, 1 Arab).

Designing the interview questions

The questions for the focus-group interviews were specifically designed by the researcher based on the research literature reviewed and the findings of the previous study. The questions presented in order to enhance conversation were: a) Please describe how is music learning perceived in your society, b) Please describe how did your family cope with your desire to learn music, and c) Please describe what is your experience as a music teacher.

Thematic analysis of the qualitative data

According to Shkedi (2012), the process of thematic analysis includes several stages from transcription of all the recorded material, through in-depth reading, coding each segment of the row material, identifying main themes, re-arranging the row data into the identified themes and categories while keeping track of the original location and context of the text in order to keep the participants' original meaning (Shkedi, 2012).

These stages were followed by the researcher. The stage of in-depth reading led to coding each segment of the row data into a computer software *Narralizer* that was developed

by Shkedi (2014) for analyzing qualitative data. These first stages led to identification of six themes and their categories. These themes were later re-arranged and included two main themes and nine categories.

3.3.3. Findings

The themes that were identified include: religious attitudes towards music and music practices; motivation for learning music as a child; support for music learning, and exposure at school; motivation to study music education during adulthood; cultural affinity influences; attitudes toward the music teacher. Each theme included several categories.

The initial themes were then re-arranged into two main themes. The first theme, **cultural attitudes toward music** includes 5 categories: differences in cultural attitudes toward music; music learning: encouraging and non- encouraging parents; cultural concepts about musical instruments; music exposure and studies during childhood and adolescence; attitudes toward music teaching as an occupation and the music teacher. The second theme, **reasons to study music education** includes 4 categories: locating possible positions for musicians; identification of an occupational opportunity; being a teacher and a musician; future plans.

1st Theme: Differences in Cultural attitudes toward music

The Jewish participants described a positive attitude in the Jewish sector toward music activities and studies, whereas the Arab participants described complex attitudes towards music activities and music studies. According to the Arab participants these attitudes originate with religious boundaries regarding the practice of music.

L. (Jewish) described the attitude of the Jewish society toward music as of wide acceptance: "*(there is) a wide acceptance, (society) accepts music activities and music studies, yes. Very much. Sure".*

The Arab participants described the tight connection between all Arabs, be they Muslim, Christian, Druze. The Christian and Druze participants acknowledge that the changing Muslim attitudes have filtered into their cultures as well.

> E. (Arab): *In culture, when you start to condemn music you begin to regress. The more there is a return to [orthodox Muslim] religion… the majority [of Arabs in Israel] are Muslim, and as more (people return to) religion.... (the) Druze and [Arab] Christians are also affected by this trend. We live together. We are inseparable…*

Modesty in the Druze religion is highly esteemed. Music making which leads to music performance is headed for immodesty and therefore not condoned.

> D. (Arab): *…modesty is the foundation that does not allow us [to be active in music] … music is… noisy… extroverted and [makes you] become known and famous.*

Music learning: encouraging and non-encouraging parents

All the participants from the Jewish society describe encouraging parents**.**

G. (Jew): *The truth is ... my father, he wanted ... me to choose some kind of musical instrument to try. …I loved it, so I continued. … He played the violin, so I was used to hear him all the time. I chose the violin and played it for six years.*

The Arab participants were the only ones who describe parents that did not support music studies.

> E.(A): *I wanted music all the time. It was so obvious to me. I started actually to play at the age of 16. First of all, there was no place to study [no music teachers in the village]. …I always knew that I wanted music but no one [in the family] noticed it. Nor was it financially feasible… And they [the family] did not see it (music) as serious. My relative all the time told me: 'You will play beautifully, but what will you do with it?'*

Cultural concepts towards musical instruments

The Arab participants discussed their cultural concepts regarding accepted and less accepted musical instruments.

> W.: *...there is music in Islam… but [they] do not use all kinds of instruments. Flute, say, it may bring... I don't know what.…I've read the Quran a few times, it's not written that you can't play [musical instruments] …sing. …Even in the time of Prophet Muhammad they used [drums]. And now, in orthodox ceremonies the… instruments are rhythmic…. You don't use the oud or the violin. It is not forbidden, but it is not desirable.*

Music exposure and studies during childhood and adolescence

What was most notable in both focus groups was that the desire to play music emerged in childhood.

> E. (Arab) *...my parents told me that even as a small child, even at the age of one and two years old, whenever I went to a wedding I would sit at the stage where the musicians were, …. I could not keep away from it (music).… It's an urge… it's something really internal.*

Attitudes toward music teaching as an occupation, and the music teacher

In both focus groups the participants stated that teaching music as a profession is not prestigious. However, the reason for the low status of the profession differed between the ethnic groups. The Jewish participants described their society's attitudes toward music as being one of acceptance, yet studying music in school is not considered important. Thus, L. stated:

> *...learning music [at school] – it's not important. It's not English, not math, nor language... It's an excellent enrichment, no one of the parents will resist it ...*

The Arab participants described a complex attitude toward the music teacher and they felt that they were not always appreciated by either other teachers, the principal, the parents and the students.

E. received much support from the principal, however he received harsh comments from some of his students in the Arab school where he teaches:

> *Now, I also hear all kinds of statements from the students themselves that ... say... there are tough statements... One of the girls once told me: 'No way, a... well ... like, no way, what do I care about what you're talking about, it really doesn't interest me, because my father said it's all music anyway...*

2nd Theme: Reasons to study music education

Locating possible positions for musicians

The participants revealed that students started looking for work opportunities in their first year of studies realizing that many musicians teach music. Financial stability was a major consideration.

> D. (Arab): *I understood that actually to get onto this [teaching] path ... I needed the certificates…*

In the Jewish group the women agreed that it is a perfect work for mothers. There was a wide agreement that teachers' working hours are very convenient.

> Y.: *...being a woman and a teacher is… family-friendly.*

A Teaching position is regarded as a day job excellent for mothers and convenient working hours as compared with performing at night. L. and E. (Jewish & Arab) also raised the issue of "awakening" from the dream of making living from performances alone.

> L.: .... *in my twenties I had this fantasy that you might really be able to make a living just from gigs and recording and everything will be fine. But the real world is not...*

Identification of an occupational opportunity

The Arab participants suggested that some Arab women came to study music having identified it as an occupational opportunity, especially in view of the lack of music teachers in Arab schools. They also reported that many of the Arab women started learning to play music upon entering college. Some of these women had not been given the opportunity to study music and

had a great desire to do so. For them, studying music education opened the door to the world of music they had wanted to enter earlier in life. E. (Arab) said, *"With girls it was the opposite [they didn't play as children]. They wanted music and found a window of opportunities [to learn]".*

Being a teacher and a musician

The participants who saw themselves not only as teachers but also as musicians were worried about their lack of time to practice, compose, and perform. Most of them were aware that their personal musical pursuits would take place after their morning teaching hours. L. (Jew) explained his distinction: *"I really enjoy having a [musical] product at the school [with the students], and at home [after teaching hours] I create for me."* Being an Arab woman teacher and a musician raises difficulties. W. (Arab) was frustrated by the limitations imposed upon her. She said that there are no other musical options available for her as an Arab woman.

> *The truth is men are... [they] are exposed to music [more] than women.... They go out if they have 'haflot' (feasts) and they are [active] musicians… My option?... Play at home if you play... Sing indoors if I sing... and I don't have many options.... Just because I am… [a woman] just teaching at school and that is it. Coming home! A teacher is not a musician, she is a teacher… if she isn't playing then it's just... she just does the school work....*

Future plans

All but one of the participants teach music in a school. As for the future – six of them plan to continue their studies in a graduate program of either music education or music therapy. The major difference between the graduates is in their impact on the musical future of their communities. The Arab music teachers are pioneers, having initiated teaching or making music in schools or villages where such studies were hardly available.

3.3.4. Discussion, conclusions and limitations

Discussion

The differences reported were seen in the different attitudes of Jewish and Arab communities towards music, the exposure of children to music activities, the level of encouragement and support by the parents for music learning, and in a latent way the types of musical instruments that the students chose to learn.

Attitude toward music were described by the Jewish graduates as of acceptance. The Arab graduates described the complexity with music learning in their culture while they emphasized that all Arabs whether Muslim, Christian, or Druze are affected from the Islamic law because they are closely interweaved with each other. All the Jewish participants and one Arab participant experienced music exposure as a child at home, while for one Arab Christian participant exposure was not at home but at church. According to Bronfenbrenner (1977) the influence of the family and home is part of the *micro-system* environment whereas the church that was mentioned by the Arab participant may be considered as part of Bronfenbrenner's definition of the *meso-system* environment. The lack of musical activities in an Arab Christian family at home exemplifies the influence of traditional Islamic Arab culture on the Arab Christians. As described by Shiloah (1999), there was a ban of hardliner interpreters of the Quran regarding secular music activities.

Attitudes towards music and the value attributed to music participation in life differ between the Jewish and the Arab cultures. Regarding encouragement, all Jewish participants and one Arab participant were encouraged by their parents to engage in music learning while two Arab participants were not encouraged. The lack of encouragement showed in late start of instrumental learning

The negative attitudes toward music activities of the Arab Muslim society seem to impact also the Druze and Christian minorities (Otterbeck & Ackfeldt, 2012; Cahn & Rusu, 2016; Shiloah, 1999) which exemplified in less encouragement for instrumental learning.

The Jewish participants played violin, guitar, piano, bass, and sang; the Arab participants played bass, darbuka, keyboard, and they, too, sang. This finding is consistent with those of an earlier study (Poles Cahn & Rusu, 2018).

Conclusions

The aim of this qualitative study was to gain a deeper understanding related to the cultural and individual differences of the musical upbringing of Jewish and Arab Israeli students, and to gain understanding concerning participants' experiences as music teachers in their cultures.

There was a wide agreement among all participants of the two focus groups that music teaching is not prestigious in terms of profession. However, the reason for the low status of the profession differed between the groups. The Jewish participants described the music class in school as considered not important compared to core curriculum subjects. In Arab society there is an appreciation for the teaching profession as a high-status occupation. Nevertheless, when it comes to music teachers there is variety of attitudes. In the school environment there are principals that appreciate and support the music teacher and others that are not supportive.

Motivation for studying music education include acknowledging the fact that music teaching is a practical profession for a musician as it can provide financial stability. Other utilitarian motivatio include convenient working hours both for mothers and for performing musicians. Many of the Arab women that came to study music in their first degree and later enrolled at music education programs did not study music before they started their academic studies in the field of music. These Arab women were given the chance to study music for the first time in their life.

Triangulation of the qualitative and quantitative data presented by the research questions.

The first research question: The focus group interview added another dimension to the musical instruments' choice of the Arab students. It seems that there are historical Islamic beliefs attributed to positive and negative qualities of musical instruments. The division is based on the belief regarding the connection between certain musical instrument and negative spiritual forces. Violin, and wind instruments are less desired, while flute is the least desired musical instrument.

The quantitative study showed differences between the Jewish and the Arab students regarding music learning. The focus group participants described their experiences with music at home. The Jewish students and one Arab student described being exposed to music playing of family members, or cooperation with singing, while two Arab students were neglected regarding their will to learn to play. Raising positive change regarding music learning they described the new music conservatory in Shefar'am (an Arab city in the northern part of Israel) that according to them have an excellent music students and excellent reputation.

The second research question: There were differences in exposure to music learning and activities between the Jewish and Arab students. The quantitative findings revealed that the Jewish students reported more exposure to music activities during their childhood, they had music classes at school for a longer time than their Arab peers. These differences reflect the ambivalence toward music learning and activities that exist in the Arab community.

The qualitative study supports these findings from the music teacher perspective. The Jewish music teachers experienced acceptance and support while the Arab teachers elevated the ambivalence in attitudes they experienced in the schools.

In the quantitative data, practice sessions reported by the students during their academic degree or teaching certificates were generally similar. A difference was found in regard to performance activities- the Jewish students reported more performance activities than the Arab students. This difference was not seen in the qualitative focus groups data. In the focus groups two men participants, one Jewish and one Arab, reported regular performing activities. Two

women, one Jewish and one Arab, described their path regarding performing. One Jewish woman was searching for the right path, while the Arab woman described her frustration from all the limitations she faces as a woman musician in the Arab community. She unveiled her difficulty as an Arab woman to perform, as she is expected to teach at school and go back home. She explained the consequences of these limitations as harming her musical development.

The third research question: Quantitative findings regarding motivation for teaching music were divided between ideological motivations and utilitarian ones. There were significant differences between the Jewish and the Arab students for both. The Arab students rated both types of motivation significantly higher than the Jewish students. Ideological related motivation included music motivations and society contribution motivations. Utilitarian reasons for teaching music included raised social status, demanded occupation, and good income. Compared to the Jewish students, the Arab students had higher ranks to all utilitarian reasons.

From both quantitative and qualitative studies, it can be concluded that the Arab students started learning music at an older age as compared to the Jewish students that started at childhood. Therefore, it is very likely that the Arab students and graduates were already considering possible occupations.

Future plans to teach music showed no differences between the ethnic groups. More than half of the students from both groups plan to teach music in the future, in kindergarten and in elementary school.

The qualitative study supports the assumptions regarding teaching music. All the participants of the qualitative study taught music in the past, while currently one is not teaching but manages community center with music lessons as part of its' activities. All the participants to the qualitative investigation are facing the challenge of teaching. They have future plans and are coping with reality. They look forward and evaluating their future development possibilities regarding higher education or other treks.

An open question that was added to the last part of the questionnaire was: What would be your most significant achievement in the field of music education? The Arab students were describing further professional personal development through achieving higher academic degrees either in music education or in music therapy. These future plans are also described by the qualitative study participants who think to keep on studying and develop themselves in the field of music education or music therapy.

The Jewish students' decision to engage in music education as a career appears to be led by their inner will for occupation in the field of music that they love. The Arab students' decision to do so is more complex because of the historical Islamic ban on music activities. Many of the Arab music education future teachers will become cultural change agents. Music education is about promoting musical knowledge. These future teachers are going to face the need to convince educational staff, students, parents and other people in their community of the value of their occupation.

Limitations include: a) The researcher personally knows all the focus groups participants, so the idea that a degree of social desirability may be manifested in the answers cannot be ruled out, and b) the participants in both studies, the quantitative and qualitative ones, are studying or had studied music education. It should be noted that findings may differ if music performance program participants would be included in such a survey.

CHAPTER 4: DISCUSSION AND GENERAL CONCLUSIONS

The purpose of this doctoral research was to investigate psycho-social characteristics of Israeli Jewish and Arab music education students in relation to their attitudes toward music education and music education career choice. This research was done in Israel, a state with two different

distinctive cultures (among others), Jewish and Arab, who differ in many aspects such as language and religion, as well as their musical culture.

4.1. Theoretical implications

The first study was dedicated to developing the CAMEE questionnaire that would be able to expose the cultural differences and similarities that exist between Israeli Jewish and Arab music education students. Statistical measures of the CAMEE questionnaire that were done in study 2 indicated good psychometric characteristics of the sub-scales and of the global scale, i.e. Cronbach's Alpha values above 0.71, thus positioning the questionnaire as an appropriate measure tool. The CAMEE questionnaire and its results indicated that there were differences between Israeli Jewish and Arab students that were due to their cultural affinity. In order to adapt this questionnaire, questions that are more specific to the ethnic culture of the participants may improve the ability of the questionnaires to delineate the differences that exist.

The second study aimed to compare Israeli Jewish and Arab music education students in order to identify cultural differences and similarities in regard to their attitudes toward music, music education and music education career choice. Participants included a total of 50 Israeli students. In order to reveal cultural differences between the Jewish and Arab students, a relatively equal number of students from each cultural group participated in the study: 26 Jewish students and 24 Arab students. The equality in percentage between the groups does not reflect the actual percentage of the Arab population in the State of Israel which is about 20.6% (Central Bureau of Statistics, 2013). The decision to maintain an equal percentage of Jewish and Arab students within the study was done in order to examine whether cultural differences between the groups were indeed statistically significant.

Results of the study confirmed cultural differences between the Jewish and Arab students regarding music style listening preferences, music instruments played and the reported involvement of family members in music studies. Differences were also found regarding musical experience during childhood and musical performance activities while studying in their academic program. Motivation for studying music education also differed between the groups with the Arab students rating utilitarian statements higher than Jewish students.

Theoretical implications regarding these results include the recognition that the cultural differences between Jewish and Arab students are reflected in almost all facets related to music and music education. The recognition of where these differences lie may be used as guidelines in addressing music education issues that range from childhood up to academic music programs. For example, musical differences such as music style listening preferences and music instruments played may be found in various cultures around the world (Campbell & Wiggins, 2013). However, the fact that the Jewish and Arabic cultures coexist in Israel, justifies incorporating a music education system within the school music classroom and within the academic music education program that provides exposure of elements from both cultures to both the Jewish and Arab population. Including music from both cultures in the Israeli music curriculum may enhance understanding and co-respect for the music of the other. Additionally, when learning music of other cultures, other issues of cultural background are often presented which contribute to a better knowledge and understanding of the other culture. In the long run it may enhance a better understanding between people of different cultures, specifically Jewish and Arab that live in Israel. Obviously, these theoretical implications are not limited to Israel but are applicable to the music education programs of other countries that have minorities.

The third study aimed to gain a deeper understanding related to the cultural and individual differences of Israeli Jewish and Arab students regarding their musical upbringing, and to gain an understanding concerning graduates' experiences as music teachers in their cultures. The participants were Jewish and Arab graduates that had completed music education programs and that were working as music education teachers.

Results of the study confirmed results of the quantitative study (study 2), but gave a deeper understanding on how the cultural differences effects both music education within the communities, and specifically the participants' musical experiences. The most prominent difference between the two groups was the support for their musical ambitions both as children and as adults. Whereas the Jewish students experienced total support, the Arab students experienced from their families and social surroundings a lack of appreciation for musical learning, at times even experiencing attitudes of contempt. These participants described feelings of frustration and sorrow for the loss of possibilities to play and for the limited possibilities available during their childhood to reach a high musical level. Also, both groups described different problems that they faced as teachers. The Jewish graduates described positive attitudes in the Jewish community toward music activities and studies, although being a music teacher is not prestigious. However, the Arab graduates described complex attitudes of the Arab community towards music activities and music studies. These attitudes ranged from lack of acceptance, usually by the more religious and traditional communities, to acceptance that was displayed by the more liberal community.

There are a number of theoretical implications, these include the recognition that the cultural differences between Jewish and Arab students are reflected in almost all facets related to music and music education. The current study adds and describes in deeper depth the frustration that exists among the Arab participants due especially to their society's attitude towards music. This study revealed that part of this attitude is due to the orthodox religious leaders that are against music learning and activities.

The second theoretical implication lies in the very fact that regardless of the prevailing attitude of the Arab society, the Arab participants both in the first and second study exemplify the modernization and secularism change that is occurring within the Arab society as reported by Al-Krenawi (2007). These participants are part of the generation that Karkabi (2013) reported whose ages are between 20-30 and who do not continue to accept the cultural boundaries regarding music activities that were imposed by the orthodox religious leaders. Therefore, the Arab music teachers may be considered as pioneers in the field of music education in their communities due to the fact that some have initiated music classes, either private or in schools where such music studies were hardly available before. Furthermore, in the Arab community, women, who in many cases did not have the chance to study music as children, although they had the desire, identified the music education profession as an occupational opportunity. For them, studying music education opened the door to the world of music they had wanted to enter earlier in life.

4.2. Practical implications

The results of these studies provide information that has practical implications regarding music education programs for the different communities.

Study 1: The CAMEE questionnaire provided a tool for the examination of factors related to music education and music education career choices in Israel. However, the concept of this tool which includes questions related to the specific cultures may be adapted in other countries that have different cultural minorities. Therefore, the CAMEE questionnaire contributes to the screening of cultural influences on students studying music education. Following the outcomes of the questionnaire, practical implications should be taken into consideration, which are described in studies two and three.

Studies 2 & 3: Implications for the school music class deal with compatible music programs. Teaching music for children should be connected to the music of their culture, for this is the music that they know the best and are familiar with. The music class should include a variety of musical instruments, some of which also represent the characteristic instruments of the child's musical culture. Exposure to playing musical instruments, at the initial level, should be

included in the music class. For some children, this might be their first contact and exposure with musical instruments.

In order to enhance encouragement for music instrumental learning within the family, practical implications should include meetings of music educators with kindergarten and school children parents. In these meetings the value of learning to play a musical instrument as a child should be explained. These implications should be especially incorporated within the Arab community in Israel where learning music was less encouraged.

It was found that the Arab students studied music playing for a shorter time compared with the Jewish students. This was partly due to the lack of enough music educators within the Arab community. Practical implications should be considered regarding the recruitment of Arab music teachers. This process could include meetings with middle and high school children and parents in order to raise their awareness of music education as a future profession, and the need to start studying a musical instrument. Learning a musical instrument prior to academic studies has the potential to develop the playing proficiency level as well as the musical knowledge of the students.

In order to expose Israeli school students to the variety of musical cultures that exist within the country, especially those of the Jewish and Arab cultures, school music programs, should incorporate songs, instruments, and listening examples from both these cultures.

School music programs may reflect the cultures in the State of Israel, incorporating songs, instruments, and listening examples from both cultures of the Jewish and Arab students.

Some of the Arab music teachers in this research experienced lack of encouragement for their music class on behalf of the school principal and the staff. There is a possibility that an introduction meeting, focusing on the value of the music class in the school should be presented to the teaching faculty and principle, may enhance positive attitudes.

There is a possibility that meetings with school principals should be arranged by educational music inspectors from the ministry of education in order to promote music programs.

It is possible that for all students and especially for the Arab students, raising awareness of the need to promote their profession as music educators should be dealt-with during their academic studies.

4.3. General conclusions of the doctoral research

Cultural differences

- Cultural affinity is a relevant force that has an effect on the musical styles' preferences and related knowledge of music education students in Israel.
- Cultural affinity conveys overt and covert messages related to the cultural attitude toward music – such as musical instruments choice.
- Cultural attitudes shape the exposure to varied activities related to music professions, in terms of facilitating or impeding the access to some of them.
- Jewish students have a better chance to be exposed to musical activities such as singing at home, learning and playing music from an early age, receiving more encouragement for playing, and learning to play for a longer time than Arab students.
- The Jewish students had attending music classes at school for a longer time during their childhood than the Arab students.
- Schools' inclusion of elective music education classes appears to be shaped by cultural affiliation and attitudes.
- Music instrumental practice training during childhood is reported to be connected to the ability to perform at adulthood. The Jewish students reported more performances than did the Arab students.

Motivation for studying music education

- The Jewish students' decision to engage in music education as a career is done with the realization that music education is not prestigious in their society, but it fulfills their inner will for occupation in the field of music.
- Regarding teaching music, the Arab students identified the gradual change in attitude of the Arab community toward music learning that occurs nowadays and realized that teaching music has become a realistic and feasible career.
- Utilitarian reasons such as *good income*, *high social statues*, and *occupational opportunities* were major motivation of the Arab students for enrolling in music education programs.
- Teaching preferences of the Arab students were realistic according to the available educational institution that may teach music, these are kindergartens and schools. High school music programs are very rare in the Arab sector as for now.
- Music teaching is a practical profession for a musician; it can provide financial stability, and performing musicians can combine teaching position with an active music life.
- The working hours are convenient both for mothers and for performing musicians.
- Many Arab women that enrolled in music program for a bachelors' degree did not have the chance to study music before.
- The identified needed occupation opened a possibility for the Arab women to study playing music – since they could find a respectful occupation as a music teacher.

Musical skills regarded as important for music teacher

- Students from both ethnic groups, Jewish and Arab, regarded musical skills such as *playing ability, solfege knowledge Western Classical music theory*, and personal qualities such as *love of teaching music*, *having good relationship with children*, and a *love of teaching* important for a music teacher.

Adapting music teaching to the targeted population

- The Arab students regarded *Middle Eastern Arab Classical music*, and *Middle Eastern Arab music theory* as important for a skilled music teacher. The Arab students know that they need to adapt their teaching program to the students they intend to teach.
- Both Jewish and Arab students planned to teach private instrumental music lessons. The Arab students also planned to teach private theory lessons. It can be speculated that there is a greater need in the Arab sector for theory teachers, and those who have the knowledge plan on teaching both.

Experiences as active music teachers in the two sectors, Jewish and Arab, in Israel

- Being a teacher is appreciated in the Arab society, while being a music teacher is less so due to the fact that music activities are not appreciated by the whole Arab community.
- The ambivalence attitude of the society is reflected also with some school principals that choose music as an elective but do not support the music program.

Cultural change

- The Arab students that choose to study music education can be considered pioneers in their way. By enrolling in music education programs, they show that music education and musical activities are of value. These students have the potential to become agents of cultural change in the Arab society in Israel.
- The future Arab music teachers will face the need to convince educational staff, students, parents and other people in their community of the value of their occupation.

4.4. Research limitations and future research directions

- For the first study, the sample size was small, $N = 20$, and they were professional Jewish and Arab musicians, and not music education students. In general, there is a low number of music education students, and especially Arab music education students in Israel. The

professional musicians were contacted for the test of the pilot version of the CAMEE questionnaire.

- The second study centered on students that chose to study music education for their Bachelors' degree or for teaching certificate. Findings, if applicable to students studying in other programs which are not focused on music education, should be treated with caution.
- This research is solely based on the self-report of the participants regarding their musical ability and knowledge. No other objective assessment ways of academic and professional performances were used in this study.
- The researcher personally knows all the focus groups participants, so the assumption that a certain degree of social desirability was given in the answers should not be excluded.

Future research directions

There are several possibilities for future research directions. Some of them can be formulated in the following research questions:

1. Are there differences between Israeli Jewish and Arab music performance graduates in the way in which they cope with their different identities as musicians and teachers after completing a music teaching certificate program?
2. What are the differences between the personal background of Israeli Jewish and Arab students that study in music education programs and Israeli Jewish and Arab students that study in music performance programs?
3. How would the awareness of the psycho-social differences between Israeli Jewish and Arab music education students impact teaching strategies and music materials of music education programs in Israel?

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