School of Population Health

Culture and Music Psychology

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DECLARATION BY AUTHOR

To the best of my knowledge and belief this thesis contains no material previously published by any other person except where due acknowledgment has been made. This thesis contains no material which has been accepted for the award of any other degree or diploma in any university. The research presented and reported in this thesis was conducted in accordance with the National Health and Medical Research Council National Statement on Ethical Conduct in Human Research (2007) – updated March 2014. The proposed research study received human research ethics approval from the Curtin University Human Research Ethics Committee (EC00262).

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ACKNOWLEDGEMENT OF COUNTRY

We acknowledge that Curtin University works across hundreds of traditional lands and custodial groups in Australia, and with First Nations people around the globe. We wish to pay our deepest respects to their ancestors and members of their communities, past, present, and to their emerging leaders. Our passion and commitment to work with all Australians and peoples from across the world, including our First Nations peoples are at the core of the work we do, reflective of our institutions' values and commitment to our role as leaders in the Reconciliation space in Australia.

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RESEARCH OUTPUTS

Journal Publications: The research reported here is at various stages of the publication process. As such the material presented here acknowledges this fact and uses the same text except for the addition at the beginning of each chapter of a brief preface placing the research in the context of the thesis as a whole.

Incorporated as Chapter 2:

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ABSTRACT

Music is evidently a product of culture. As such, it is reasonable to think that culture influences music consumption, but little research within the field of music psychology concerns cultural variables. The current thesis attempts to investigate culture's influence on music consumption through two domains, namely musical taste and uses of music. The current thesis does so by considering culture at different levels. Culture is assessed at the individual level within a specific country, at the group level across multiple countries, and nationally aggregated cultural orientation scores. Altogether, there are six chapters that represent six separate studies that conduct investigations on culture and music consumption. All chapters had significant findings in one way showing the various more specific relationships that exist between cultural dimensions and music consumption. The thesis informs the existing literature within music psychology, consumer psychology, and cross-cultural psychology, and it is hoped that future research adopts a shift in focus towards exploring a wider range of cultural variables and their relationship with both musical taste and the ways in which people use music.

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TABLES AND FIGURES

The table and figure numberings start with the Chapter number followed by the order it appears within the Chapter. For instance, Table 2.1 is the first table that appears within Chapter 2.

CHAPTER 1: GENERAL INTRODUCTION

Archaeological findings date the earliest musical instruments to 40,000 years ago (Killin, 2018). Montagu (2017) argues that over human history music has fulfilled four purposes namely dance, personal or communal entertainment, communication, and rituals. Early uses of music achieved these purposes by using a rhythm alongside noises or sounds, and this practice evolved into what became the earliest known 'music'. Mithen (2006) further argues that historically music has been a 'societal adhesive' that allows for bonding between individuals, families and communities. For instance, the act of dancing or singing together before a hunt or warfare helped to bind participants together before the challenge to come. More simply, the earliest forms of music were explicitly purposeful rather than arbitrary, and many of these purposes concerned effective interaction with other people and the user's social environment.

Music is often depicted as a product of culture, and a large ethnomusicological literature has investigated how different cultures embrace music differently (see Nettl, 2005; Rice, 2013). From traditional forms of American folk music to Indian ragas to the popular Han music of China, music clearly takes diverse forms. Nonetheless, music has become more intertwined with the daily lives of individuals as society and technology have evolved. Following the rise of radio in the 20th century, recent years have seen a significant increase in our access to music through the viral growth of online music streaming. This has led to music being even more intricately involved in the daily lives of individuals as music consumption has shifted from traditional means of consumption to a digitised and highly portable model, with an enormous expansion of choice for the listener. The IFPI (2023) notes that music streaming accounted for more than 50% of the music industry's revenue (17.5 billion USD) in 2022. In that year there were 616 million subscribers to paid music streaming services,

representing almost a 100% increase since 2019 (Statista, 2024). This proliferation of music consumption and streaming warrants more attention from psychologists given the huge range of choice and opportunity to contextualise music listening. The current thesis addresses this by focusing on why individuals use music and their musical tastes. Moreover, the fact that music use varies distinctively between cultures is interesting but is yet to receive significant attention from psychologists, which is all the more surprising in the context of music streaming services which operate across national borders. Hence, this thesis explores the links between music consumption and culture within the context of music psychology and cross-cultural psychology.

1.1 Music Psychology

The social psychology of music addresses diverse topics such as individual differences, identity, and group processes in both performance and music consumption. North and Hargreaves' (2008) overview suggests that research within the field can be organised according to Doise's (1986) more general classification of social psychology research, which concerns influences at one of four hierarchical levels, namely intraindividual, interindividual, socio-positional or ideological respectively. Intraindividual research concerns processes that occur entirely within the individual such as personality and emotions. The interindividual level concerns processes that occur between individuals and in different situations. Socio-positional influences refer to relationships between individuals, groups, and other circumstances where individuals relate to one another on the basis of social group membership. Finally, Doise's ideological level deals with broad, macro levels of influence such as cultural beliefs, norms, societal structures, and political ideals.

North and Hargreaves (2008) state that the majority of research within the social psychology of music concerns the two lower levels of Doise's hierarchy, whereas the two

higher levels (socio-positional and ideological) receive much less attention. Studies that focus on factors such as personality in relation to music preferences and consumption have been conducted widely (see Charmorro-Premuzic et al., 2010; Rentfrow & Gosling, 2003; Schäfer & Mehlhorn 2017), while other studies (see Lonsdale & North, 2011; Schäfer et al., 2013; Schäfer, 2016) have shown how music helps individuals relate to one another. Recent years however have seen various authors argue that research should consider social influences which feature higher in Doise's hierarchy (Boer & Fischer, 2012; Krause & North, 2017; Rentfrow, 2012), and corresponding research effort concerning factors such as political beliefs (see Devenport & North, 2019). In particular, although a small amount, there is an increasing body of research that considers music psychology through a cross-cultural lens (see Boer & Fischer 2012; Saarikillo, 2023). For instance, Boer and Fischer (2012) specifically looked at the way music is used across different cultures, where Western cultures are more likely to use music for emotional functions compared to Eastern cultures. This was concluded through the emphasis on emotional functions of music being mentioned more by Western participants in comparison to Eastern participants within the study. Similarly, Liew et al. (2021) reported a difference between Japan and the USA in preference for the type of affect (low vs high arousal states) evoked by music. Furthermore, Rabinowitch (2022) suggests that people's musical engagement can be explained by one particular cultural dimension, namely tightness looseness. A small number of other studies also indicate that cultural factors are related to musical behaviour (e.g., Boer & Fischer, 2012; Stevens, 2012; Juslin et al., 2016) . These various studies show that there is a clear relationship between cultural influences and how music is used and consumed, although there is little agreement concerning the most relevant theoretical model of culture, or the most important means of music consumption that should be investigated. Therefore, this thesis focuses specifically on

trying to better understand the complex relationships between culture and music across a range of differing cultures.

The attempt to understand music here is specifically focused on two main areas of music consumption. Firstly, the musical taste of individuals is concerned with the genres that individuals would ideally like to consume. The use of genres as a measure of musical taste can be seen throughout the literature (see Colley, 2008; Savage & Gayo, 2011). Previous research has related musical taste to various predictors such as personality (e.g., Elvers et al., 2015; Rentfrow & Gosling, 2003), social class (e.g., Coulangeon, 2015; Liu et al., 2019) and political orientation (Devenport & North, 2019).

The other aspect of musical behaviour considered here is the goals of music consumption. Several studies show that most individuals use music for attaining specific goals or have specific motivations for using music (Lonsdale & North, 2011). Having a better understanding of why music is consumed and what individuals intend to achieve through their consumption of music can provide great insights to understanding the behaviour of music consumption. These motivations may be related to a host of different variables. Prior studies have also shown that individuals tend to use music to facilitate emotional regulation, connect with other individuals socially, and engage in identity expression (see Lonsdale & North, 2011; North et al., 2004; Schäfer et al., 2013).

1.2 Culture

Culture has been defined in various ways by a variety of scientific theorists and philosophers. From the perspective of psychological research, a good summary of what culture encompasses is Matsumoto's (1996) argument that culture is a set of values, beliefs and systems that individuals believe in and adopt but share within a community. This definition implies that individuals are often influenced by culture both on an individual level

and a societal level. This therefore allows us to consider how a given individual relates to cultural values, and how the latter may differ between individuals. The literature provides several dimensions of culture that can be quantified. If these cultural dimensions can explain musical behaviour this opens the possibility of applying them to the quantitative, algorithmic models employed by music streaming services.

Since the notion of culture is inevitably broad, it is unsurprising that researchers have attempted to focus on specific subcomponents or dimensions. Specifically, this thesis aims to understand how cultural dimensions relate to musical taste and the way individuals consume and use music. The specific cultural dimensions included within this thesis are: individualism-collectivism, tightness-looseness, relational mobility and ideal affect. These dimensions are of particular interest since, although they are well established in research on cross-cultural psychology, there has not yet been research linking them with music consumption. Not all cultural dimensions within the literature can be mapped onto music psychology in a straightforward manner. However, music consumption is also an act of consumerism and so in cases where prior findings concerning culture do not directly predict musical behaviour, we attempt to draw on literature from the field of consumer psychology. Each of the cultural dimensions employed in the thesis is reviewed briefly below.

Individualism-Collectivism. Individualism is defined as a social pattern of loosely linked individuals who place more emphasis on the self rather than the collective, whereas collectivism is defined as a pattern of closely linked individuals who identify themselves as part of a larger social collective (Hofstede, 2012; Triandis, 1995). As such, individualistic societies often place greater emphasis on independence and self- sufficiency whereby individuals within society are independent and look out for themselves. In contrast, collectivistic societies place greater emphasis on maintaining the group's status quo so that the collective's needs take precedence over personal needs. Within the context of music, Boer

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and Fischer (2012) found there to be differences in how music is used across different cultures that make good intuitive sense: for instance collectivistic cultures were actually more inclined to use music to dance with friends and family. Similarly, Saarikallio et al., (2020) found that individualism-collectivism could explain differences between people in how they use music to achieve affective states. Individualistic societies were found to utilize music more for self-expression and reflection, while collectivistic societies were more inclined to use music to attain positive states of arousal which might help achieve group cohesion.

Tightness-Looseness. Tightness looseness refers to the extent to which a particular society is tolerant of deviant behaviour (Gelfand et al., 2011). Tight cultures typically have strict social norms to which individuals are expected to adhere, and violation of these norms leads to negative consequences for the perpetrator. In contrast, loose cultures place less pressure on individuals to follow norms and allow greater deviation from these without consequence. Tight societies have a limited range of permissible behaviours, while loose societies have weaker constraints and a wider range of permissible behaviours. While tightness looseness operates at the level of individuals it also relates to broader societal governance, since tighter societies are more inclined to have heightened pressure and control on media outlets, and less political and civil liberty (Gelfand et al., 2011). Work on tightness looseness originated in the late 1970s with the hypothesis that a society's degree of tolerance of deviance results from ecological threats such as natural disasters, famines, or lack of natural resources (Berry, 1979). Due to the presence of threats, there is a need for strong social norms to govern the behaviour of individuals to ensure social coordination and therefore survival. In contrast, societies that face fewer ecological threats have a lower need for order and are therefore more tolerant of deviance (Gelfand et al., 2011). In the context of music, Rabinowitch (2022) argues that tightness leads to a form of synchrony in music whereas looseness leads to more fluidity and interpretation in music. Li et al. (2013) further suggests that loose cultures

promote personal creativity more, which allows artists to explore freely thus increasing creative potential: in contrast, tight cultures require artists to follow stricter norms which can prevent creative exploration.

Relational Mobility. Relational mobility refers to the extent to which individual members within a society have the freedom to enter interpersonal relationships (Thomson et al., 2018). Individuals within societies with high relational mobility have the freedom to freely enter and leave interpersonal relationships as they wish, while those within low relational mobility societies often form new interpersonal relationships as the result of a need to fulfill duty, obligations and social roles. Thomson et al. (2018) also further suggested that Eastern countries generally have lower relational mobility in comparison to Western countries. This is highlighted in Takemura and Suzuki's (2017) study where they found greater inclination for self-expression concerning relationship formation on Facebook (which was popular within North America) whereas self-expression was lower on Mixi, a social networking platform popular in Japan. Relational mobility may also arise potentially from ecological threat, since societies with higher numbers of ecological threats tend to have lower levels of relational mobility. The hypothesis here is that these ecological threats lead to people having a desire to group together and fulfill clear social roles out of a need to co-operate in the face of threat (Thomson et al., 2018). Research also shows that societies with higher levels of relational mobility tend to have higher levels of self-esteem, as individuals living within these societies tend to have higher confidence in approaching other individuals and forming new relationships (Thomson et al., 2018). In the context of music, previous research shows that music facilitates social bonding and identity expression for the purpose of forming new relationships (Lonsdale & North, 2011; Schafer et al., 2013). This tendency should be more evident in individuals and societies higher on relational mobility as they have greater freedom to choose their relationships. From a theoretical perspective, Takemura's (2014) finding

supports this notion since individuals higher on relational mobility more often had the need to be more appealing and unique. This is because uniqueness helps them stand out from the crowd and potentially form more relationships based on their uniqueness.

Ideal Affect. Ideal affect refers to the emotions, feelings and mood that one would ideally like to attain or experience (Tsai et al., 2006). Affect Valuation Theory (AVT) posits that an individuals' ideals for certain moods and emotions can influence their behaviour (Tsai et al., 2006). The basis of this notion is that often individuals have very different ideal emotions that they would like to experience in comparison to the actual emotions that they are feeling. Moreover, people's feelings and emotions fluctuate throughout the day, implying that there are constantly changing ideal emotions that one would like to experience (Tsai, 2007). Tsai (2007) also argues that ideal affect is directly influenced by culture. For instance, Tsai et al., (2007) showed that there is an inclination towards lower states of arousal in East Asian cultures whereas Western cultures have greater inclination towards higher states of arousal (Tsai et al., 2007). Unsurprisingly, several studies describe how music is often used as an emotional regulation tool (see Cespedes-Guevara & Eerola, 2018; Juslin & Sloboda, 2013; Lonsdale & North, 2011). Thus, it is reasonable to expect that music listening can be influenced by ideal affect.

1.3 Socioeconomic Status

In addition to the cultural dimensions, several chapters of the thesis will also consider the socioeconomic status of individuals and societies. Socioeconomic status can be regarded as closely related to culture as there are multiple models of culture that implicate one's socioeconomic status either as a covariate or as more implicitly related to specific cultural dimensions. This is because cross-cultural research has investigated how individuals from different cultures might respond and behave differently when considering the social

hierarchies and status of individuals. For example, the research on social dominance orientation (SDO) (Pratto et al., 2013) and power distance (Hofstede, 2011) both include socioeconomic status as indices of differences in people's positions in social hierarchies. Furthermore, the socioeconomic status of individuals has been linked to the way those individuals appreciate music. Meuleman (2021) is one recent example of numerous papers which suggest that socioeconomic status is related to a taste for highbrow culture because the upper echelon of society have more opportunity to be exposed to a wider range of cultural products. Certain musical genres fall under this category and therefore result in a taste that others with lower socioeconomic status may not necessarily share or be exposed to. This in turn results in a sense of prestigiousness when consuming certain genres of music which might be related to the social class and position of individuals. For example, Mellander et al. (2018) found that within the United States that individuals with high SES backgrounds are more inclined to appreciate classical and jazz music whereas those from lower SES backgrounds are more inclined to appreciate rock and pop. Whether the same or any relationship between these variables can be identified outside Western Europe and North America remains an empirical question, however.

1.4 Uses of Music

Music is used differently not just across cultures but also individuals. Research within the field of music psychology has looked at uses of music in relation various variables. For example, studies like Chamorro-Premuzic and Furnham (2010) looked at the personality traits of individuals in relation to the way they use music. For example, introverted, neurotic and non-conscientious individuals are more inclined to use music for emotional regulation purposes. Additionally, there are also studies that look at how the use of music might vary by age group (e.g., Laukka, 2007; Papinczak et al., 2015). Particularly, Papinczak et al. (2015)

suggested young people's (15 to 25 years old) use of music is associated with their well-being. They found that several domains related to well-being were linked to reasons for consuming music, namely forming relationships, modifying emotions and immersing into one's emotions. Another study by Lonsdale (2018) focused on the emotional intelligence of individuals in relation to music, with findings suggesting that the emotional intelligence was related to management of negative mood by music (through regulation ofing arousal).

Furthermore, research has also considered the uses of music in different contexts of everyday life and daily living (Chamorro-Premuzic & Furnham, 2007; Lonsdale & North, 2011; Schäfer et al., 2013). Lonsdale and North (2011) concluded in their study that individuals utilise music for a range of different reasons including emotional regulation, identity expression, diversion, interpersonal relationships and surveillance. Furthermore, Schäfer et al. (2013) report similar findings to Lonsdale and North (2011) arguing that the main reasons for music consumption were emotional regulation, self-awareness and social relatedness. In summary, these studies all tend to identify three main reasons for using music, namely emotional regulation, self-related functions, and social functions.

Another interesting aspect of the research on how individuals use music is the implicit suggestion that people often often actively use music to achieve particular ends rather than passively receive it, which suggests intentional behaviour (Lonsdale & North, 2011). Management of emotions, self, and interpersonal relationships through music implies strongly that it is fulfilling particular functions for people as part of their everyday life. Therefore, identifying the drivers of such intentionality is essential in providing a better understanding of how music consumption works. It would also be reasonable to suspect that culture might be one such driver of the motivation for using music to achieve particular goals. One such example would be the ideal affect of individuals (see above), such that people use music to achieve particular, and crucially culturally-related, moods. This

represents just one of the intuitive insights into uses of music that can be provided by considering them in the context of cultural dimensions. Investigating this and similar relationships would allow clearer and better understanding of culture's influence on the uses of music.

1.5 Addressing the Research Question

As discussed earlier, music is closely embedded within culture, and so it is unsurprising that we can identify possible relationships between musical behaviour and each of individualism, tightness, relational mobility, and ideal affect. Therefore, the current thesis seeks to further understand how culture relates to the way individuals and societies consume and use music. In addition to establishing a quantitative relationship between music and cultural values, the present research also attempts to identify unique relationships between specific cultural dimensions and specific aspects of music consumption.

While the thesis addresses social influences at Doise's ideological level, this is addressed in different ways within the thesis itself, with cultural dimensions being measured at different levels. Chapters 2-5 capture cultural orientations at an individual level within a specific country, since as Matsumoto (1996) points out, culture is a set of values that individuals believe in. The notion here is that individuals can have varying scores on any given cultural dimension despite being under the wider influence of a societal/cultural norm. For instance, a tight society would presumably practice tight values within its community, but there can be a varying degree of cultural tightness between individuals living within this society. Chapter 6 looks at individual cultural orientations at a cross-national level, as it is predicted that despite there being individual level cultural orientations, there are cross-cultural differences when it comes to these orientations. Chapter 7 looks at cultural

orientations aggregated at the national/societal level. To conclude, the overarching research question of this thesis is:

RQ: How does culture relate to the way music is consumed and used?

To address this the current thesis includes six chapters written as individual studies. There are two main streams of research embedded within the current thesis which are discussed below.

1.6 Thesis Structure

Stream 1 includes Chapters 2-5 where data at the individual level from four different countries are utilized to determine how culture relates to the way music is used and consumed amongst individuals within each specific country. Chapter 6 aggregates the data from the previous four chapters to investigate cross-country differences on similar variables. Stream 2 is represented by Chapter 7 which employs aggregated societal level data to investigate cross-national differences in music streaming preferences.

Chapters 2-5 include studies that investigate the relationship between tightness-looseness, relational mobility, and ideal affect and both musical taste and goals of music consumption among individuals from Australia, Japan, China and Malaysia respectively. Each chapter represents a standalone, detailed investigation into individual cultural orientations within a given country and how these relate to the musical taste and goals of consuming music of individuals within each country.

Chapter 6 builds on the previous four chapters and provides a cross-national comparison of how musical taste and uses of music relate to cultural dimensions. Country differences here are predicted to be a significant moderating variable between the predictor

and outcome variables. As such this chapter is interested in cross-national differences at a societal level rather than the individual level (in contrast to the previous chapters).

Chapter 7 utilises Spotify's archival charts for song popularity to explore how cultural variables relate to music consumption at an aggregated national level. The chapter focusses on how individualism-collectivism relates to the number of unique artists and band size of charting songs, and data on gender equity is used to attempt to predict the proportion of female artists on charting songs.

CHAPTER 2: MUSIC CONSUMPTION AND USES IN JAPAN

2.1 Preface

      This chapter looks at musical taste and the goals of consuming music within Japan. Data is collected on specific cultural dimensions and used to predict music consumption by the same individuals. Japan was chosen due to it being the second largest music market in the world and it being a prominent non-Western culture. This will allow better insight into an Eastern culture where the existing literature has predominantly focused on Western contexts.

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2.2 Introduction

Across the world, music streaming is becoming a preferred means of music consumption (IFPI, 2022). The rise in streaming has created a need for research on the motivations behind this trend, as music may fulfill specific purposes in individuals' lives, aligning with their broader goals and motivations. These goals and motivations are influenced by cultural factors where, despite a growth of research into streaming and music consumption, there remains a notable gap in understanding the role of culture in these. As cultures may differ in behavioural predispositions, this can translate into differences in music consumption across cultures. One potential manifestation of this found in global charts is the increasing diversity of music listening between countries (Bello & Garcia, 2021), which may explain why algorithms employed by streaming services such as Spotify factor in the users' region/country and provide localised content recommendations (Anderson et al., 2020).

2.2.1 Music Consumption in Japan

This paper considers the relationship between cultural dimensions and music consumption in Japan. Both global (e.g., Apple Music, Spotify) and domestic (e.g., Gyao by Yahoo! JAPAN and LINE) music streaming services have entered the Japanese music streaming market, with 21.6 million users in 2019 and growth to over 29 million expected by 2023 (Statista, 2022). Projected Japanese revenues for streaming services are expected to hit USD 2.9 billion by 2027 (Statista, 2022), contributing significantly to the industry (Ingham, 2021). Despite the popularity of streaming, CD consumption nonetheless remains one of the prominent ways of consuming music in Japan. As Japan is the second largest music industry behind USA (IFPI, 2022), there is merit in investigating the consumption preferences of Japanese consumers in the context of a literature that is predominantly Western; it is surprising that little attention has been paid to understanding Japanese music consumption within the context of cultural factors.

2.2.2 Cross-cultural Consumer Research

Recent research on music consumption, has focused on how the motivations behind the consumption or utilisation of music differ between individuals. Multiple studies (e.g., Boer, 2009; Lonsdale & North, 2011) show that individuals utilise music particularly as means of identity expression, mood regulation, and socialisation. However, these studies are typically conducted within a Western context. The present study aims to address this through a cross-cultural perspective on musical taste and uses of music. Music consumption is a form of consumerism. Thus, considering it in the context of consumer research is appropriate. Several studies have demonstrated that culture affects consumer behaviour, particularly when comparing Eastern and Western cultures (e,g., Kim et al., 2002; Park et al., 2010; Rozin et al., 2003). These studies highlight how cultural differences can account for varied behaviours when it comes to consumer choices and preferences. To cite one example, there are

differences between South Korean and Chinese participants in purchasing goods for social and performance purposes compared to purchasing for the experience (Kim et al., 2002).

Studies in media psychology suggest that cultural factors influence music consumption. For instance, Park et al. (2019) found cultural variations in music preferences within Spotify streaming data, reflecting users' different moods. Additionally, Liew et al. (2022) observed that participants from different cultures are likely to experience certain moods more (e.g., Western countries and high arousal negative emotions) and be more inclined to use highly arousing music as a means of regulating and discharging emotion. The limited research concerning consumption of music indicates the potential for research that identifies how cultural factors influence the music listening of individuals. Therefore, this study aims to investigate how differences in cultural orientations at an individual level in Japan might account for musical taste and goals of music consumption.

2.3. Cultural Dimensions

This study draws on cross-cultural psychology in identifying factors that may explain music consumption among Japanese people. Matsumoto (1996) defines culture as a set of values, beliefs and attitudes that are similar across a group of people but yet individually unique. Numerous attempts to conceptualize and model cultural similarities and differences have been proposed. Perhaps the best-known example are Hofstede's dimensions (2012), which examine dimensions such as individualism-collectivism, and power distance, which offer explicit insights into how behaviour and practices vary across cultures. However, Hofstede's model has been criticized on numerous grounds with issues related to data (see McSweeney, 2002; Taras et al., 2010), validity (Beugelsdikl & Welze, 2018), and lack of theoretical basis (Kaasa, 2021).

This study will employ three cultural factors to understand Japanese music consumption; tightness-looseness, relational mobility and ideal affect. Although these

dimensions are frequently examined in contemporary cross-cultural research, they have received little attention within music psychology. This study aims to test potential relationships concerning music consumption based on findings in other cross-cultural research concerning tightness-looseness, relational mobility and ideal affect. Specifically, tightness-looseness and relational mobility are relatively new cultural dimensions that can be measured both at an individual and national level (Gelfand et al., 2011; Thomson et al., 2018), providing better insight into variations individuals' musical taste and use. Furthermore, ideal affect has received a lot of attention from a cross-cultural standpoint, but very little concerning music consumption despite links between mood regulation, affect and music consumption observed in several studies (e.g., Juslin & Sloboda, 2010; Tsai et al., 2007).

Tightness-Looseness. Tightness-looseness (Gelfand et al., 2011) refers to the degree of behaviour deviation from social norms. Tight cultures often have strict and well-established norms, and deviant behaviour results in negative consequences. Conversely, loose cultures are more lenient on social norms and deviant behaviour. For individual behaviour, tighter individuals have different decision-making styles and psychological adaptations that influence the individuals' behaviour (Gelfand et al., 2006). In the context of music, Li et al., (2017) found that loose societies tend to promote creative exploration, allowing individuals to prioritize creativity. Furthermore, Liew et al. (2021) found that loose societies tend to prefer higher arousal music for emotional regulation, indicating a link between the dimension and music consumption. Moreover, tighter cultures tend to resist change and are less likely to try new things (Li et al., 2017), and this may translate to new music taking longer to achieve popularity across the general public. Gelfand et al., (2011) suggested that tighter cultures might be more resistant to the introduction of new products, which can be attributed to maintaining social order and feelings of cultural superiority. In the context of music, this may

have implications for introducing foreign songs into tighter countries/cultures which predominantly consume localised music. Hence, despite the absence of research directly examining the topic, there are clear grounds to suspect that tightness-looseness plays a role in musical taste and uses of music.

Relational Mobility. Relational mobility refers to the extent where individuals in their social environment feel free to form interpersonal relationships and networks (Thomson et al., 2018). Individuals scoring high on relational mobility tend to perceive greater freedom to form and leave interpersonal relationships as they wish. Conversely, those scoring low for relational mobility tend to perceive less flexibility when forming new relationships, often basing relationships on specific circumstances such as duties, roles, and rites rather than personal preference. The literature indicates that low relational mobility is one key feature of Japanese culture (Thomson et al., 2018). Relational mobility can be related to music consumption, as consumer research literature shows that it influences people's perceptions of the products they consume (Koo, 2022; Li et al., 2022; San Martin et al., 2019). For example, Koo (2022) suggests that those higher on relational mobility might prefer brand extensions due to the focus on interrelationships where consumers can better appreciate the link between parent and extension brands. This suggests a possible link between relational mobility and musical taste and goals of music consumption, given the potential role of music as a means of socialization and forming new interpersonal relationships. For instance, individuals higher on relational mobility might be more inclined to use music as a tool of identity expression in order to form new relationships with others, something less likely to occur in setting where relational mobility is low. Furthermore, Takemura (2014) found that individuals higher on relational mobility often have the need to be more unique, which might have implications for musical taste. This need for uniqueness might cause individuals to consume music that they perceive as being more unique or niche, perhaps in the belief that this helps them to stand out

or appear unique to others. Therefore, despite the absence of earlier research, this study will attempt to explore the relationship between relational mobility and music consumption of individuals in Japan.

Ideal Affect. Ideal affect refers to those emotions, feelings and mood that individuals ideally would like to experience (Tsai et al., 2006). This concept is based on Affect Valuation Theory (AVT) which claims that an individual's ideal affect can influence their behaviour and decisions (Tsai et al., 2006). Previous literature consistently links music consumption to emotions and affect (e.g., Cespedes-Guevara & Eerola, 2018; Juslin, 2013). Juslin and Sloboda (2010) summarise the role of music in conveying and regulating emotions. Note that previous research indicates a relatively stronger preference for low arousal positive (LAP) affect among Japanese compared to stronger preference for high arousal positive (HAP) affect among Western participants (Park et al., 2016; Sims et al., 2018; Tsai et al., 2007). Furthermore, Liew et al. (2021) also report a relationship between musical taste and affect in Japanese participants whereby they were more inclined towards LAP in comparison to Western cultures (i.e., America) who favored HAP.

The relatively stronger preference for LAP in Japan, indicated by the literature, is significant in understanding music consumption behaviours in Japan. Lonsdale and North (2011) (see also Schafer et al., 2013) found that one of the main motivations of individuals consuming music was mood management. This raises the possibility that ideal affect should be related to music tastes, where a desire to achieve particular affective states predisposes the listener to select particular musical genres that help achieve these states. The current study will allow insight into how Japanese individuals might consume or use music in order to attain certain ideal states of emotion and mood.

2.4 Socioeconomic Status

While socioeconomic status (SES) is not a dimension of culture, it can also provide a valuable contribution to explaining music consumption in Japan. Many cross-cultural studies consider gross domestic product and similar measures of wealth, and often investigates how individuals from different cultures respond differently to disparity in social hierarchy and status through dimensions like social dominance and power distance (Hofstede, 2012; Pratto et al., 2013). Socioeconomic status can be a good representation of social standing disparities between individuals and has been implicated in musical (and other artistic) tastes in several studies. Meuleman (2021) suggests that highbrow culture/taste are more common in individuals with higher socioeconomic status as they have more access and exposure to different cultural products. This allows a buildup of an acquired taste for products such as music, art, dance and more. In contrast, lowbrow culture and tastes (or popular culture) are often related to lower status 'stuff of everyday sociability' (Meuleman, 2021), such as popular TV entertainment shows. Multiple studies concerning musical taste indicate that liking for specific genres correlate with SES (Liu et al., 2019; Mellander et al., 2018). For instance, Mellander et al., (2018) found that individuals within the United States from higher socioeconomic backgrounds are more likely to prefer genres such as jazz, classical and opera, while those from lower socioeconomic groups are more likely to prefer genres such as gospel, rock and punk. However, it is unknown if these results could be repeated in non-Western cultures where SES may imply differing values and behaviours (Hamamura, 2011; Miyamoto, 2017), which may include music tastes.

2.5 Current Study: Research Questions and Possibilities to Explore

This paper is part of a larger cross-cultural study, in which Japan is selected due to it being a significant Asian economy and unique music streaming market compared to Western countries. The study aims to explore music consumption in Japan from a cultural perspective concerning people's musical taste and their goals for consuming music. It seeks to understand

how an individuals' cultural orientation can influence the way they consume music. In addition to considering musical taste, we also consider what motivates people to consume music in the light of prior Western research (e.g., Ferwerda et al., 2017; Lonsdale & North, 2011; North, 2010; Schäfer et al., 2013). We propose three main research questions, and within each of these research questions a few more specific and speculative possibilities that can also be tested by the same dataset.

The first research question concerns the musical taste of individuals in Japan. We hypothesize that tightness-looseness, relational mobility and ideal affect each predict Japanese individuals' music taste. Beyond this, the study explores more specific possibilities, based on existing findings. For instance, individuals who are tightly oriented may be less likely to consume music genres often associated with anti-authoritarian sentiments such as rock and heavy metal (e.g., North et al., 2005; Schwartz & Fouts, 2003; Smith & Boyson, 2002) as a consequence of the priority these individuals place on accepted attitudes and behaviour. Furthermore, individuals with high relational mobility may exhibit unique music consumption patterns, specifically music genres that are considered 'niche' or 'specialist' (Takemura, 2014; Takemura & Suzuki, 2015). To examine this possibility, the study categorizes jazz as a 'niche' genre, as it is often consumed less by the wider population (Krumhansl, 2017; Statista, 2022), so that liking for it may correlate positively with relational mobility. Additionally, based on North et al.'s (2019) findings concerning emotional expression in music genres, the study predicts a relationship between HAP ideal affect and liking for pop music, and between LAP ideal affect and liking for classical/opera and jazz music genres.

The second research question is whether Japanese people's goals for music consumption are related to their tightness-looseness, relational mobility and ideal affect. In addition to assessing this relationship, we explore several specific possibilities, based on

existing literature. First, individuals who have a tighter orientation might use music as means of coping with stress, given the heightened scrutiny they experience as a result of the need to comply with societal norms and increased accountability (Gelfand et al., 2006). Additionally, individuals with higher relational mobility have a higher need for uniqueness and freedom in their relationships, and so may be more inclined to utilize music as means of unique social identity expression (Takemura, 2014; Takemura & Suzuki, 2015).

The third research question concerned the relationship between individuals' musical taste, goals of music consumption and their subjective socioeconomic status. Research in western societies (see e.g., Liu et al, 2019; Mellander et al., 2018) has shown that people with higher SES are more likely to consume 'high art' genres, but it is unclear whether this common western finding generalizes to Japanese society given its differing cultural characteristics.

A summary of these research questions and hypotheses is as follows:

RQ1. Are an individual's scores for tightness-looseness, relational mobility and ideal affect related to their liking for various genres of music?

H1a. Individuals who are more tightly oriented might be less likely to prefer rock and metal music genres.

H1b. Individuals who have higher relational mobility might be more likely to prefer jazz music genres.

H1c. Individuals who have stronger preference for high arousal positive affective states are more likely to prefer pop music genres.

H1d. Individuals who have stronger preference for low arousal positive affective states are more likely to prefer jazz and classical music genres.

RQ2. Are an individual's scores for tightness-looseness, relational mobility and ideal affect related to their goals for music consumption?

> H2a. Individuals who are tightly oriented might be more inclined to use music as a means of coping and stress relief.

> H2b. Individuals who have higher relational mobility might be more inclined to use music as a means of identity expression.

RQ3. Is an individual's socioeconomic status (SES) related to their liking for various music genres and their goals of consuming music?

2.6 Methods

2.6.1 Participants

Ethics approval for the research was obtained from the Human Research Ethics Committee at the lead author's university. The study sampled 205 university student participants from Japan aged between 18-30 years ($M = 22.1$, $SD = 2.76$) who identified as Japanese. Among these participants, 77 participants identified as male, 127 identified as female and 1 identified as other. The one case where participant identified as other gender was excluded from the analyses where sex was included as a dummy coded control variable. Convenience sampling was employed. The questionnaire was uploaded to CrowdWorks (Japan), an online crowdsourcing platform, which redirected respondents to a Qualtrics survey. Payment was approved on the condition that the survey was completed fully. The questionnaire was available for two weeks. Forced response for items concerning participants' status as students and age were employed to ensure that the inclusion criteria were met and to maximise the homogeneity of the sample in terms of age and education experience. Participants were paid 300 yen (approximately 2USD) each to complete the questionnaire.

2.6.2 Measures

Data collection involved an online questionnaire containing 159 questions concerning different cultural dimensions, goals of music consumption and liking for musical genres. Most of the measures used in the questionnaire have established translations, however the measures of liking for musical genres and goals of music consumption were newly developed and required translation through a professional translation service. Translated versions of these measures underwent evaluation by a native Japanese speaker fluent in English and trained in cultural psychology and a researcher based in Japan who were part of the research team, and the translations were deemed suitable for Japanese native speakers.

Tightness-Looseness. This scale consists of six items to which participants respond on six-point Likert scales (1 = 'strongly disagree' and 6 = 'strongly agree'). Measurement equivalence has been tested and established by Gelfand et al. (2011) across countries including Japan. Example items (in English) are 'There are many social norms that people are supposed to abide by in this country' and 'People in this country almost always comply with social norms'.

Relational Mobility. This measure consists of 12 items to which participants respond on six-point Likert scales (1 = 'strongly disagree' and 6 = 'strongly agree'). Measurement equivalence has been tested and established by Thomson et al. (2018) across countries including Japan. Example items are 'They (the people around you) have many chances to get to know other people' and 'It is easy for them to meet new people'.

Ideal Affect. Tsai et al.'s (2006) measure of ideal affect comprises 30 items, each of which is rated on a five-point Likert scale where 1 = 'never' and 5 = 'all the time'. Participants are presented with a list of adjectives and asked to rate the extent to which each is desirable. Measurement equivalence of the scale in Japan was demonstrated by Tsai et al. (2007). Example items are 'serene' and 'happy'. Given the focus of the present study

separate means were calculated for the HAP – 3 items (i.e., excitement, enthusiasm, and elation) and LAP – 3 items (i.e., calm, peacefulness, and serenity) respectively to produce a single score for each.

Subjective Socioeconomic Status. Subjective socioeconomic status (SSS) is an individual's perception of their place within the socioeconomic structure of a given society (Nobles et al., 2013). This study used MacArthur's Scale of Subjective Social Status (Adler et al., 2000), which is a widely used single item measure (e.g., Bullock & Limbert, 2003; Franzini & Fernandez-Esquer, 2006) that asks participants to rank their perceived socioeconomic status compared to others. Respondents are presented with an illustration of a ladder with 10 rungs with the first rung representing low socioeconomic status relative to other people in the respondents' social circle and the 10th rung representing higher socioeconomic status compared to other individuals. This measure has been used in and deemed valid in Japan (Curhan et al., 2014).

Musical Taste. We developed this measure to assess respondents' liking for different music genres. We are not aware of an existing measure which assesses liking for music genres that produces consistent factor structures, reliability scores and validity across cultures (see e.g., Chung et al., 2017; Devenport & North, 2019; Merz et al., 2020). The measure employed here consists of 13 genres that were chosen based on the popularity of genres on the global Billboard charts, enabling comparison of data across various countries. Items are listed in Table 1. Participants rated liking for each genre using seven-point Likert scales where 1 = 'not at all' and 7 = 'strongly'. Example items are 'Rock' and 'Jazz'. A reliability analysis using the current dataset produced a Cronbach's alpha of $\alpha = 0.848$. An exploratory factor analysis, reported below, aimed to identify any underlying factor structures and latent variables within the data using varimax rotation. Three factors with eigenvalues greater than 1 were identified, which accounted for 57.24% of the variance. The three factors were

labelled as 'Western', 'Rock', and 'Pop' (see Table 1), and factor scores were calculated for use in subsequent analyses. See also Figure 1 for the scree plot.

Table 2.1

Factor loadings for musical taste scale.

	Rotated Factor Matrix[a]		
	Factor		
	Western	*Rock*	*Pop*
1. Pop			.510
2. Country	.434		
3. Rock		.522	
4. R&B/Hip-hop			.638
5. Latin	.590		
6. Dance/Electronic			.472
7. Christian/Gospel	.660		
8. Western Classical	.780		
9. Jazz	.673		
10. Alternative	.422	.532	
11. Reggae		.434	
12. Metal		.767	
13. Blues	.421	.499	
Cumulative Variance	36.39	48.27	57.24

Extraction Method: Principal Axis Factoring.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

Figure 2.1

Scree plot of Factor Analysis for Musical Taste
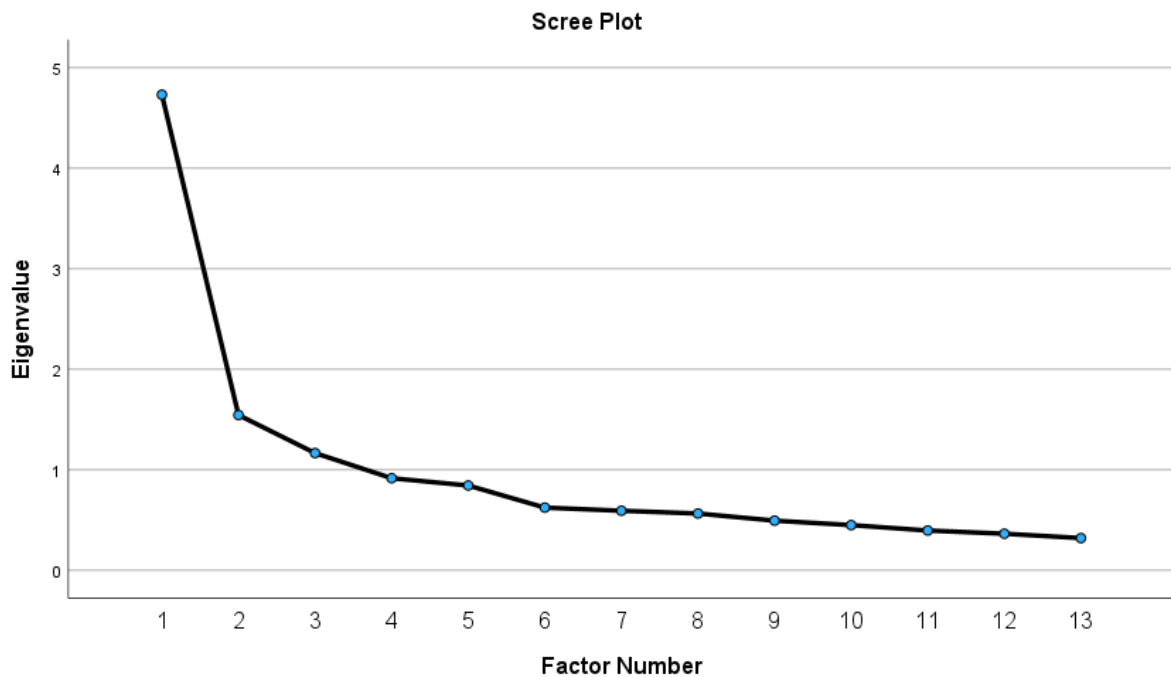
Goals of music consumption. This measure is adapted from Lonsdale and North's

(2011) assessment of individuals' goals of music consumption, which in turn was based on

McQuail et al.,'s (1972) model of media gratifications. The measure consists of 30-items

which are assessed on a seven-point Likert scale where 1 = 'not at all' and 7 = 'completely'.

Items are listed in Table 2. Example items are 'To relieve anxiety' and 'To relieve

stress/tension'. A reliability analysis was carried out using the current data set, producing a

Cronbach's alpha of $\alpha = .937$. Measurement equivalence has not been established in a

Japanese sample, as it has only previously been used in a Western context. An exploratory

factor analysis using varimax rotation is reported below for this measure. Five factors were

identified for the goals of music consumption measure which accounted for 66.27% of the

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variance. The five factors were labelled 'Identity', 'Coping', 'Trends', 'Time' and 'Activity' as shown in Table 2 followed by the scree plot in Figure 2, and factor scores were calculated for use in subsequent analyses. Although certain factors contain a small number of items, they were retained in subsequent analyses as they represent common uses or goals of consuming music (North et al., 2004; Schäfer & Mehlhorn, 2017).

Table 2.2

Factor loadings for goals of music consumption scale.

	Rotated Factor Matrix[a]		
			Factor
	Identity	*Coping*	*Trendy*
1. To help get through difficult times		.586	
2. To relieve anxiety		.835	
3. To relieve stress/tension		.824	
4. To express my feelings and emotions	.600		
5. To make me feel better		.697	
6. To alleviate feelings of loneliness		.559	
7. To escape the reality of everyday life		.536	
8. To construct a sense of identity of myself	.722		
9. To explore possible identities	.737		
10. To portray a particular image to others	.573		
11. To express my identity	.803		
12. To create an image for myself	.810		
13. To display my membership of social groups/subcultures	.478		
14. To learn how to do things			.701
15. To learn how to behave in the future			.759
16. To obtain useful information for daily life			.750
17. To discover who I really am	.659		

18. To learn how other people think		.540		
19. To be entertained			.606	
20. To relax			.578	
21. To set the 'right' mood			.497	
22. To take my mind off things			.686	
23. To keep up with current events				.698
24. To stay in-touch with current fashions and trends				.519
25. To spend time with family				.572
26. To have something to talk about with others				
27. To spend time with friends				
28. To 'fill' uncomfortable silences				
29. To pass the time				
30. To relieve boredom		.465		
Cummulative Variance	36.07	52.23	58.37	

Extraction Method: Principal Axis Factoring. Rotation Method: Varimax with Kaiser Normalization.

Figure 2.2

Scree plot of Factor Analysis for Goals of Music Consumption

Scree Plot
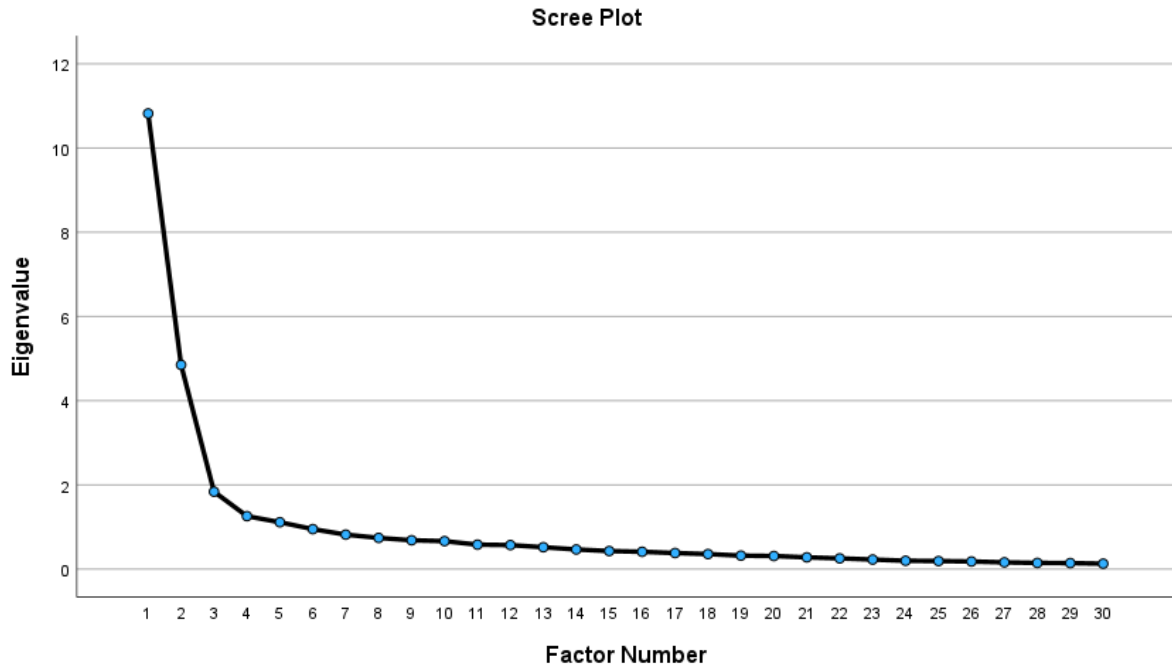
2.7 Results

Participants' data (37 instances) was removed in cases where more than 5% of items were unanswered where total participants after removal of missing data was 205. Missing data was checked using Little's MCAR test ($p > .05$), which showed that data was missing completely at random (Li, 2013). Missing data was replaced using the expectation maximization (EM) technique (Dong & Peng, 2013). The descriptive statistics for each dimension of culture, socioeconomic status, ideal affect and participant demographics are summarized in Table 3.

Table 2.3

Descriptive Statistics

Dimensions	Age	RM	TL	HAP	LAP	SSS
Mean	22.1	3.68	4.29	2.51	3.89	5.50

Median	22	3.67	4.33	2.25	4.00	5
SD	2.76	0.563	0.564	0.664	0.723	1.81
Minimum	18	2.00	2.33	1.00	2.00	1
Maximum	30	5.25	5.83	4.50	5.00	10
Cronbach's α		.785	.637	.700	.834	-

*Note: N = 205, RM = Relational Mobility, TL = Tightness Looseness, HAP = High Arousal Positive, LAP = Low Arousal Positive, SSS = Subjective Socioeconomic Status

2.7.1 Liking for music

We conducted three sets of analyses to examine research questions 1, 2 and 3 respectively. The first set of analyses addressed RQ1. All three factors of musical taste were predicted in separate multiple regression analyses from participants' scores on cultural factors, namely ideal affect (HAP and LAP), tightness-looseness and relational mobility. Age and gender were added as control variables. Supporting RQ1, the results (summarized in Table 4) showed that cultural factors are related to Japanese participants' musical taste (R^2 = .07, p = 0.012 for Western, R^2 = .08, p = 0.004 for Rock, and R^2 =.11, p < .001 for Pop). In particular, liking for Western, Pop and Rock factors were each related positively to HAP (Western: b = .20, p = .04; Rock b = .19, p = .04; Pop b = .27, p = .002). No other cultural dimensions were related to any of the musical taste scores.

The more detailed and speculative hypotheses derived from RQ1 (H1a-d) proposed relationships between specific musical genres, using specific items (vs. factor scores) shown in Table 1, and specific cultural dimensions. For example, 'rock' in the analysis for RQ 1 consisted of genres that were extracted from the factor analysis, the analysis here for H1a only examined 'rock' as a single genre not as a factor. H1a proposed a negative relationship

between tightness and liking for rock and metal. To investigate this, a regression analysis predicted liking for rock with the same set of predictors as above but did not show a relationship with tightness ($b = -.03$, $p = .87$); and the same non-significant result was found for metal ($b = -.17$, $p = .28$). H1b proposed that relational mobility should be related positively to liking for jazz, which was not confirmed ($b = -.00$, $p = .98$). H1c proposed that liking for high arousal positive affect should be positively related to liking for pop, but this was also not supported ($b = .12$, $p = .21$). H1d proposed a positive relationship between low arousal positive affect and liking for both classical ($b = -.10$, $p = .42$) and jazz ($b = -.04$, $p = .72$), but neither relationship was supported.

Table 2.4

Results for Hypothesis 1 (Musical taste and cultural dimensions)

	Western Music		Rock Music		Pop Music	
	Coefficient (SE)	95% CI	Coefficient (SE)	95%CI	Coefficient (SE)	95%CI
Intercept	-0.22 (.87)		0.50 (.81)	[-1.11, 2.12]	-2.03 (.75)	[-3.52, -.55]
Gender	0.34* (.13)	[.09, .60]	-0.37 (.12)	[-.62, -.13]	0.38* (.11)	[.16, .61]
Age	0.02 (.02)	[-.02, .06]	-0.002 (.02)	[-.04, .04]	0.02 (.02)	[-.02, .06]
RM	-0.01 (.11)	[-.23, .21]	-0.008 (.11)	[-.20, .22]	0.11 (.10)	[-.09, .30]

TL	-0.17 (.11)	[-.39, .05]	-0.08 (.11)	[-.29, .13]	-0.03 (.10)	[-.23, .16]
HAP	0.20* (.01)	[.01, .39]	0.19* (.09)	[.01, .37]	0.27* (.08)	[.10, .43]
LAP	-0.13 (.09)	[-.30, .04]	-0.004 (.08)	[-.17, .16]	0.03 (.08)	[-.12, .18]
Mode Fit Measures	$R^2 = .0737$ $F(6, 197) =$ 2.61*		$R^2 = .0837$ $F(6, 197) =$ 3.00*		$R^2 = .110$ $F(6, 197) =$ 4.05*	

* $p < .05$

Note: RM = Relational Mobility, TL = Tightness looseness, HAP = High Arousal Positive, LAP = Low Arousal Positive

2.7.2 Goals of music consumption

The second main analysis addressed RQ2, examining the relationship between scores on the five factors concerning music consumption goals and the same set of cultural factors as before (tightness-looseness, relational mobility, HAP and LAP), examined separately with age and gender added as controls.

Table 5 summarizes the results. Supporting RQ2, the regression models showed that cultural factors significantly predicted four out of five goals of music consumption (R^2 = .163, $p < .001$ for Identity, $R^2 = .182, p < .001$ for Coping, $R^2 = .163, p < .001$ for Trendy, $R^2 = .136, p < .001$ for Time). Results concerning Activity were not significant ($R^2 = .037, p$ = .27)

This set of analyses also addresses H2a and H2b concerning whether (H2a) tightly oriented individuals might be more inclined to use music as means of coping and stress relief, and (H2b) individuals with higher relational mobility are more inclined to use music as means of identity expression. As shown in Table 5, the expected relationship between Coping and tightness-looseness was significant ($b = .45$, $p < .001$). The relationship between Identity and relational mobility was also significant ($b = .31$, $p = .006$). In addition to these findings, tightness-looseness was negatively related to using music to be Trendy ($b = -.51$, $p = 0.027$). HAP was positively related to Identity ($b = .32$, $p < .001$) and Trendy ($b = .21$, $p < .001$); whereas LAP also positively predicted using music for Coping ($b = .19$, $p = .027$) and to pass Time ($b = .40$, $p < .001$). While the findings concerning H2a and b are consistent with previous findings, the remaining findings are also interpretable and considered further in the Discussion.

Table 2.5

Results for Hypothesis 2 (Goals of music consumption and cultural dimensions)

	Identity		Coping		Trendy		Time		Activity	
	Coefficient (SE)	95% CI	Coefficient (SE)	95% CI	Coefficient (SE)	95% CI	Coefficient (SE)	95% CI	Coefficient (SE)	95% CI
Intercept	-3.05* (.87)	[-4.77, -1.34]	-2.96* (.86)	[-4.65, -1.27]	2.82* (.86)	[1.13, 4.50]	-1.66 (.85)	[-3.33, .01]	-0.81 (.85)	[-2.50, .87]
Gender	0.48* (.13)	[.22, .73]	0.35* (.13)	[.10, .60]	-0.15 (.13)	[-.40, .11]	-0.15 (.13)	[-.40, .10]	0.16 (.13)	[-.09, .41]
Age	0.01 (.02)	[-.03, .06]	-0.03 (.02)	[-.07, .01]	-0.01 (.02)	[-.05, .03]	-0.03 (.02)	[-.07, .02]	0.02 (.02)	[-.03, .06]
RM	0.31* (.11)	[.09, .53]	0.05 (.11)	[-.17, .27]	-0.06 (.11)	[-.28, .16]	0.03 (.11)	[-.18, .25]	-0.01 (.11)	[-.23, .21]

TL	0.11 (.11)	[-.11, .33]	0.45* (.11)	[.23, .66]	-0.51* (.11)	[-.73, -.29]	0.19 (.11)	[-.03, .41]	0.10 (.11)	[-.12, .32]
HAP	0.32* (.10)	[.13, .51]	0.05 (.09)	[-.14, .24]	0.21* (.09)	[.03, .40]	0.02 (.09)	[-.16, .21]	0.15 (.09)	[-.03, .34]
LAP	-0.10 (.09)	[-.27, .08]	0.19* (.09)	[.02, .36]	-0.12 (.09)	[-.29, .05]	0.40* (.09)	[.23, .56]	-0.15 (.09)	[-.32, .03]
Mode Fit Meas ures	R^2 = .163 F(6, 197) = 6.38*		R^2 = .182 F(6, 197) = 7.28*		R^2 = .163 F(6, 197) = 6.39*		R^2 = .136 F(6, 197) = 5.18*		R^2 = .037 F(6, 197) = 1.28	

*p < .05

Note: RM = Relational Mobility, TL = Tightness looseness, HAP = High Arousal Positive,

LAP = Low Arousal Positive

2.7.3 Socioeconomic status

The third main analysis used two multiple regressions to determine the relationship between Subjective Socioeconomic Status (SSS) and both musical taste and goals of music consumption respectively while controlling for age and sex. The results are shown in Tables 6 and 7 respectively. SSS did not relate significantly to liking for Rock, Pop and Western factors. SSS was also not significantly related to any of the factors concerning goals of music consumption. As such, the results did not support RQ3 that individuals' socioeconomic status (SES) should be related to their liking for music or goals of music consumption.

Table 2.6

Results for Hypothesis 3 (Musical Taste and SSS)

	Western Music		Rock Music		Pop Music	
	coefficient (SE)	95% CI	Coefficient (SE)	95%CI	Coefficient (SE)	95%CI
Intercept	-0.61 (.63)	[-1.86, .63]	0.66 (.59)	[-.50, 1.82]	-0.89 (.55)	[-1.97, -.20]
Gender	0.25 (.13)	[-.01, .51]	-0.41* (.12)	[-.65, -.17]	0.34* (.11)	[.12, .57]
Age	0.02 (.02)	[-.03, .07]	-0.001 (.02)	[-.04, .04]	0.02 (.02)	[-.02, .06]
SSS	-0.05 (.03)	[-.11, .02]	0.006 (.03)	[-.06, .07]	-0.02 (.03)	[-.08, .05]
Model Fit Measures	$R^2 = .03$ $F(3, 200) = 2.04$		$R^2 = .058$ $F(3, 200) = 4.10*$		$R^2 = .046$ $F(3, 200) = 3.22*$	

Note: SSS = Subjective Socioeconomic Status, * $p < .05$

Table 2.7

Results for Hypothesis 3 (Goals of Music Consumption and SSS)

	Identity		Coping		Trendy		Time		Activity	
	Coefficient (SE)	95% CI	Coefficient (SE)	95% CI	Coefficient (SE)	95% CI	Coefficient (SE)	95% CI	Coefficient (SE)	95% CI
Intercept	-0.96 (.66)	[-2.26, -0.34]	-0.16 (.65)	[-1.44, -1.12]	1.06 (.65)	[-0.23, 2.35]	0.50 (.64)	[-0.77, 1.77]	-0.28 (.61)	[-1.49, .92]
Gender	0.42* (.14)	[.15, .69]	0.45* (.18)	[.18, .71]	-0.31* (.14)	[-.57, -.04]	-0.04 (.13)	[-.31, .22]	0.11 (.13)	[-.14, .36]
Age	0.01 (.02)	[-.03, .06]	-0.02 (.02)	[-.07, .02]	-0.01 (.02)	[-.05, .03]	-0.03 (.02)	[-.07, .02]	0.02 (.02)	[-.02, .06]
SSS	-0.02 (.04)	[-.09, .05]	-0.02 (.03)	[-.09, .05]	-0.05 (.04)	[-.12, .02]	0.03 (.04)	[-.04, .10]	-0.06 (.03)	[-.13, .00]
Mode Fit Measures	R^2 = .049 $F(3, 200)$ = 3.45*		R^2 = .071 $F(3, 200)$ = 5.08*		R^2 = .032 $F(3, 200)$ = 2.23		R^2 = .136 $F(3, 200)$ = 0.669		R^2 = .024 $F(3, 200)$ = 1.64	

* $p < .05$

2.8 Discussion

The study aimed to examine the role of cultural factors in music listening, specifically tightness-looseness, relational mobility, and ideal affect, using Japan as a test case, informed by prior cross-cultural research highlighting stable societal differences between Japan and Western societies on these cultural factors. Overall, findings reported here support the

importance of cultural factors in musical taste and motivation for listening to music among a population that has been under-represented in music psychology literature.

RQ1 considered the relationship between Japanese survey respondents' scores on cultural dimensions and their musical taste. Results supported this RQ, showing that liking for music was related to ideal affect concerning high arousal positive moods. However, the specific hypotheses concerning particular cultural dimensions and liking for specific music genres were not supported.

RQ 2 considered the relationship between cultural dimensions and goals of music consumption among Japanese participants. Four out of the five factors of the goals of music consumption were related to the cultural dimensions, supporting RQ 2. The findings also showed numerous relationships between specific uses of music and particular cultural dimensions. Some of these relationships were as anticipated. Tightness was related to using music for coping, supporting H2a. The stress and fear of repercussions in not conforming to societal norms might lead to tightly oriented individuals looking for different means of coping with stress (Gelfand et al., 2006). In this case, music could be a plausible avenue for individuals to cope with everyday stressors. The items loading onto the 'Coping' factor included for instance 'To relieve stress/tension', and 'To help get through difficult times'. The pressure to conform and the inability to act independently might lead to increased stress on individuals, where they need to adapt their lifestyles and everyday behaviour to fit societal norm. This echoes Gelfand et al.'s (2006) discussion concerning felt accountability, where individuals feel their behaviour is under the constant scrutiny and evaluation of society.

Relational mobility was positively related to using music consumption for Identity, supporting H2b. Items loading on the 'Identity' factor included 'To express my identity' and 'To create an image for myself'. This suggests that individuals with higher relational mobility

may have a greater sense of freedom when it comes to forming new interpersonal relationships, resulting in wider a social network and greater need for uniqueness (Takemura, 2014; Takemura & Suzuki, 2015). These aspects are closely related to expressing and curating a sense of self, which translates into music consumption as a method of showcasing their unique individual behaviour.

The findings also revealed some unexpected relationships between cultural dimensions and music consumptions goals, which also make intuitive sense. Specifically, tightness was negatively related to using music to be Trendy: tighter values mean that individuals are less inclined to want to stand out. High arousal ideal affect was positively related to using music for Identity and to be Trendy, whereas low arousal ideal affect was positively related to using music for Coping and to pass Time. The relationship between low arousal ideal affect and Coping reflects findings by Gilbert (2014) and Koelsch et al. (2019) that low arousal positive states have soothing qualities, and McManus et al.'s (2019) finding that low arousal positive affect negatively predicts depression and anxiety. These findings imply why individuals are more likely to utilize music as a means of Coping, particularly for managing stress and events that occur in daily life.

RQ 3 addressed the relationship between socioeconomic status, musical taste and goals of music consumption. Participants' scores on the three music preference factors did not relate significantly to their subjective socioeconomic status. This contrasts with findings from earlier Western research (e.g., Liu et al., 2018; Mellander et al., 2018) showing a relationship between musical taste and SES. A potential explanation for this could be cultural omnivorism, which suggests that cultural elites in the present day exhibit diverse tastes encompassing both elitist and popular cultural forms (de Vries & Reeves, 2021). However, it is simply possible that SES and musical taste are not related to one another in Japan but remain related elsewhere.

The results of this study indicate that cultural factors, especially individuals' music consumption goals, can predict their music consumption behaviours in Japan. These findings build upon earlier work such as Lonsdale and North (2011) and Schäfer et al. (2013) by identifying factors that predict how individuals use music, emphasizing the role of culture. Moreover, musical taste was also predictable by cultural factors, specifically individuals' ideal affect. The study's focus on the cultural orientations of individual participants allows better insight into how these cultural factors influence the consumption and goals of using music. Clearly the findings show that culture can be used to predict music consumption, which has been underrepresented in previous research. Future research could attempt to unpack this further. For example, future work could explore how other cultural dimensions like individualism-collectivism might predict aspects of music consumption, such as collectivist tendencies leading to preference for popular music or a narrower range of tracks and genres. From a theoretical standpoint, research on music consumption focusing on culture provides an macro-level perspective that complements the more atomistic individual-focused approach adopted by much of the existing research which often concentrates on individual differences and cognitive processes. These studies have yet to comprehensively consider the impact of culture which has a broad influence on many aspects of individuals' lives. This study highlights the significant relationships that have been uncovered between the cultural dimensions employed and musical taste and goals of using music, contributing not only to the literature of music psychology but also cross-cultural psychology.

Future research could also investigate the possibility that the present findings generalise beyond solely music consumption as defined here. For example, music streaming algorithms could be adapted to include the findings, potentially improving consumer experience. Similarly, the finding that tighter individuals are more inclined to use music as a coping mechanism could inform other aspects of music consumption relevant to stress relief

and individuals' psychological health. Furthermore, the finding that individuals higher on relational mobility use music as means of socialization couldhave implications for the intricate social process of sharing music between individuals. Moreover, the findings here may not be limited to Japan: since cultural values were defined at the level of the individual (rather than nation), any two individuals with common cultural values may have common ways of consuming music. We encourage future researchers to use individual measures of cultural values as these do not seek to aggregate participants on the basis of shared nationality.

2.8.1 Limitations

As noted earlier, the present research used a set of musical genres chosen for their relevance in different countries, including Japan. However, studies have shown that individuals differ in their interpretations of music genres (e.g., Fung, 1994; Teo et al., 2008). As such, the results are interpretable in terms of Japanese participants' understanding of the genre labels employed. Comparisons with responses from other countries concerning theses same genre labels must be more cautious. The items used on the measure employed here were obtained from Billboard global genres; although clearly relevant to Japan, due to the global popularity of the genres, they might not encompass those genres specific to Japan which could produce a different pattern of findings to that reported here. We also draw reader's attention to the magnitude of the effect sizes reported, which are relatively small. Despite this, the findings are still interesting as they indicate how certain cultural factors relate to music consumption in a Japanese context, consistent with previous research (e.g., Boer & Fischer, 2012; Way et al., 2020)

Beyond the immediate implications of the present findings, future research can draw insights from the apparent trend within music streaming preferences towards consumption of music produced within one's own culture (Bello & Garcia, 2021; Way et al., 2020). This may

well be related to cultural factors, such as tightness or the extent to which a listener identifies with local culture (versus adopting a more cosmopolitan, internationalist worldview). Furthermore, it is improbable the present research design captured all those cultural factors that relate to music consumption. Additionally, future research might consider a mixed-methods approach where participants provide information concerning their understanding of music genre labels.

2.9 Conclusion

In conclusion, the findings have theoretical implications for our understanding of the musical taste and the goals of music consumption of individuals in Japan. The findings here indicate that cultural dimensions can predict to a certain extent why individuals listen to certain music or their goals music consumption. It also extends the current literature on music consumption from the perspectives of music and cross-cultural psychology, where prior works have not quite considered the cultural dimensions that have been employed here. We look forward to further research broadening these findings to a range of other countries and musical styles.

CHAPTER 3: MUSIC CONSUMPTION AND USES IN CHINA

3.1 Preface

Chapter 2 showed how cultural variables can significantly predict musical taste and goals of consuming music amongst individuals within Japan. This confirms the hypothesis of the thesis that cultural influences can be a predictor for different forms of music consumption in general. However, the findings of Chapter 2 are of course limited to only Japan. The current chapter will use a similar design to that employed in Chapter 2 to investigate culture's influence on music consumption in China. There has been very little attention paid to the social psychology of music in China. Nonetheless, China also accounts for a very large

population of consumers using various music streaming services which would provide valuable insights in addressing the research question of the thesis.

3.2 Introduction

3.2.1 Music Consumption in China

This chapter seeks to investigate the relationship between cultural dimensions and music consumption in China. China currently accounts for more than 10% of the world's population, which is reflected in uptake of music streaming services, with some having up to 300 million active monthly users (e.g., KuGou Music, QQ Music, Kuwo Player) (Statista, 2023). The proportion of potential users adopting streaming services is expected to reach 24.3% of the population within the next four years equating to approximately 380 million unique individuals (Statista, 2023). Furthermore, China's music streaming industry is ranked second just behind the United States in terms of revenue generation from music consumption (Statista, 2023) and also ranked within the top 10 music markets in the world (IFPI, 2022). This size of the streaming market in China highlights the need for more research to better understand the listening habits of individuals in China. Chinese culture of course differs markedly from that in Western countries, where the majority of research on music listening has been carried out (e.g., Lonsdale & North, 2011; Rentfrow et al., 2011). The present study attempts to explore music psychology within this context. Some of these cultural differences are outlined below as well as how these documented differences may relate to music consumption in China. In particular, this chapter approaches music listening of individuals in China from the perspective of cultural variables, specifically looking at how an individual's cultural orientation relates to the way they consume music.

3.2.2 Cross-cultural Consumer Research

Listening to music is a form of consumerism. Multiple studies have shown that consumer behaviour varies as a function of cultural variables. For example, Xu et al. (2014)

demonstrated their role in predicting differences in second-hand clothing consumption between China and the USA. Participants' perception of social norms was a significant predictor among Chinese consumers, whereas perceived value was a significant predictor among American consumers. Multiple other studies highlight the differences between Eastern and Western cultures in different areas of consumption such as environmentally-sensitive products (Chan & Lau, 2002), luxury products (Bian & Forsythe, 2012), and online shopping (Pratesi et al., 2021).

Moreover, the role of cultural factors in consumer behaviour is not limited to only broad comparisons of East and West, but can also be seen within much smaller geographical areas. For instance, Ruiz-Mafe et al. (2013) compared Spanish and Dutch individuals purchasing airline tickets and showed that differences in their purchasing intentions could be predicted by Hofstede's (Hofstede, 2012) cultural dimensions. Similarly, Kim et al. (2002) found that Chinese and South Korean participants differed in their motivations for purchasing clothing. Since culture can influence the behaviour and motivations of individual consumers, this leads us to suspect that cultural factors can also account for differences between consumers in musical taste and how people utilise music.

3.3 Cultural Characteristics that Help Understand Music Consumption Behaviours among Chinese People

The current study uses three cultural dimensions, namely tightness looseness, relational mobility and ideal affect, which seem well placed to explain musical taste and goals of consuming music among Chinese consumers for the reasons outlined below. These dimensions are utilised often within cross-cultural psychology research that includes Chinese participants, but have not been investigated extensively within the field of music psychology. In order to do so, the current study uses findings from previous cross-cultural research as a basis for identifying connections between the dimensions and specific aspects of musical

taste and reasons for consuming music. For instance, tightness looseness and relational mobility can be measured both at the national/societal and individual level (Gelfand et al., 2011; Thomson et al., 2018), and map well onto individual's musical tastes and their goals in consuming music. Additionally, ideal affect is a concept that has been researched by many from a cross-cultural standpoint but has not been used in previous research concerning music consumption by individuals. More detailed arguments concerning each dimension are presented below.

Tightness Looseness. Tightness looseness refers to the extent to which a culture accepts deviation from the social norm (Gelfand et al., 2011). A tight culture often has strict norms and rules in place, governing the behaviour and attitude of individuals within that culture. Deviant behaviour usually leads to negative social consequences for the individual. In contrast, loose cultures tend be more tolerant of deviation from social norms, and place lesser sanctions on those who do violate accepted standards for attitudes and behaviour. International research indicates a stronger orientation towards tightness in China and other societies in Asia (Gelfand et al., 2011). Although the dimension is often operationalised at the level of a culture, work such as Gelfand et al. (2006) have considered it at the level of specific individuals, showing that tightly oriented individuals have different styles of cognition that result from the way they psychologically adapt to circumstances and make decisions. Gelfand et al., (2011) suggested that tight cultures might resist the introduction of new products more than looser cultures, due to the need to maintain social order and hierarchy within society. Within China, research indicates regional variations in tightness-looseness across provinces in that tighter provinces have greater levels of government control and constraints over daily practices (Chua et al., 2019). Within the context of music consumption, this might have implications for introducing foreign and novel music to tighter societies/cultures, where individuals may predominantly consume songs that are localized to

their country or consumed already by the masses. Furthermore, Liew et al. (2021) found that tighter societies tend to prefer lower forms of arousal in their music as a tool for regulating emotion, which further highlights the potential of this dimension to relate to individuals' music consumption.

Relational Mobility. Relational mobility refers to the extent to which a culture is perceived to encourage freedom in forming interpersonal relationships versus the expectation that interpersonal relationships will be formed on the basis of social roles and responsibilities (Thomson et al., 2018). Prior research indicates that East Asian countries generally have lower relational mobility in comparison to Western countries (Thomson et al., 2018). Individuals scoring higher on this dimension tend to experience more freedom in forming and leaving interpersonal relationships in contrast to those scoring lower on the dimension who experience less freedom in doing so. Interpersonal relationships in low relational mobility cultures are often formed based on family membership, occupations, and other societal roles, whereas high relational mobility is associated with interpersonal relationships being formed on the basis of the individual's own wishes, preferences, and volition. This might suggest the possibility of relational mobility being related to musical taste and goals of consuming music where music is utilized to socialize and form new interpersonal relationships. For example, individuals oriented towards higher relational mobility might be more inclined to use music as a means of expressing identity to help form new relationships with others (as they have the freedom to do so), whereas this is less likely where individuals are oriented towards lower relational mobility. Furthermore, Takemura (2014) found that individuals with higher relational mobility have greater desire to be unique, which might suggest that individuals with higher relational mobility feel the need to consume music that they perceive as unique or niche to help them stand out in comparison to other individuals around them.

Ideal Affect. Prior research has shown consistently how the consumption of music is linked to one's affect (e.g., Cespedes-Guevara & Eerola, 2018; Konečni, 2010). Ideal affect refers to the feelings, emotions and mood that individuals would like to ideally attain or experience (Tsai et al., 2006). Affect Valuation Theory (AVT) proposes that an individual's ideal affect can influence their behaviour and thought process (Tsai et al., 2006). Studies that concern particular affective states show that there is an inclination towards low arousal positive (LAP) affect in East Asian cultures in comparison to Western cultures that prefer high arousal positive (HAP) affect (Park et al., 2016; Tsai, 2017). This preference for LAP in East Asia may be useful in understanding the music consumption of individuals in China. In this context it is notable that Lonsdale and North (2011) and Schafer et al. (2013) among others showed that mood management is one of the main drivers of music consumption in Western participants. Moreover, North et al. (2017, 2019) in two studies observing mood and energy of 204,506 songs in the US concluded that different genres over- and under-represent certain moods. For example, classical music and jazz were more likely to contain moods such as calm, peace and tranquillity whereas pop music pieces were more likely to feature passion, romance and power. This finding indicates that certain genres are more likely to predispose individuals who consume it to certain moods/emotions which might make it possible for individuals to listen to particular genres with the goal of attaining particular ideal affects: as such, an individual's ideal affect could be related to the genres of music to which they choose to listen. This study will look at the relationship between ideal affect and music consumption, which has not been investigated previously.

3.4 Socioeconomic status

Although obviously not a cultural dimension, socioeconomic status (SES) clearly differs between cultures and individuals, and may help explain how individuals consume music in China. Socioeconomic status can often be linked with social hierarchies or status that are the

basis of certain cultural dimensions such as social dominance and power distance (Hofstede, 2012; Pratto et al., 2013). Therefore it seems reasonable that research on cultural factors in music taste and usage would also investigate SES. Multiple studies of Western participants show a correlation between music consumption and SES (Liu et al., 2019; Mellander et al., 2018). A common finding is that individuals with higher socioeconomic status have an increased likelihood of consuming highbrow arts or genres (e.g., van Eijck, 2001). Meuleman (2021) found that this occurs because higher SES leads to more opportunities for exposure to different cultural products. Within the context of music consumption specifically, Mellander et al. (2018) among several other studies found that individuals in the United States were more inclined to prefer high art genres like jazz, opera and classical music when they came from higher socioeconomic status backgrounds. However, it is unknown whether this common Western finding would translate into a Chinese context, which has had a different economic trajectory and cultural attitudes towards personal wealth and social power compared to the West. Though a few studies such as Hamamura et al. (2011) and Takemura et al. (2016) suggest similar trends with regards to social class and independence, this again has not been explored within a context of music consumption.

3.5 Current study: Hypotheses

The aim of this study is to explore individual's musical taste and uses of music within China from the perspective of cultural variables. We propose three main hypotheses, and within each main hypothesis are several more specific and speculative propositions that can be tested simultaneously.

The first hypothesis is that tightness looseness, relational mobility and ideal affect each significantly predict Chinese individuals' musical taste. Aside from this main hypothesis, the research presents an opportunity to look into a number of more specific possibilities based on the literature. For example, individuals with a tighter cultural

orientation might be less inclined to consume music genres that are associated with anti-authoritarian sentiments and subcultures, such as rock or metal (see North, 2005; Schwartz & Fouts, 2003), which might deviate from societal norms of 'acceptable' attitudes and behaviour. This could be attributed to the emphasis on norm conformity and the social stigma that follows deviation from accepted standards of morality. Additionally, individuals with greater orientation towards relational mobility have been found to have a greater need to be unique, as this arguably allows them to stand out and further improve their chances of forming interpersonal relationship with others (Takemura, 2014). This might have implications for how music is consumed by individuals so that higher relational mobility is associated with consumption of musical genres that are more niche. In this context, the genres that are least popular among consumers in China happen to be rap and electronic music (Statista, 2021), and so we propose that liking for these might correlate with the individual's relational mobility. As there is not a rap genre in the item list here, we explore the said relationship using ratings of R&B/Hip-Hop, which most closely resembles rap. Furthermore, North et al. (2019, 2021) showed that genres such as pop are more likely to exude energetic, bold and outgoing moods which reflects higher levels of arousal whereas music genres such as jazz and opera are more likely to reflect relaxing moods which relate to lower levels of arousal. On this basis, we hypothesise that HAP ideal affect will correlate with liking for pop music, whereas LAP ideal affect will correlate with liking for jazz and opera music.

The second hypothesis is that cultural dimensions of tightness looseness, relational mobility and ideal affect are related to the goals of music consumption of Chinese individuals. Again it is possible to formulate a number of more specific hypotheses. Individuals who are tightly oriented might be more inclined to experience greater degrees of psychological stress, as they constantly experience pressure to adhere to societal norms as well as the increased scrutiny one were to face if deviating from these norms (Gelfand et al.,

2006). From this we can speculate that tightness might lead to a greater propensity to consume music as a means of coping with stress. However, Chua et al. (2019) found that tightness in China in associated with greater life satisfaction and happiness, in contrast to findings in the West (e.g., Gelfand et al., 2006). Therefore, we might speculate that within China, tighter orientation might correlate with less likelihood of using music as a means of coping, due to heightened levels of happiness and life satisfaction where individuals experience less need to cope with stress. Additionally, individuals with a greater orientation towards relational mobility might be more inclined to use music as a means of identity expression.

The third main hypothesis is that there should be a relationship between an individual's subjective socioeconomic status and both musical taste and goals of consuming music. As stated earlier, research has shown that individuals in the West who have higher socioeconomic status backgrounds are more inclined to appreciate 'high art' genres. It is not clear if this Western finding will translate similarly to an Eastern society such as China, due to differing cultural, historical, economic and other factors.

In summary, the hypotheses are as follows:

1. Are tightness looseness, relational mobility and ideal affect related to an individual's musical taste?
   a. Individuals who are more tightly oriented are more inclined to prefer rock and metal genres, for their anti-authoritarian sentiment.
   b. Individuals with higher relational mobility might be more inclined to prefer R&B/Hip-hop and electronic music, to assert their uniqueness.

     c.   Individuals with higher preference for HAP affective states are more inclined to prefer pop music genres for their associations with high arousal mood state.

     d.   Individuals with higher preference for LAP affective states are more inclined to prefer jazz and classical music genres for their associations with low arousal mood state.

2.   Are tightness looseness, relational mobility and ideal affect related to an individual's goals of music consumption?

     a.   Individual's inclination to utilize music as means of coping with stress may differ across their orientation towards tightness-looseness, given that tightness-looseness may influence their susceptibility for psychological distress.

     b.   Individuals with higher relational mobility orientation are more inclined to use music as a tool for identity expression in order to form new interpersonal relationships.

3.   Is subjective socioeconomic status (SSS) related to an individual's musical taste and goals of consuming music?

3.6 Method

3.6.1 Participants

The research received approval from the ethics board of the lead author's university. The study sampled 405 university student participants from Guangzhou, China aged between 18-30 years ($M = 21$, $SD = 0.77$) and who identified as Chinese nationals, both of which were verified using forced responses on the questionnaire. A power analysis was conducted to inform the sample size relative to the anticipated effect sizes. For a multiple regression analysis with four predictors (as in the main analyses reported below), to achieve 80% power,

79 participants are required to reliably detect a medium effect size (Cohen's $f2 = .15$), whereas 597 participants are required to reliably detect a small effect size (Cohen's $f2 = .02$). For a practical consideration, we decided to recruit 405 participants to ensure that an effect size in the small-to-medium range (above .03) can be detected with 80% power. None of the participants identified as anything other than male (N = 207) or female (N = 198). Convenience sampling was employed. The questionnaire was distributed by a member of the authorship team working at a university in southern China.

3.6.2 Measures

A paper questionnaire was disseminated consisting of 159 questions related to different cultural dimensions, liking for musical genres and goals of music consumption. For most measures, published translations were used, as detailed for the description of each measure below. Exceptions were measuring for music taste and goals of music consumption, which in the absence of existing measures were newly developed and translated into Chinese via a professional translation service: these were subsequently checked by members of the authorship team in China to ensure the quality and equivalence of the translation.

Tightness/Looseness. The scale consists of six items to which participants responded on a six-point Likert scale (1 = 'strongly disagree' and 6 = 'strongly agree'). Measurement equivalence was established by Gelfand et al. (2011) across various countries including China. Example items are 'There are many social norms that people are supposed to abide by in this country' and 'People in this country almost always comply with social norms'.

Relational Mobility. The scale consists of 12 items to which participants responded on a six-point Likert scale (1 = 'strongly disagree' and 6 = 'strongly agree'). Measurement equivalence was established by Thomson et al. (2018) across various countries including China. Example items are 'It is easy for them to meet new people' and 'They are able to choose the groups and organizations they belong to'.

Ideal Affect. Tsai et al.'s (2006) measure of ideal affect includes 30 items on which participants rate the extent to which they would ideally like to experience each, using a five-point Likert scale (1 = 'never' and 5 = 'all the time'). Measurement equivalence was established by Tsai et al. (2007) across several countries including China. Example items are 'calm' and 'peaceful'. On the assumption that no participant would ideally experience negative affect, the present research focused specifically on two quadrants of ideal affect which consist of three items each – High Arousal Positive (HAP) (i.e., excitement, enthusiasm and elation) and Low Arousal Positive (LAP) (i.e., calm, peacefulness, and serenity). Their means are calculated to produce a single score for each of HAP and LAP.

Subjective Socioeconomic Status. Subjective socioeconomic status (SSS) reflects where individuals perceive they rank relative to the wider society to which they belong (Nobles et al., 2013). This study used a single item measure, MacArthur's Scale of Subjective Social Status (Adler et al., 2000). This asks participants to rank their perceived socioeconomic status relative to the remainder of their society by marking a position on a pictorial depiction of a ladder containing 10 rungs, presented from the 1st rung (low) to the 10th (high). The measure's validity has been established in China (Su & Li, 2022).

Musical Taste. Liking for different music genres was assessed via a self-developed measure, since there is no existing measure that produces consistent factor structures and reliability scores across cultures (see e.g., Chung et al., 2017). The measure consists of 13 different music genres which were chosen based on their popularity on the Billboard global charts, and so might likely be useful across several countries such as China. (Note that the present research is part of a larger study that will eventually compare data from several countries.) Respondents are asked to rate their liking for each genre based on a seven-point Likert scale where 1 = 'not at all' and 7 = 'strongly'. Example items are 'Pop' and 'R&B', and a full list is provided in Table 2. A reliability analysis was conducted to ensure reliability,

which produced Cronbach's alpha α = 0.869. An exploratory factor analysis using varimax

rotation was conducted to identify underlying factor structures and latent variables from

participants' responses. It produced three factors with eigenvalues more than 1 accounting for

58.8% of the variance. These three factors were labelled as 'Non-Mainstream', 'Traditional

Western', and 'Mainstream Pop' (Table 1) followed by scree plots (Figure 1), and factor

scores were computed in SPSS where a coefficient is computed for each respondent's score

for each factor for use in subsequent analyses.

Table 3.1

Factor loadings for musical taste scale.

	Rotated Factor Matrix[a]		
	Factor		
	Non-Mainstream	*Traditional Western*	*Mainstream Pop*
1. Metal	.849		
2. Reggae	.808		
3. Blues	.597		
4. Rock	.589		
5. R&B/Hip-Hop	.537		
6. Dance/Electronic			
7. Western Classical		.826	
8. Christian/Gospel		.671	
9. Jazz		.615	
10. Latin		.533	
11. Alternative		.530	

12. Pop			.793
13. Country			.769
Cumulative Variance	39.38	50.08	58.82

Extraction Method: Principal Axis Factoring.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

*Dance/Electronic did not load onto any factor from the analysis due to the suppression of small coefficients below .40.

Figure 3.1

Scree plot of Factor Analysis for Musical Taste
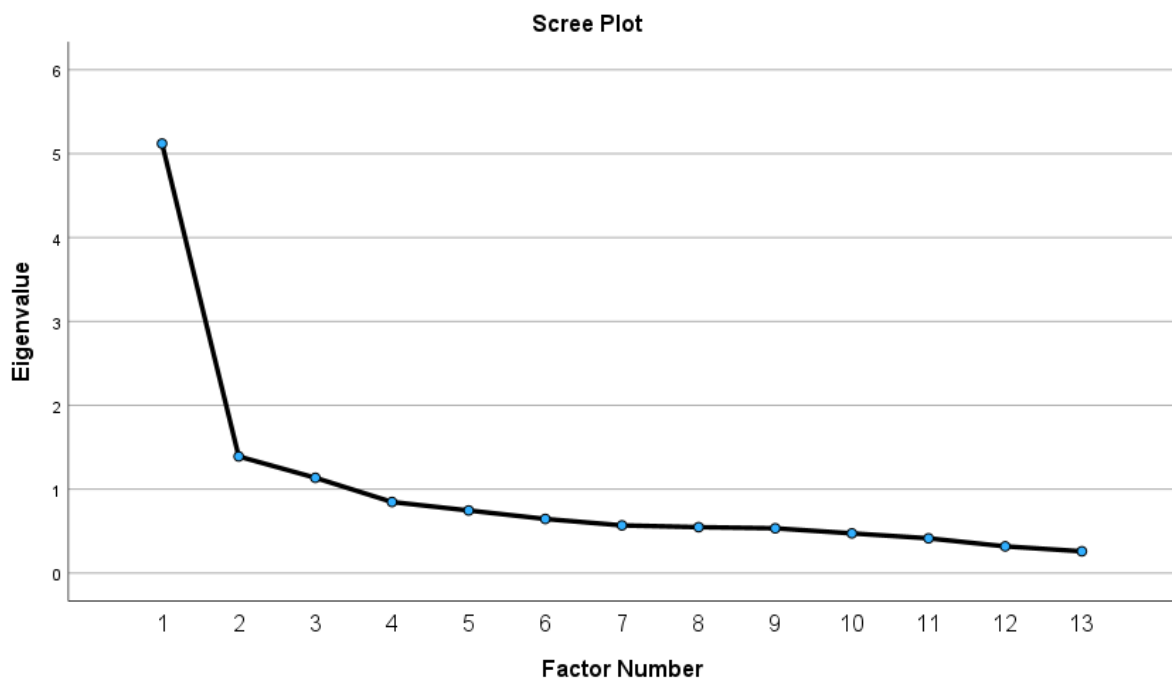
Goals of music consumption. This measure was produced through an adaptation of Lonsdale and North's (2011) measure which assesses an individuals' goals for music consumption, and which in turn was developed based on McQuail et al.'s (1972) media gratification model. The measure contains 30-items that are scored on seven-point Likert

scales where 1 = 'not at all' and 7 = 'completely'. Table 3 shows the list of the items.

Example items are 'To relieve anxiety' and 'To pass the time'. A reliability analysis was

conducted, which produced Cronbach's alpha $\alpha = 0.940$. this measure was previously used

only within a Western context and not in China. An exploratory factor analysis was

conducted using a varimax rotation. Seven factors were identified with eigenvalues of more

than 1 which accounted for 68.2% of the variance. These factors were labelled as 'Coping',

'Identity', 'Behaviour', 'Relationships', 'Trendy', 'Solace', 'Boredom' (see Table 2)

followed by the scree plots (Figure 2), and the factor scores were calculated through SPSS

which generates a coefficient for each respondent to be used in the following analyses.

Table 3.2

Factor loadings for goals of music consumption scale.

	Rotated Factor Matrix[a]						
	Factor						
	Coping	*Identity*	*Learning*	*Boredom*	*Trendy*	Solace	Relationships
1. To relieve anxiety	.841						
2. To relieve stress/tension	.824						
3. To relax	.796						
4. To make me feel better	.794						
5. To set the 'right' mood	.751						
6. To take my mind off things	.738						
7. To help get through difficult times	.688						
8. To express my feelings and emotions	.649						
9. To be entertained	.520						
10. To create an image for myself		.842					

11. To express my identity	.835		
12. To portray a particular image to others	.813		
13. To explore possible identities	.794		
14. To construct a sense of identity for myself	.640		
15. To display my membership of social groups	.623		
16. To discover who I really am	.580		
17. To learn how to behave in the future		.830	
18. To learn how to do things		.800	
19. To obtain useful information about things		.787	
20. To learn how other people think		.523	
21. To relieve boredom			.887
22. To pass the time			.875
23. To 'fill' uncomfortable silences			.648

24. To stay in-touch with current fashions and trends					.866		
25. To keep up with current events					.817		
26. To have something to talk about with others					.670		
27. To escape the reality of everyday life						.719	
28. To alleviate the feelings of loneliness						.687	
29. To spend time with family							.794
30. To spend time with friends							.720
Cumulative Variance	37.25	49.44	57.41	63.10	67.88	71.65	75.06

Extraction Method: Principal Axis Factoring. Rotation Method: Varimax with Kaiser Normalization.

Figure 3.2

Scree plot of Factor Analysis for Goals of Music Consumption
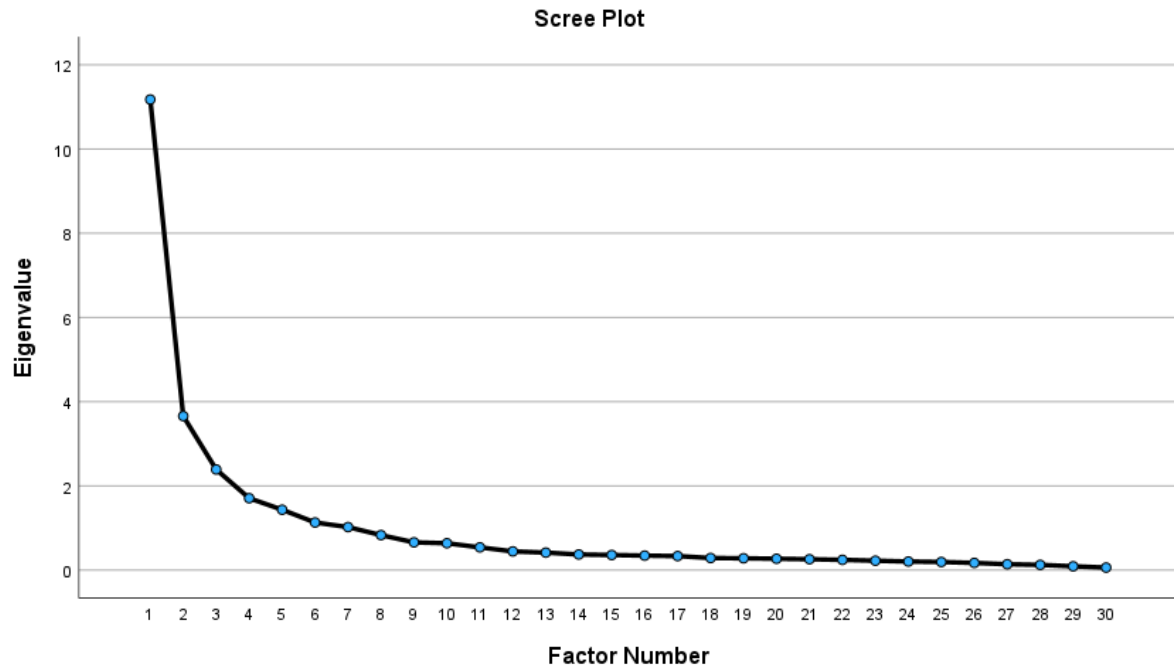
3.7 Results

   Descriptive statistics concerning all predictors are reported in Table 3.

Table 3.3

Descriptives

Pearson's R	TL	RM	HAP	LAP	SSS	Mean (SD)	Cronbach's α
TL	-					4.48 (0.59)	.753
RM	0.207*	-				4.12 (0.65)	.728
HAP	0.161*	0.107*	-			2.73 (0.69)	.728
LAP	0.097	0.152*	0.133*	-		3.27 (0.80)	.823

SSS	-0.061	-0.033	-0.224*	-0.066	-	5.23 (1.33)	-

Note: *p < .05. As SSS is a single item measure no Cronbach's α was computable.

TL = Tightness looseness, RM = Relational Mobility, HAP = High Arousal Positive, LAP = Low Arousal Positive, SSS = Subjective Socioeconomic Status

3.7.1 Liking for music

Three sets of analyses were conducted for hypotheses 1, 2 and 3 respectively. The first set of analyses was conducted to address H1which concerns musical taste and cultural dimensions. The three factors identified within the musical taste measure (namely 'Non-Mainstream', 'Traditional Western', and 'Mainstream Pop') were each used as outcome variables in three separate respective regression analyses that predicted scores on each musical taste factor on the basis of participant's scores on the three cultural factors (namely tightness-looseness, relational mobility and two scores of ideal affect, HAP and LAP). Results showed that the cultural factors were related to participants' liking for Non-Mainstream (R^2 = .04), but not Traditional Western and Mainstream Pop musical taste. Specifically, HAP was related significantly to liking for Non-Mainstream music (b = .19, p = .009). No other individual cultural dimensions were related to any of the musical taste scores.

The more speculative hypotheses (1a-d) proposed specific relationships between particular cultural dimensions and liking for specific music genres. To avoid Type 1 errors in testing these more speculative propositions, Bonferroni correction of alpha levels was applied (p = .0125). Hypothesis 1a proposed a negative relationship between tightness and liking for rock and metal music genres. A regression was conducted between scores concerning the rock genre alone (e.g., Item 4 in Table 2) and the same set of predictors as the main analysis (i.e., tightness looseness, relational mobility, HAP and LAP): this showed a non-significant relationship (b = -.06, p = .56); there was also no relationship between the cultural

dimensions and liking for metal ($b = -.18$, $p = .08$). Hypothesis 1b proposed a positive

relationship between relational mobility and liking for R&B/Hip-hop and dance/electronic

music genres. A regression with same set of predictors as the main analysis (i.e., tightness

looseness, relational mobility, HAP and LAP) showed a non-significant relationship between

relational mobility and liking for R&B/Hip-Hop ($b = -.14$, $p = .14$), and the relationship

between relational mobility and dance/electronic music was not significant either ($b = -.02$, p

$= .77$). Hypothesis 1c proposed a positive relationship between liking for pop music and

preference for HAP affect. This was tested using a regression with tightness looseness,

relational mobility, HAP and LAP as the predictors, and showed a non-significant

relationship ($b = -.12$, $p = .04$). Hypothesis 1d proposed that preference for LAP affect would

positively relate to liking for classical which was not supported ($b = .15$, $p = .03$) , while

analysis on the liking for jazz also did not support the proposed relationship between liking

for this genre and LAP ($b = .02$ $p = .71$).

Table 3.4

Results for Hypothesis 1 (Musical taste and cultural dimensions)

	Non-Mainstream Music		Traditional Western		Mainstream Pop	
	Coefficient (SE)	95% CI	Coefficient (SE)	95%CI	Coefficient (SE)	95%CI
Intercept [a]	1.04* (.48)	[.10, .1.98]	0.11 (.49)	[-.84, 1.06]	-0.70 (.48)	[-1.65, - .25]
RM	-0.14 (.07)	[-.30, .01]	0.03 (.08)	[-.12, .19]	0.09 (.08)	[-.06, .24]

TL	-0.13 (.08)	[-.30, .04]	-0.14 (.09)	[-.31, .03]	0.07 (.09)	[-.10, .24]
HAP	0.19* (.07)	[.05, .33]	0.05 (.07)	[-.09, .19]	-0.11 (.07)	[-.26, .03]
LAP	-0.12 (.06)	[-.23, .01]	0.08 (.06)	[-.04, .19]	0.10 (.06)	[-.02, .23]
Mode Fit Measures	$R^2 = .0392$ F(4, 399) = 4.07*		$R^2 = .0114$ F(4, 399) = 1.15		$R^2 = .0177$ F(4, 399) = 1.80	

* p < .05

Note: RM = Relational Mobility, TL = Tightness looseness, HAP = High Arousal Positive,

LAP = Low Arousal Positive

3.7.2 Goals of music consumption

The second main analysis concerns Hypothesis 2 and looked at the relationship

between cultural dimensions (tightness looseness, relational mobility and ideal affect) and the

seven factors concerning goals of music consumption. Each of the seven factors from the goals of music consumption measure were analyzed individually using regression analysis as seen in Table 5.

The results for Hypothesis 2 indicated that four out of the seven factors were significantly predicted by cultural factors namely Coping, Trendy, Solace and Boredom (R^2 ranging from .031 for Solace to .047 for Trendy). Identity ($R^2 = .018$, $p = .19$), Behaviour ($R^2 = .005$, $p = .26$) and Relationships ($R^2 = .012$, $p = .39$) did not relate significantly to cultural factors.

This second analysis also provides a test of hypotheses 2a and 2b, which proposed respectively that individuals who are more tightly oriented are less inclined to use music as a means of coping, and that individuals who have higher relational mobility are more inclined to use music as a means of expressing their identity. Bonferroni correction of alpha levels was again applied. Both hypotheses were not supported as can be seen in Table 5 where the relationship between tightness looseness and Coping ($b = .11$, $p = .11$) was not significant, and the relationship between relational mobility and Identity was not significant ($b = -.14$, $p = .07$). However, although these were not the subject of hypotheses, it is also notable that relational mobility was positively correlated with Coping ($b = .21$, $p = .009$). HAP was positively correlated with Trendy ($b = .28$, $p < .001$) and Boredom ($b = .21$, $p = .003$). These additional findings are considered in the Discussion section.

Table 3.5

Results for Hypothesis 2 (Goals of music consumption and cultural dimensions)

	Coping		Identity		Behaviour		Relationships		Trendy		Solace		Boredom	
	Coefficient (SE)	95% CI	Coefficient (SE)	95%CI	Coefficient (SE)	95% CI	Coefficient (SE)	95% CI	Coefficient (SE)	95% CI	Coefficient (SE)	95% CI	Coefficient (SE)	95% CI
Intercept [a]	-1.26* (.48)	[-2.21, -0.32]	0.18 (.48)	[-.77, 1.13]	-0.30 (.49)	[-1.26, .66]	-0.43 (.49)	[-.138, .52]	-1.09* (.48)	[-2.02, -.15]	0.65 (.48)	[-0.29, 1.60]	-0.93 (.48)	[-1.87, .01]
RM	0.21* (.08)	[.05, .36]	-0.14 (.08)	[-.30, .02]	0.09 (.08)	[-.06, .25]	0.06 (.08)	[-.10, .21]	-0.04 (.08)	[-.19, .10]	-0.16* (.08)	[-.00, -2.03]	0.03 (.08)	[-.12, .18]
TL	0.11 (.09)	[-.05, .28]	0.02 (.08)	[-.15, .19]	-0.02 (.09)	[-.20, .15]	0.04 (.09)	[-.13, .21]	0.15 (.08)	[-.01, .32]	0.14 (.09)	[-.03, .31]	-0.06 (.08)	[-.23, .11]
HAP	-0.11 (.07)	[-.25, .03]	0.15* (.07)	[.10, .30]	0.05 (.07)	[-.10, .19]	-0.11 (.07)	[-.25, .04]	0.28* (.07)	[.13, .42]	-0.06 (.07)	[-.20, .08]	0.21* (.06)	[.02, .27]
LAP	0.07 (.06)	[-.05, .19]	-0.03 (.06)	[-.16, .09]	-0.04 (.06)	[-.16, .09]	0.09 (.06)	[-.03, .21]	-0.05 (.06)	[-.20, .11]	-0.14* (.06)	[-.31, -.00]	0.15* (.06)	[.02, .27]

Model Fit Measures						
$R^2 = .033$	$R^2 = .018$	$R^2 = .005$	$R^2 = .012$	$R^2 = .047$	$R^2 = .031$	$R^2 = .041$
$F_{(4, 400)} = 3.46^*$	$F_{(4, 400)} = 1.78$	$F_{(4, 400)} = 0.52$	$F_{(4, 400)} = 1.21$	$F_{(4, 400)} = 4.88^*$	$F_{(4, 400)} = 3.19^*$	$F_{(4, 400)} = 4.25^*$

$^*\ p < .05$

Note: RM = Relational Mobility, TL = Tightness looseness, HAP = High Arousal Positive, LAP = Low Arousal Positive

3.7.3 Socioeconomic status

The third main analysis involved two multiple regressions that were conducted to investigate the relationship between subjective socioeconomic status (SSS) and each of musical taste and goals of music consumption respectively. The results can be seen in Tables 6 and 7. These show that SSS was correlated with liking for Non-Mainstream (R^2 = .021, p = .003) and using music for Coping (R^2 = .026, p < .001), whereas it did not correlate with the other factors concerning musical taste and goals of music consumption.

Table 3.6

Results for Hypothesis 3 (Musical taste and SSS)

	Non-Mainstream Music		Traditional Western		Mainstream Pop	
	Coefficient (SE)	95% CI	Coefficient (SE)	95%CI	Coefficient (SE)	95%CI
Intercept [a]	-0.58* (.20)	[-.97, -.18]	-0.04 (.20)	[-.44, .36]	-0.05 (.20)	[-.45, .35]
SSS	0.11* (.04)	[.04, .18]	0.01 (.04)	[-.07, .08]	0.10 (.04)	[-.06, .08]
Mode Fit Measures	R^2 = .021 $F(1, 402)$ = 8.72*		R^2 = .000 $F(1, 402)$ = 0.04		R^2 = .000 $F(1, 402)$ = 0.068	

Note: SSS = Subjective Socioeconomic Status

Table 3.7

Results for Hypothesis 3 (Goals of music consumption and SSS)

	Coping	Identity	Behaviour	Relationships	Trendy	Solace	Boredom

	Coefficient (SE)	95% CI	Coefficient (SE)	95%CI	Coefficient (SE)	95% CI	Coefficient (SE)	95% CI	Coefficient (SE)	95% CI	Coefficient (SE)	95% CI	Coefficient (SE)	95% CI
Intercept [a]	0.628* (.20)	[.24, 1.02]	-0.06 (.20)	[-.46, .34]	-0.13 (.20)	[-.53, .26]	-0.13 (.20)	[-.52, .27]	-0.08 (.20)	[-.47, .32]	-0.06 (.20)	[-.46, .33]	-0.19 (.20)	[-.59, .20]
SSS	-0.12* (.04)	[-.20, -.05]	0.01 (.04)	[-.06, .09]	0.03 (.03)	[-.04, .10]	0.02 (.04)	[-.05, .10]	0.01 (.04)	[-.06, .08]	0.01 (.04)	[-.06, .08]	0.04 (.04)	[-.04, .11]
Model Fit Measures	$R^2 = .026$ $F(1, 403) = 10.5*$		$R^2 = .000$ $F(1, 403) = 0.09$		$R^2 = .001$ $F(1, 403) = 0.47$		$R^2 = .001$ $F(1, 403) = 0.41$		$R^2 = .000$ $F(1, 403) = 0.15$		$R^2 = .000$ $F(1, 403) = 0.11$		$R^2 = .002$ $F(1, 403) = 0.98$	

Note: SSS = Subjective Socioeconomic Status

3.8 Discussion

The aim of the current study is to investigate the relationship between musical taste, goals of music consumption, and each of several cultural dimensions within Chinese participants.

Hypothesis 1 considered the relationship between Chinese individuals' scores on cultural dimensions (i.e., tightness looseness, relational mobility and ideal affect) and their musical taste. Results from the analysis partially supported the hypothesis since the cultural dimensions were collectively able to predict liking for Non-Mainstream factor scores but were not able to predict Traditional Western or Mainstream Pop music factor scores. The same analysis also showed a significant relationship between the Non-Mainstream factor and HAP. The correlation between the Non-Mainstream factor and HAP is consistent with North et al.'s (2019) finding that alternative genres (e.g., rock, metal) typically have higher arousal moods and energy. Aside from the main analysis, the more specific, secondary hypotheses (1a-d) were not supported.

Hypothesis 2 concerned the relationship between cultural dimensions and goals of music consumption. Four of the seven factors concerning the goals of music consumption were significantly correlated with the cultural dimensions, supporting the hypothesis. The goals of music use that were related to cultural dimensions were using music as means of coping, keeping up with current trends, finding solace, and passing time. Specifically, individuals with higher relational mobility were more inclined to utilize music as means of coping. Note that the difference between coping and solace here is that the coping factor concerns using music to alleviate certain moods or situations, whereas the solace factor more overtly concerns using music to find comfort. Additionally, individuals whose ideal affect concerned higher states of arousal were more likely to use music as means of easing boredom and keeping up with trends.

Hypothesis 3 concerned the relationship between subjective socioeconomic status and both individuals' musical taste and goals of consumption. Specifically, subjective socioeconomic status only related positively to liking for Non-Mainstream music and using music as a means of coping. This is an interesting finding as previous studies among western samples (Mellander et al., 2018) have shown that liking for Non-Mainstream music is associated with lower socioeconomic status, whereas the Chinese data here showed the opposite relationship. However, Li (2021) suggests that individuals who come from higher socioeconomic status backgrounds in China have greater exposure to different cultural consumables leading to greater cultural capital, and so they might be expected to appreciate musical genres such as rock that are less commonly-consumed in China.

Overall, the results of this study indicate that there are relationships between cultural factors and music consumption. The present results demonstrate that cultural factors can predict liking for music and uses of music, and also provide relatively rare insight into the psychology of the music streaming market in China. The findings here extend our understanding of music consumption in some quite specific ways: certain relationships were consistent with previous findings from the Western literature, such as the correlation here between liking Rock and high arousal ideal. However, the present research also identified potentially new relationships which future research could pay further attention to such as the positive relationship between socioeconomic status and non-mainstream music or how relational mobility is positively related to using music as a means of coping.

The study focused on the cultural orientation of participants at an individual level. Although it is common for cultural orientations and dimensions to be measured at a broader national level, there are also benefits of doing so individually. Firstly, this allows a specific understanding of individual attitudes and behaviors. More importantly, measurement of cultural orientation at the level of the individual also avoids the assumption that all

individuals within a particular group share the same cultural values: for example, a national aggregate score showing tightness can still contain many individuals who are loosely oriented. In line with this argument, we also note that the findings here may not be unique to Chinese individuals only, as any one individual's cultural values may be found in another individual in any other country: on the basis of the findings here we would expect both people to have similar musical taste and to use music for similar reasons.

The findings here concern university students in Guangzhou and contrast in some ways with previous findings among western samples. Future research will be needed to determine the extent to which the present conclusions can be generalised to the remainder of China, given the considerable cultural heterogeneity across such a sizeable and dispersed population. We might argue also, however, that a similar point could be made concerning the limited number of other studies that have considered relationships between culture and consumption in other regions.

Furthermore, as noted earlier, the musical taste scale was self-developed based on the top charting genres on global music charts in order to ensure that the genres concerned are relevant across multiple countries. However, this means that some genres of relevance to only China were not included. More generally it is important to note that music is a by-product of culture and often the interpretation of it (e.g., genre labels) can vary across different cultures, practices and values (Teo et al., 2008). Finally, the present study considered only a small number of cultural dimensions on the basis that these might be credibly related to music: whether other cultural factors also relate to musical behaviour remains to be determined.

3.9 Conclusion

In conclusion, the present study demonstrates the relationship between cultural factors and both musical taste and uses of music among university students in metropolitan southern China. Issues such as these should arguably receive greater research attention as music

consumption becomes increasingly digitized but also more divergent and localized. Technological changes in our means of music consumption mean that one's cultural orientation might represent an increasingly important influence on music selection choices and motivations, and we look forward to further research that expands the scope of our understanding of the relationship between music consumption and culture.

CHAPTER 4: MUSIC CONSUMPTION AND USES IN MALAYSIA

4.1 Preface

The current chapter looks at music consumption in Malaysia. Malaysia is evidently a prominent economy within Southeast Asia. Typically cross-cultural comparisons involving East Asian countries have focussed on South Korea, Japan and China with less focus on other Asian countries. As the overall aim of the thesis is to provide a cross-cultural analysis, it also makes sense to ensure that there is variety in the cultural orientations being investigated, and Malaysia happens to be one of the tighter countries according to Gelfand et al. (2012) and low on relational mobility (Thomson et al., 2018) in comparison to the other countries included within this thesis. The paper will build on similar hypotheses and rationales as the previous two chapters to investigate how culture might influence music consumption in Malaysia.

4.2 Introduction

4.2.1 Music Consumption in Malaysia

The current study investigates how cultural factors and socioeconomic status relate to musical taste and uses of music within a Malaysian sample. Music streaming has become increasingly common within Malaysia over the past decade (Statista, 2023) with revenue projected to reach 66 million USD in 2023. Statista (2023) notes that among those who use music streaming services, Malaysia has a disproportionately high number who pay a subscription rather than use a free tier containing advertising. It is also notable with within Southeast Asia, Malaysia ranks third for ethnic diversity just behind Indonesia and Thailand (Alesina et al., 2003), although very little previous research has collected cross-cultural data in the country. This may be relevant to music consumption, given Bello and Garcia's (2021) finding that popular music listening preferences are becoming increasingly diverse and localised (see also Mehr et al., 2019).

4.3 Cultural Dimensions

The current research uses several cultural dimensions to capture the cultural orientations of individuals, namely tightness-looseness, relational mobility and ideal affect. These are relatively new cultural constructs which have been studied cross-cultural research but have been investigated to only a very limited extent within the context of music psychology. However, the potential impact of these cultural dimensions on musical behaviour can be predicted on the basis of research on cross-cultural consumption.

Tightness-looseness. Tightness-looseness (Gelfand et al., 2011) refers to the extent to which cultures/individuals tolerate deviance from societal norms for attitudes and behaviours. Tighter societies tend to have negative repercussions and consequences for deviant behaviour whereas looser societies are more tolerant of deviance away from norms. Their lower tolerance for deviance from norms means that individuals within tighter cultures are less inclined to try or consume new products, as these are outside the norm (Li et al., 2017). Furthermore, Gelfand et al. (2006) suggests that individuals who live within tight societies often face greater psychological stress due to the constant need to appease cultural norms while fearing retributions for deviating from those norms. Within the context of music, Li et al. (2017) found that individuals from looser societies tend to have higher creative potential due to the greater emphasis in those societies on creative exploration. Liew et al. (2022) also found that tighter individuals are likely to utilise music that is high arousing to regulate emotion. Consequently, tightness-looseness could be related to individual's musical tastes and uses of music.

Relational Mobility. Relational mobility (Thomson et al., 2018) refers to the extent to which individuals within a society feel the freedom to form and enter new interpersonal relationships. Individuals with low relational mobility often perceive there to be little

flexibility in forming new relationships, instead forming relationships on the basis of a sense of duty to the people concerned (e.g., their subordinates at work) or because they occupy a particular societal role (e.g., a fellow member of a sports team). In contrast, individuals with high relational mobility perceive there to be much more flexibility in forming relationships, which may often be based purely on personal preferences such as which other people they simply like the most or with whom they share many interests. Relational mobility could relate to various aspects of music consumption. For instance, the freedom of forming and entering new interpersonal relationships among people high for relational mobility means they could be more inclined to utilise music as a means of identity expression and establishing shared interests with others. Research findings have shown that music can often be used as a means of identity expression (see Lonsdale & North, 2011; Schafer et al., 2013). Similarly, Takemura (2014) concluded that individuals who are higher on relational mobility also have a greater desire to be unique in order to 'stand out' relative to others in the apparent belief that this will help them to form new relationships. Translating this to music consumption, individuals with a high level of relational mobility could also prefer to consume music genres that are considered niche or 'unique' in order to stand out in comparison to others.

Ideal Affect. Ideal affect refers to the emotions, feelings and moods that individuals ideally would like to achieve and experience (Tsai et al., 2006). The Affect Valuation Theory posits that the ideal affect of individuals can subsequently influence their behaviour and actions (Tsai et al., 2006). Numerous studies show that music effectively influences the emotions of individuals (see Juslin et al., 2016; Saarikallio et al., 2020; Tsai, 2007), so that individuals often utilise music as a means of emotional regulation, expression of emotion or to achieve certain emotional states. Previous research has also shown that ideal affect differs according to culture, where Eastern cultures (e.g., Japan) are inclined towards low arousal positive (LAP) affect whereas Western cultures (e.g., America) have more inclination for high arousal

positive (HAP) affect (Liew et al., 2021; Tsai et al., 2007). Juslin et al. (2016) identified different motives for music listening between individualistic and collectivistic cultures , such that nostalgia-longing was more frequent in collectivistic cultures while sadness-melancholy was more prevalent in individualistic cultures. Moreover, Liew et al., (2022) found that individuals from Japan have musical tastes inclined towards LAP compared to American individuals' inclination towards HAP musical tastes. However, there is little evidence concerning the potential relationship between ideal affect and music, and the limited previous research has focussed on Western and East Asian cultures (notably China, Japan, and Korea). We are not aware of any findings concerning Southeast Asia or whether existing findings extrapolate to the region.

4.4 Socioeconomic Status

Although socioeconomic status is not a cultural dimension, there are grounds to investigate it within the context of culture and music consumption. Studies often consider different aspects of wealth and financial status when investigating consumer behaviour. Furthermore, several cultural dimensions such as social dominance orientation and power distance (Hofstede, 2012; Pratto et al., 1999) address disparities in wealth and social status. These highlight the potential influence that wealth can have on consumer behaviour. In context of music psychology, several studies (e.g., Liu et al., 2019; Mellander et al., 2018) have shown that socioeconomic status influences musical taste, so that people of higher socioeconomic status tend to appreciate 'highbrow' genres of art. This is attributed to their exposure to more diverse culture and artforms which allows for heightened appreciation. In contrast, people of lower socioeconomic status tend to appreciate more popular genres of art (Meuleman, 2021). Specifically, Liu et al., (2019) found that participants from America that come from lower socioeconomic backgrounds were more inclined to consume music genres

like pop music whereas those from more affluent backgrounds were more inclined to appreciate genres such as jazz and opera.

4.5 Current Hypotheses

The literature reviewed here indicates that each of tightness-looseness, relational mobility, ideal affect, and socioeconomic status has the potential to influence musical taste and the uses to which people put music. There is a growing body of quantitative research on music and culture, however, there is little research particularly concerning uses of music and samples in Eastern cultures.

Three main hypotheses are proposed along with several more specific and tentative hypotheses that can also be tested using the same data.

The first hypothesis proposes a relationship between musical taste and each of tightness-looseness, relational mobility, and ideal affect. The same data allows several more tentative hypotheses to be tested based on previous findings within literature. Hypothesis 1a proposes that since individuals who are more tightly oriented prioritise conformity to societal norms they may be less inclined to consume music genres such as rock and metal due to the often anti-authoritarian sentiments associated with these genres (see Mulder et al., 2007; North et al., 2005). Hypothesis 1b proposes that individuals with higher relational mobility may be more inclined to consume music genres that are considered 'niche'. This is based on Takemura (2014) finding that individuals high on relational mobility often feel the need to appear more unique in an attempt to stand out compared to others. While efforts to determine the popularity of genres within specifically Malaysia were unsuccessful, as detailed in the Method section, Krumhansl (2017) illustrates clearly that globally jazz is relatively unpopular compared to many other genres, and so it may be considered 'niche' within the context of this study. Therefore, hypothesis 1b suggests that high relational mobility will be related to higher

liking for jazz. Moreover, North et al. (2019) analysed a very large sample of music to determine the emotions that different genres are most likely to elicit and found that genres like pop often exude high levels of arousal (what North et al. termed bold and energetic) whereas genres such as jazz, classical and opera were more likely to reflect relaxing and similar low arousal states. Consequently, hypothesis 1c speculates that HAP ideal affect is related to liking for pop genre, while hypothesis 1d speculates that LAP ideal affect is related to liking for classical, jazz and opera.

The second main hypothesis proposes that there will be a relationship between the goals of music consumption and the same cultural dimensions of tightness-looseness, relational mobility and ideal affect. We also propose two further specific and tentative hypotheses based on extrapolations from previous findings. Hypothesis 2a suggests a relationship between tighter orientations and using music as means of coping with everyday stressors. This is based on the heightened psychological stress imposed by tighter cultural values (Gelfand et al., 2006). Hypothesis 2b suggests that individuals who are higher on relational mobility might be more inclined to use music as a means of socialisation and identity expression, since these people have more freedom to form relationships with whoever they choose and need to take practical steps to form relationships as these will not arise automatically from social roles.

The third main hypothesis proposes a relationship between socioeconomic status and both musical taste and goals of consuming music. The relationship with musical taste has not been studied previously within Asian cultures/countries, and neither is there existing literature on how socioeconomic status might correlate with peoples' goals of consuming music.

To summarise the hypotheses:

1. Are an individual's cultural orientations concerning tightness-looseness, relational mobility, and ideal affect related to their musical taste?

    a. Individuals that are more tightly oriented have lower liking for rock and metal.

    b. Individuals that have higher relational mobility have higher liking for jazz.

    c. Individuals who have greater preference for high arousal positive affect have higher liking for pop.

    d. Individuals who have greater preference for lower arousal positive of affect have higher liking for jazz and classical.

2. Are an individual's cultural orientations concerning tightness-looseness, relational mobility, and ideal affect related to their goals of music consumption?

    a. Individuals that are more tightly oriented are more inclined to use music as a means of coping.

    b. Individuals that have higher relational mobility are more inclined to use music as a means of identity expression.

3. Is subjective socioeconomic status related to both musical taste and goals of consuming music?

4.6 Method

4.6.1 Participants

The current study received ethics approval from the Human Research Ethics Committee of the authors' university. The study sampled a total of 195 students who identified as Malaysian nationals, were between 18-30 years of age, and were students at a university in Malaysia. Participants were recruited via convenience sampling with emails sent out to students from the university. This email contained a link that redirected participants to a Qualtrics questionnaire.

4.6.2 Measures

Tightness-Looseness. This measure consists of six items where participants respond on a six-point Likert scale (1 = 'strongly disagree' and 6 = 'strongly agree'). The measure has been tested for measurement equivalence by Gelfand et al. (2011) across countries including Malaysia. Example items are 'People in this country almost always comply with social norms' and 'There are many social norms that people are supposed to abide by in this country'. A reliability analysis conducted for this measure highlighted the need to remove a single item ('People in this country have a great deal of freedom in deciding how they want to behave in most situations') from the measure as it seemed to be affecting reliability. The Cronbach's alpha for the measure before removal of the item was .57 but improved to .74 after removal. The item being suggested to remove was a reverse coded item, prior to removal it was recoded and checked to ensure that there were no errors in coding of the item. Once this was confirmed, the decision to remove the item was made to ensure that there is adequate reliability scores for the measure.

Relational Mobility. This measure consists of 12 items where participants respond to a six-point Likert scale (1 = 'strongly disagree' and 6 = 'strongly agree'). The measure has been tested for measurement equivalence by Thomson et al. (2018) across countries including Malaysia. Example items are 'there are few opportunities for these people to form new friendships' and 'It is often the case that they cannot freely choose who they associate with'. The measure is reliable with a Cronbach's alpha of .788.

Ideal Affect. Tsai et al.'s (2006) measure of ideal affect consists of 30 items which individuals rate on a five-point Likert scale where 1 = 'never' and 5 = 'all the time'. Participants are shown a list of adjectives describing different emotions and rate to which extent the emotion is desirable. Measurement equivalence has been not been established in

Malaysia however, it has been used in many different East Asian cultures such as Korea, Japan and China (see Tsai et al., 2007). We expect the measure to be reliable within an Asian country. Example items are 'enthusiastic' and 'peaceful'. The present study predominantly considers high arousal positive (HAP) and low arousal positive (LAP), means for which were calculated separately to achieve a single score for each.

Subjective Socioeconomic Status. Subjective socioeconomic status (SSS) is assessed by MacArthur's Scale of Subjective Socioeconomic Status (Adler, 2000) in the study. The measures utilises an illustration of a ladder with 10 rungs (first rung being low and highest rung being high) where individuals are asked to rate from a scale of 1-10 how they perceive their socioeconomic status relative to other individuals around them within their society.

Musical Taste. This measure is a self-developed and assesses liking for 13 genres. The rationale behind a self-developed measure is that there is no existing measure of musical taste that has consistent reliability scores and factor structures across cultures (see Table 2). The current measure is based on the highest ranked genres on Billboard's global charts. Items are listed in Table 1. Participants rate the extent to which they like each genre based on a 7-point Likert scale where 1 = 'not at all' and 7 = 'strongly'. An exploratory factor analysis was conducted to identify the factor structure of the measure and determine if there are any underlying latent variables using varimax rotation. Four factors with eigenvalues greater than 1 were identified which were labelled as 'Western', 'Rock', 'Pop' and 'Dance' (see Table 1) and accounted for 61.12% of the variance. The aggregate score of each factor is used for the analysis of hypotheses. A scree plot for additional information is also included in Figure 1

Table 4.1

Exploratory Factor Analysis for Musical Taste Measure

Rotated Factor Matrix[a]

	Factor			
	Western	*Rock*	*Pop*	*Dance*
1.Western Classical	.704			
2. Country	.578			
3. Reggae	.538			
4. Latin	.505			
5. Jazz	.501			
6. Christian/Gospel	.463			
7. Blues				
8. Metal		.841		
9. Rock		.724		
10. Alternative		.428		
11. Pop			.690	
12. R&B/Hip-Hop			.508	
13. Dance/Electronic				.754
Cumulative Variance	28.59	41.05	52.54	61.12

Extraction Method: Principal Axis Factoring.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

Figure 4.1

Scree plot of Factor Analysis for Musical Taste

Scree Plot
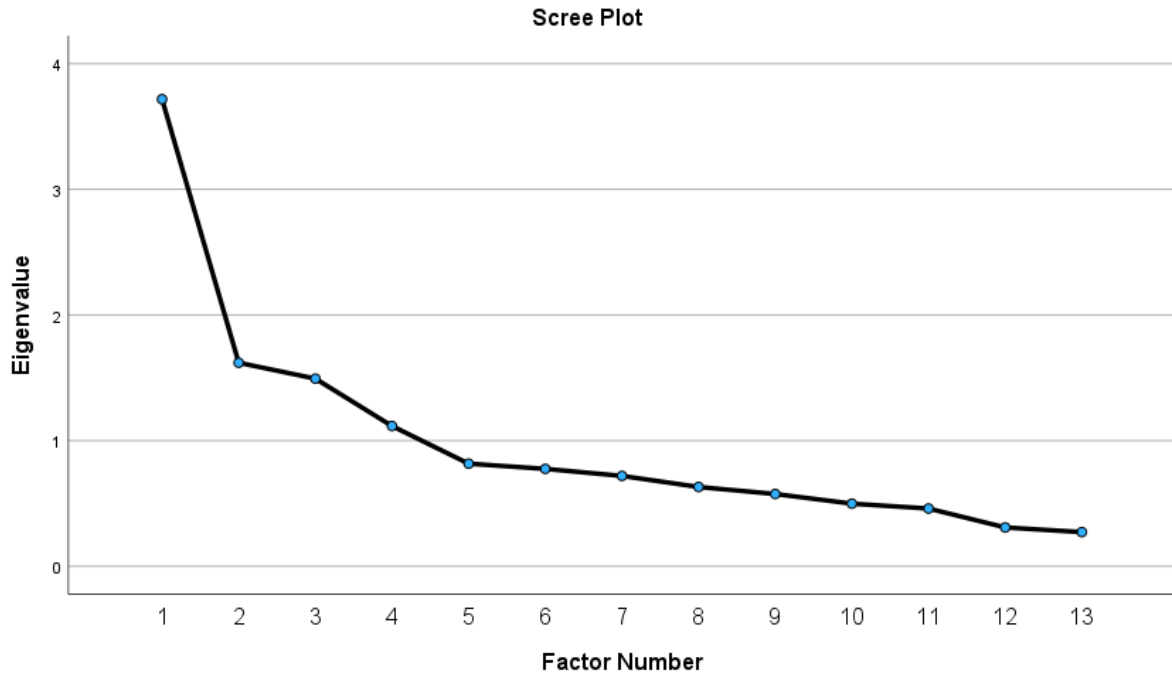
Goals of music consumption. This measure is based on Lonsdale and North's (2011) which assess the goals of music consumption amongst individuals and which itself was based on McQuail et al.'s (1972) model of gratifications. Participants rate how strongly they agree with each of 30 possible goals of consuming music on a 7-point Likert scale where 1 = 'not at all' and 7 = 'completely'. Items are listed in Table 2. Example items are '' and ''. An exploratory factor analysis was conducted on the measure using varimax rotation where six factors were identified with eigenvalues more than 1 and which accounted for 66.19% of the variance (see Table 2). The factors were labeled 'Identity', 'Coping', 'Boredom', 'Learning', 'Spending Time', and 'Loneliness'. The aggregate score for each factor is used for the analysis of the hypotheses. Scree plot for the factor analysis is also included in Figure 2

4.7 Results

Participant data was cleaned so that cases with more than 5% of missing data were removed. They were tested using Little's MCAR test (Li, 2013) to ensure that they were missing completely at random. Missing data was replaced using the Expectation

Maximization (EM) (Dong & Peng, 2013) technique through SPSS. Descriptive statistics are

included in Table 3 for all variables.

Table 4.2

Exploratory Factor Analysis for Goals of Music Consumption Measure

	Rotated Factor Matrix[a]					
	Factor					
					Spending	
	Identity	*Coping*	*Boredom*	*Learning*	*Time*	*Loneliness*
1.To create an image for myself	.836					
2.To express my identity	.818					
3.To portray a particular image to others	.773					
4.To display my membership of social groups/subcultures	.752					
5.To explore possible identities	.697					
6.To construct a sense of identity of myself	.670					
7.To discover who I really am	.541					
8.To express my feelings and emotions	.437	.406				
9.To relieve anxiety		.875				

10.To relieve stress/anxiety	.810		
11. To help get through difficult times	.694		
12. To make me feel better	.555		
13.To relax	.549	.435	
14. To set the 'right' mood	.401		
15. To pass the time		.826	
16. To relieve boredom		.822	
17.To take my mind off things		.564	
18. To 'fill' uncomfortable silence		.495	
19. To be entertained		.459	
20. To escape the reality of everyday life		.410	
21. To learn how to do things			.839
22. To learn how to behave in the future			.754
23. To obtain useful information for daily life			.688
24. To learn how other people think			.498
25. To stay in touch with current fashions and trends			

|						
26. To spend time with friends					.724	
27. To have something to talk about with others					.622	
28. To spend time with family					.590	
29. To keep up with current events						
30. To alleviate feelings of loneliness						.650
Cumulative Variance	32.78	43.10	50.95	57.73	62.59	66.19

Extraction Method: Principal Axis Factoring.

 Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

Figure 4.2

Scree plot for Factor Analysis of Goals of Music Consumption
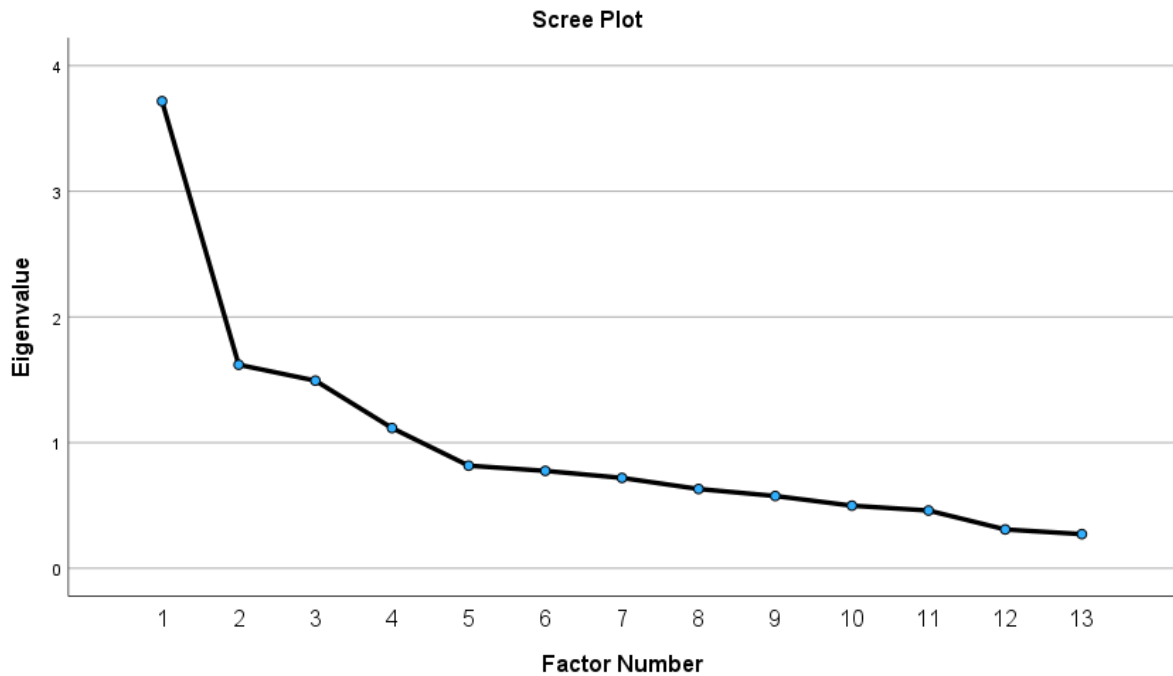
Table 4.3

Descriptives

Pearson's R	TL	RM	HAP	LAP	SSS	Mean (SD)	Cronbach's α
TL	-					4.64 (0.73)	.743
RM	0.074	-				3.78 (0.63)	.788
HAP	0.121	0.026	-			3.07 (0.78)	.724
LAP	0.183*	0.005	0.484*	-		3.54	.73

						(0.91)	
SSS	0.220*	-0.026	-0.061	-0.096	-	5.27	-
						(1.60)	

Note: *p < .05. As SSS is a single item measure no Cronbach's α was computable.

TL = Tightness looseness, RM = Relational Mobility, HAP = High Arousal Positive, LAP = Low Arousal Positive, SSS = Subjective Socioeconomic Status

4.7.1 Musical taste

In analysing hypothesis 1, four separate regressions were carried out with the outcome variables being each of the four respective factors identified from the musical taste measure while the predictor variables in each analysis were the cultural dimensions of tightness-looseness, relational mobility and ideal affect of HAP and LAP. The results for this analysis are summarised in Table 4. Pop was the only factor that was significantly predicted by cultural dimensions (R^2 = .098, p < .001).

Table 4.4

Results for Hypothesis 1 (Cultural dimensions and musical taste)

	Western		Rock		Pop		Dance	
	Coefficient (SE)	95% CI	Coefficient (SE)	95%CI	Coefficient (SE)	95%CI	Coefficient (SE)	95% CI
Intercept [a]	0.726 (.56)	[-.39, .1.84]	0.36 (.59)	[-.80, 1.51]	-1.96* (.51)	[-2.97, -.95]	-0.19 (.52)	[-1.22, .84]
RM	-0.145 (.10)	[-.34, .05]	-0.09 (.10)	[-.30, .11]	0.06 (.09)	[-.11, .24]	0.05 (.09)	[-.13, .23]
TL	-0.13 (.09)	[-.29, .04]	-0.02 (.09)	[-.20, .16]	0.22* (.08)	[.06, .37]	-0.05 (.08)	[-.20, .11]
HAP	0.05 (.09)	[-.13, .23]	-0.08 (.09)	[-.26, .11]	0.06 (.08)	[-.10, .22]	0.10 (.08)	[-.07, .26]

LAP	0.07 (.08)	[-.08, .23]	0.09 (.09)	[-.07, .25]	0.15 (.07)	[.01, .29]	-0.02 (.07)	[-.17, .12]
Mode Fit Measures	$R^2 = .0304$ $F(4, 191) = 1.50$		$R^2 = .012$ $F(4, 191) = 0.58$		$R^2 = .0981$ $F(4, 191) = 5.19*$		$R^2 = .01$ $F(4, 191) = 0.484$	

To analyse H1a-d, separate regressions were carried out. In this case, each analysis used stand alone genres from the musical taste measure (rather than factor scores). Bonferroni correction of alpha = .0125 was applied to avoid the occurrence of Type 1 errors. H1a proposed a negative relationship between tighter orientations and both rock and metal. These relationships were not significant for either rock (b = .008, p = .95) or metal (b = -0.05, p = .69) H1b proposed that relational mobility is positively associated with liking jazz, but this was not supported (b = -.192, p = .124). Hypothesis 1c suggested that individuals who ideally like to experience higher positive arousals (HAP) are more inclined to enjoy pop, but this was not supported (b = .081, p = .401). Hypothesis 1d suggested that individuals who ideally like lower states of affective arousal are more inclined to enjoy jazz but this was not supported (b = -.083, p = .41), and neither was there a significant relationship between LAP and liking for classical music (b = -.034, p = .748).

4.7.2 Goals of music consumption

In analysing Hypothesis 2, six separate regressions were carried out. The outcome variables in each analysis are the six respective factors scores identified from the goals of music consumption and in each case the predictor variables were tightness-looseness, relational mobility and ideal affect HAP and LAP. Results are summarised in Table 5. Four out of the six factors identified were significantly predicted by cultural dimensions, supporting Hypothesis 2. The significant factors were Coping (R^2 = .072, p = .006), Boredom (R^2 = .139, p < .001), Learning (R^2 = .095, p < .001), and Spending Time (R^2 = .101, p < .001). Identity and Lonely were not associated with any cultural dimensions.

Table 4.5

Results for Hypothesis 2 (Cultural dimensions and goals of music consumption)

	Identity		Coping		Boredom		Learning		Time		Lonely	
	Coefficient (SE)	95% CI	Coefficient (SE)	95%CI	Coefficient (SE)	95% CI	Coefficient (SE)	95% CI	Coefficient (SE)	95% CI	Coefficient (SE)	95%CI
Intercept [a]	0.47 (.62)	[-.75, -1.70]	-1.60* (.61)	[-2.80, -.41]	-1.82* (.57)	[-2.94, -.71]	-2.54* (.58)	[-3.69, -1.39]	-1.92* (.54)	[-3.00, -0.85]	-0.54 (.55)	[-1.63, .55]
RM	-0.11 (.11)	[-.33, .10]	-0.02 (.11)	[-.23, .18]	-0.12 (.10)	[-.31, .07]	0.20 (.10)	[.00, .40]	0.08 (.09)	[-.10, .27]	-0.01 (.10)	[-.20, .18]
TL	0.06 (.09)	[-.12, .25]	0.26* (.09)	[.09, .09]	0.45* (.09)	[.28, .62]	0.27* (.09)	[.09, .44]	0.11 (.08)	[-.05, .28]	0.04 (.08)	[-.12, .21]
HAP	0.13 (.10)	[-.07, .32]	0.22 (.10)	[.03, .41]	0.03 (.09)	[-.15, .21]	0.14 (.09)	[-.04, .33]	0.23* (.09)	[.06, .40]	0.01 (.09)	[-.17, .19]
LAP	-0.20 (.09)	[-.38, -.03]	-0.06 (.08)	[-.23, .45]	0.02 (.08)	[-.13, .18]	0.02 (.08)	[-.14, .18]	0.11 (.08)	[-.04, .26]	0.10 (.08)	[-.05, .25]

Model Fit Measures	$R^2 = .034$ $F(4, 191) = 1.69$	$R^2 = .072$ $F(4, 191) = 3.72*$	$R^2 = .139$ $F(4, 191) = 7.72*$	$R^2 = .095$ $F(4, 191) = 5.03*$	$R^2 = .101$ $F(4, 191) = 5.34*$	$R^2 = .016$ $F(4, 191) = 0.77$

H2a suggests that tighter orientations are associated positively with using music as means of coping with everyday stressors. This was supported, given the regression between tightness-looseness and Coping as a factor ($b = 0.26$, $p = .004$). H2b suggests that individuals high on relational mobility are more likely to use music as a means of identity expression and socialisation. This was not supported by the regression as there was no significant relationship between relational mobility and Identity ($b = -0.11$, $p = .287$). We note also that three other unexpected relationships were found in these analyses. Tightness-looseness correlated significantly with Boredom ($b = 0.45$, $p < .001$) and Learning ($b = 0.27$, $p = .003$), while HAP was correlated with Time ($b = 0.23$, $p = .009$).

4.7.3 Subjective socioeconomic status

To test hypothesis 3, regressions were carried out testing the factors identified from the musical taste and goals of consumption measure against SSS. Results are shown in Tables 6 and 7. None of the musical taste factors was related to SSS whereas two of the uses of music were, namely Coping ($R^2 = .05$, $p = .002$) and Boredom ($R^2 = .041$, $p = .005$).

Table 4.6

Results for Hypothesis 3 (SSS and Musical Taste)

	Western		Rock		Pop		Dance	
	Coefficient (SE)	95% CI	Coefficient (SE)	95%CI	Coefficient (SE)	95%CI	Coefficient (SE)	95%CI
Intercept [a]	0.29 (.21)	[-.13, .71]	0.41 (.22)	[-.02, .84]	-0.18 (.20)	[-.57, .22]	0.06 (.20)	[.32, .45]
SSS	-0.06 (.04)	[-.13, .02]	-0.08 (.04)	[-.16, .00]	0.03 (.04)	[-.04, .11]	-0.01 (.04)	[-.08, .06]
Mode Fit Measures	$R^2 = .010$ $F(1, 194) = 2.02$		$R^2 = .02$ $F(1, 194) = 3.89$		$R^2 = .004$ $F(1, 194) = 0.84$		$R^2 = .000$ $F(1, 194) = 0.11$	

Table 7

Results for Hypothesis 3 (SSS and Goals of music consumption)

Identity	Coping	Boredom	Learning	Socialisation	Lonely

	Coefficient (SE)	95% CI	Coefficient (SE)	95% CI	Coefficient (SE)	95% CI	Coefficient (SE)	95% CI	Coefficient (SE)	95% CI	Coefficient (SE)	95% CI
Intercept [a]	0.13 (.24)	[-.33, .60]	-0.70* (.23)	[-1.15, -.25]	-0.61* (.22)	[-1.05, -.17]	0.38 (.23)	[-.07, .83]	0.23 (.21)	[-.19, .65]	-0.13 (.21)	[-.54, .28]
SSS	-0.03 (.04)	[-.11, .06]	0.13* (.04) .002	[.05, .21]	0.12* (.04) .005	[.04, .20]	-0.07 (.04)	[-.15, .01]	-0.04 (.04)	[-.12, .03]	0.03 (.04)	[-.05, .10]
Model Fit Measures	$R^2 = .002$ $F(1, 194) = 0.34$		$R^2 = .05$ $F(1, 194) = 10.1*$		$R^2 = .041$ $F(1, 194) = 8.19*$		$R^2 = .016$ $F(1, 194) = 3.05$		$R^2 = .006$ $F(1, 194) = 1.27$		$R^2 = .002$ $F(1, 194) = 0.45$	

4.8 Discussion

The current study seeks to explore the relationship between culture and both musical taste and the goals of consuming music within a Malaysian population. The first hypothesis concerned the relationship between cultural dimensions of tightness-looseness, relational mobility, ideal affect and musical taste. Results from the analysis revealed that only the Pop factor was significantly predicted by cultural dimensions, whereas the other musical taste factors identified were not. Specifically, there seems to be a significant positive correlation between the HAP ideal affect and liking for Pop, but no other relationships within this Malaysian sample concerning cultural dimensions and musical taste.

H2 seeks to investigate the relationship between the same cultural dimensions and goals of consuming music. Four out of the six factors that were extracted from the measure of music use were significantly related to cultural dimensions. Specifically cultural factors predicted using music as means of coping, relieving boredom, learning new trends, and filling time. The findings also supported Hypothesis 2a showing that tighter orientations were associated with using music to cope with daily stressors. This echoes the findings of Gelfand (2006) which showed high psychological stress stemming from constant adherence to social norms. More simply, tightness relates to music consumption. Hypothesis 2b was not supported, since relational mobility was not related to using music as a means of identity expression and socialisation.

Aside from the specific hypotheses, the analysis of uses of music produced three other significant findings that were not expected but do seem intuitive. There were significant relationships between tightness and using music to both alleviate boredom and learn things. The strict rigidity in behaviour arising from a tight orientation could well lead to boredom (see e.g., Corazza & Lubart, 2020). Similarly tight orientations give rise to a need to learn

societal standards and norms, so the relation between tightness and using music to learn about one's social milieu is understandable. Finally, an ideal affect focussing on achieving high positive arousal correlated significantly with using music to pass time. This could simply be attributable to this cultural orientation leading to a desire to have fun.

Hypothesis 3 concerns subjective socioeconomic status. Musical taste was not predicted by socioeconomic status, but the latter did correlate with two of the goals of music consumption, namely Coping and Boredom. This may have interesting practical implications in Malaysia where streaming is the preferred method of consuming music and approximately 40% of music streaming users fall within the same age range of the current sample (Statista, 2023). The correlations here concerning socioeconomic status may imply that individuals from a background with higher socioeconomic status may be able to afford music streaming services as a means of coping with stressors and relieving their boredom. This especially applies in the context of Malaysia where there is extensive use of music streaming services.

The current study shows the influence of culture on the goals of music consumption, if not musical taste. More generally the results also further help inform current understanding of cross-cultural and music psychology research, showing that these two are related to one another. Although there is a growing body of evidence that looks at music behaviour through a cultural lens, such as Rabinowitch (2023), Saarikillo et al. (2020), Tsai (2007). There are nonetheless many aspects of culture that have not been considered by research on music psychology. The current findings are of course limited to tightness-looseness, relational mobility, and ideal affect, and to Malaysia. As argued earlier, the majority of cultural comparisons often occur between East Asian and Western cultures with little inclusion of other cultures such as those in Southeast Asia. We look forward to future research concerning a broader range of cultural values and global regions. For instance, the individualistic or

collectivistic tendencies may lead to different goals of consuming music or even musical taste, given the range of other variables with which this aspect of culture correlates.

Furthermore, music psychology research has predominantly focused on individual factors that are unique to the individual concerned, such as personality and emotional reactions to music. However, cultural values in contrast can be shared with other people, and this makes them a particularly interesting aspect of music consumption given that digital streaming services also permit music listening to be shared both within and outside one's own country. We note specifically here that the cultural dimensions employed in the present research exist at the level of the individual and so can be shared easily with other people across national or regional boundaries. Another strength of the current study is that these same cultural values can also be measured meaningfully at the level of whole societies, providing interesting insight for music streaming services themselves but also musicians who aspire to popularity within a particular country or region.

4.8.1 Limitations

We also highlight some limitations of the current study. The measure of musical taste used verbal genre labels. Teo et al. (2008) have shown that individuals often differ in their interpretation of genres which may limit the generalisability of the results here, and any comparison with other countries should be cautious. Furthermore, we also highlight the rather small effect sizes found in the results here. Nonetheless, the present findings are nonetheless interesting since there is no a priori reason to assume that the cultural dimensions, genres, and uses of music studied here should explain a large portion of the variance in one another, and there is very little quantitative evidence concerning the relationship between culture and music consumption, particularly from Southeast Asia.

4.9 Conclusion

To conclude, the findings here inform new insights for the relationship between cultural factors to the musical taste and uses of music of individuals. This current study shows significant relationships that can be uncovered between culture and music consumption within university students from Malaysia. Future research should extend the current literature with broader cultural dimensions and broader styles of musical genres to allow a comprehensive understanding of culture's influence on music consumption.

CHAPTER 5: MUSIC CONSUMPTION AND USES IN AUSTRALIA

5.1 Preface

The current chapter builds on the findings of the previous three chapters. As the previous three chapters focused on prominent Asian countries due to the lack of research, the current chapter replicates the methodology but within a Western context, namely Australia.

5.2 Introduction

The cross-cultural psychology literature shows that there are various ways in which culture can impact and influence the behaviours and choices of individuals (Matsumoto & Yoo, 2006). Early conceptualisations of cultural dimensions by scholars such as Hofstede (2011), Triandis (1995), and Markus and Kitayama (1991) paved the way for many more models and theories. These studies highlight on a conceptual level how culture shapes the behaviour and perspectives of individuals. For example, individualistic cultures encourage greater emphasis on self and independence of self, whereas collectivistic cultures encourage an emphasis on interdependence in relation to the greater collective/group in society (Markus & Kitayama, 1991). These tendencies within culture itself eventually translate from a societal level to that of individual levels, which in turn influences behavioural tendencies (Matsumoto, 2007).

Research on music consumption in Western contexts has considered a wide range of factors such as personality, emotions, interpersonal relationships and group processes. For instance, Rentfrow and Gosling (2003) and Chamorro-Premuzic et al. (2010) have shown that the personality of individuals is related to musical taste so that, for instance, higher Openness to Experience scores correlate positively with liking for jazz and classical music. Juslin and Sloboda (2011) have explored the role of music in emotional regulation. Moreover, various studies (e.g., Lonsdale & North, 2011; Schäfer et al., 2013) have investigated the functions and goals of music use, showing that it serves various social psychological purposes such as

assisting the formation of interpersonal relationships. More simply, western research on musical taste implicates various individual differences and social psychological variables. Since music is often regarded as a byproduct of culture, the existing evidence on social psychological factors in musical behaviour means that it would be particularly unsurprising to find that cultural factors also played a role.

A small number of studies support this assertion. Bello and Garcia (2021) show that aggregated global music trends are increasingly more localised, reflecting a growing preference for homegrown music. Furthermore, Park et al. (2019) showed that there were differences between cultures in consumer preferences for the affective tone of music streamed via Spotify. Similarly, Park et al. (2017) found that different countries gave rise to different trending YouTube videos, again implying that cultural factors dictate the consumption of media.

In addition to these findings of differences between whole cultures in media preferences, there is also the potential for culture to influence music consumption at the level of specific individuals. For instance, Saarikallio et al. (2020) looked at of the relationship between the cultural dimension of individualism-collectivism and the use of music for emotional regulation among Indian and Finnish participants. Those who were more collectivistic (more common among Indian participants) were more likely to use music as a means of mood regulation to achieve positive and relaxed states: individualistic participants (who were more likely to be Finnish) were more inclined to use music for self-expression and reflection. Similarly, Rabinowitch (2023) looked at the cultural dimension of tightness-looseness in relation to the collaborative process in music making. They argue that tighter orientations, which reflect a belief that societal standards should be adhered to, may lead to more rigidity and precision in music: in contrast, looser orientations, which reflect a belief that societal standards do not have to be followed precisely at all times, may lead to more

flexibility and interpretability in the process of making music. As such, there is some indication that culture influences the musical behaviour of individuals.

The present research consequently investigates the relationship between culture and both music consumption and use among Australians. A lot of previous work on individual differences in music consumption has focussed on factors such as personality and emotions. What sets culture apart from individual differences is that it is often defined as a collection of values or beliefs shared by individuals within a society (Matsumoto, 1996), yet it also offers distinctive insights at the individual level. Culture shares similarities with traditionally studied factors like personality in that it varies uniquely between individuals. However, it differs from individual differences in that it can be shared and is frequently examined at a societal level. Studying culture in music psychology research offers the flexibility of considering either societal- or individual-level influences. Hence, the present research used cultural dimensions that can be measured at the level of individuals.

Within Australia, of the various music streaming services available, Spotify has received approximately 23 million downloads as of 2022, followed closely by YouTube Music (Statista, 2023). As of 2020, over 12.7 million Australians used music streaming services, equivalent to 60% of the total population (Roy Morgan, 2020). Of course, in addition to streaming many people also continue to utilise traditional means of music consumption such as radio.

5.3. Cultural Dimensions

Culture is defined as a set of values, believes, attitudes and behaviours that are shared by individuals within a social group, but which still differ from one person to another (Matsumoto, 1996). The influence that culture has on an individual's daily life would be expected to be significant, since from the definition alone, culture can shape every aspect of one's behaviour and choices. It is unsurprising therefore that several studies have related

cultural values to a variety of consumption preferences, which informed our hypotheses here. The current study utilises three cultural dimensions, namely tightness looseness, relational mobility and ideal affect, which were chosen based on existing research suggesting that each may relate to music consumption. Furthermore, the dimensions chosen are measurable at an individual level using well-established techniques which provides an opportunity to capture the cultural orientations of participants in a way that does not assume all people within a given society have similar values. Consequently, although the data collected is from an Australian sample, there is the potential to generalise the findings to an individual outside Australia with a similar profile of cultural values to a given participant in the present study.

Tightness-looseness. Tightness looseness is a relatively new cultural dimension which has not previously been considered within research on music psychology. It is defined as the extent to which a specific culture tolerates deviance from the social norm, and the probability that deviant behaviour will result in negative consequences for the actor (Gelfand et al., 2011). Tight cultures are less tolerant of deviance whereas loose cultures are more tolerant of deviance. This tolerance extends to the attitudes, behaviours, choices, and values of individuals living within each culture. Although the dimension is often operationalised on a broader level encompassing cultures and societies, it can also be captured at an individual level. For instance, Di Santo et al. (2021) showed that personal orientations within Italy concerning tightness looseness reflected differences within companies in individual job satisfaction, organizational deviance and commitment. Gelfand et al. (2006) also suggested that tightly oriented individuals often face greater psychological pressure as a consequence of the fear they experience of potential repercussions for violating norms. It follows that tighter cultural values may lead to more resistance to accepting a wide range of genres, new pieces of music, or new musical genres whereas looser cultural values may lead to greater acceptance of a breadth of genres and novel music. Furthermore, Liew et al. (2021) showed

that tighter societies are inclined towards consuming music that has lower affective arousal, since this can be a means of regulating the greater stress associated with social restrictions.

Relational Mobility. Relational mobility is a cultural dimension that refers to the extent to which an individual values their personal freedom in forming new interpersonal relationships (Thomson et al., 2018). People in cultures high on relational mobility have greater freedom in entering and forming new relationships at their own discretion, whereas people in cultures low on relational mobility are more likely to form new relationships based on their responsibilities, societal roles and occupations (Thomson et al., 2018). Note here that one of the conclusions of research on the social psychological functions of music is that this plays a role in fostering interpersonal relationships (e.g., Lonsdale & North, 2011; Schäfer et al., 2013). One possible implication of this is that individuals high on relational mobility are more likely to utilise music as a means of connecting and socializing, given that their interpersonal relationships are less prescribed. This can be done in various ways such as utilising personal musical taste as a means of establishing common ground with another individual, or utilising music to express one's personal identity in an attempt to facilitate formation of new relationships. Takemura (2014) also found that individuals that are high on relational mobility had a need to be more unique, as there is more social capital in standing out, and so relational mobility may also be associated with liking for niche, non-mainstream musical genres.

Ideal Affect. Multiple studies (e.g., Schäfer et al., 2013) have shown how individuals utilise music to achieve certain moods or regulate their emotions. Ideal affect refers to the extent to which an individual prefers and strives to attain a given emotion or mood (Tsai et al., 2006). Prior research into ideal affect and music has shown that Western societies are more inclined to prefer music that has high arousal positive (HAP) properties, whereas Eastern societies show greater preference for music with lower arousal positive (LAP) properties (Liew et al.,

2021). This raises the possibility that differences in ideal affect relate to individual's musical taste. Note also that several studies have shown that mood management is one of the more popular motivators of music consumption among most Western individuals (Lonsdale & North, 2011; Schäfer et al., 2013), which further suggests a role for ideal affect in musical taste. Moreover, North et al. (2017, 2019) showed that certain genres are more likely to express specific moods which may lead to consumers selecting specific genres that allow them to curate or attain those moods. For instance, genres like jazz and classical music were more likely to promote moods such as calm, tranquillity and peace whereas genres like pop were more likely to promote moods such as a sense of power and passion (North et al., 2017; 2019). Given this, ideal affect may relate to music genre preferences.

5.4 Socioeconomic Status

The present research also considers socioeconomic status (SES). Various dimensions in cross-cultural psychology contain elements of SES or at least relate to this indirectly. For example, two well-known cultural dimensions, power distance and social dominance orientation (Hofstede, 2011; Pratto et al., 2013), focus on social hierarchies and differences in status that different individuals have within a society. Previous research concerning SES and musical taste has shown that preference for highbrow art forms is predicted by higher SES. For instance, Liu et al. (2019), Mellander et al. (2018), and Meuleman (2021) have found that individuals from higher SES backgrounds often prefer different genres of music compared to those from lower SES backgrounds. North and Davidson (2013) provided direct evidence of a relationship between musical taste and social class among Australian participants. The current study seeks to replicate this and offer more specific insights concerning how SES relates to musical taste and uses of music.

5.5 Hypotheses of current study

The aim of the current study is to explore the relationship between cultural dimensions (i.e., tightness looseness, relational mobility, ideal affect), socioeconomic status, and musical taste and goals of consuming music in Australia. There are three main hypotheses, along with several subsidiary hypotheses concerning more specific relationships between particular variables.

The first hypothesis is that tightness looseness, relational mobility and ideal affect predict the musical taste of individuals in Australia. These cultural dimensions have not been explored before within the context of music psychology. Within this first main hypothesis we can also propose several more tentative subsidiary hypotheses concerning liking for specific musical genres. H1a is that individuals who are more tightly oriented might be less inclined to consume musical genres such as rock or metal that often contain anti-authoritarian elements within the songs (North et al., 2005), as these deviate from societal norms of acceptability. H1b is that individuals who are higher on relational mobility should prefer less popular or less frequently consumed genres of music, as Takemura (2014) suggested. The desire for uniqueness arising from higher relational mobility might lead to individuals consuming more niche musical genres. In stating this, according to Statista (2023) the least popular genres consumed in Australia as of March 2023 were religious, jazz and blues music so that liking for these may correlate with relational mobility. Furthermore, ideal affect might correlate with liking for specific genres of music. H1c is that individuals who prefer higher arousal states should prefer pop and H1d is that individuals who prefer lower arousal states should prefer jazz. For example, North et al. (2021) have shown that music genres such as pop are related to higher affective arousal and therefore it can be deduced that individuals who would ideally like to experience higher affective arousal might consume music genres like pop to attain that. In contrast, North et al. (2019) showed that music genres like jazz are

more likely to be linked with lower states of affective arousal and hence individuals wishing to attain low arousals of affect might be more inclined to prefer these genres.

The second main hypothesis proposes that tightness looseness, relational mobility, and ideal affect are related to individuals' goals for consuming music. Within this second main hypothesis we can also propose several more tentative hypotheses concerning specific uses of music based on the existing literature. H2a is that individuals who are more tightly oriented should be more likely to use music as a means of coping with stressors in daily life. Furthermore, societies with higher relational mobility enjoy greater freedom and flexibility in forming interpersonal relationships which might also translate to goals of consuming music. Consequently, we propose (H2b) that individuals who have higher relational mobility might be more likely to use music as a means of sharing their identity in order to form new interpersonal relationships.

The third hypothesis predicts that the subjective socioeconomic status of individuals is related to their musical taste and goals of consuming music. Previous findings suggest that individuals with higher socioeconomic status are more likely to appreciate 'highbrow' artistic genres.

In summary, the hypotheses are:

1) Is musical taste related to cultural orientations on tightness looseness, relational mobility and ideal affect?
   a. Tightly oriented individuals are less inclined to enjoy rock and metal.
   b. Individuals with higher relational mobility are likely to enjoy jazz, blues and religious music.
   c. Individuals who would ideally like to achieve a higher arousal positive affect are likely to enjoy pop.

> d. Individuals who would ideally like to achieve a lower arousal positive affect are likely to enjoy jazz.

2) Are goals of music consumption related to tightness looseness, relational mobility and ideal affect?

> a. Individuals who are more tightly oriented are likely to consume music to cope with everyday stressors.

> b. Individuals who have higher relational mobility are more likely to consume music as means of expressing their identity.

3) Is subjective socioeconomic status related to musical taste and goals for consuming music?

5.6 Method

5.6.1 Participants

The study received ethics approval from the lead author's university ethics committee. There was a total of 244 student participants who identified as Australians and were between the ages of 18-30 years. Convenience sampling was utilised. The questionnaire was uploaded to an online portal where undergraduate students were able to select from different studies in which to participate as part of their course requirements.

5.6.2 Measures

The questionnaire contained several scales as follows;

Tightness-Looseness. The scale has six items where participants respond on a six-point Likert scale (1 = 'strongly disagree' and 6 = 'strongly agree'). Example items are 'There are many social norms that people are supposed to abide by in this country' and 'People in this country almost always comply with social norms'. Gelfand et al. (2011) established measurement equivalence in Australia. Higher scores on this dimension indicate tighter orientation.

Relational Mobility. The scale has 12 items where participants respond on a six-point Likert scale (1 = 'strongly disagree' and 6 = 'strongly agree') which asks statements on how accurately it describes people within their society. Example items are 'There are few opportunities for these people to form new friendships' and 'It is easy for them to meet new people'. Thomson et al. (2018) have established measurement equivalence in Australia.

Ideal Affect. Ideal affect is measured using the Affect Valuation Index by Tsai et al. (2006). It consists of 30 items where participants rate the extent to which they ideally would like to experience a specific emotion using a five-point Likert scale. Example items are 'elation' and 'serenity'. Measurement equivalence in Australia was established by Tsai et al. (2007). Only high arousal positive (HAP) affective states and low arousal positive (LAP) affective states were included in the present research on the presumption that no one ideally wants to experience negative affect. HAP and LAP are formed by three items each from the 30-item index. HAP is measured through excitement, enthusiasm, elation; and LAP is measured through calm, peacefulness, serenity. The respective means of each of the three items are calculated to produce a score for each of HAP and LAP.

Subjective Socioeconomic Status. MacArthur's Scale of Subjective Social Status (Adler et al., 2000) was used to measure subjective socioeconomic status (SSS). The measure uses an illustration of a ladder and asks respondents to rank their perceived socioeconomic status on the 10 rungs of the ladder, ranging from low to high, where the bottom rung is considered low and the top rung is considered high. Sanders et al. (2006) have shown that the measure is sound to be used within an Australian context.

Musical Taste. Musical taste data was obtained using a self-developed measure. There are no existing measures that produce consistent reliability scores and factor structures across multiple cultures (see e.g., Devenport & North, 2019; Rentfrow & Gosling, 2003). The

current findings are part of a larger study that will eventually compare multiple countries'
musical taste. Hence, a 13-item measure was developed using top genres from the Billboard
Global charts that were representative of popular genres consumed across the world. A full
list is presented in Table 2. Participants were asked to state how much they liked each genre
on a seven-point Likert scale (1= 'not at all' and 7 'strongly'). A reliability analysis showed
that the Cronbach's α for all items of the measure was .69, while an average of the alphas for
each factor resulted in .72. An exploratory factor analysis with varimax rotation was
conducted to identify the underlying factor structure of the measure. The factor analysis
resulted in four factors which had eigenvalues greater than 1 and which explained 57.55% of
the variance. Loadings are shown in Table 1, and the factors were labelled as 'Western',
'Rock', 'R&B', and 'Pop' respectively with a scree plot in Figure 1. Scores were produced
for each factor and these were used in analysis concerning the main hypotheses.

Table 5.1

Factor loadings of musical taste measure

	Rotated Factor Matrix[a]			
	Factor			
	Western	*Rock*	*R&B*	*Pop*
1. Jazz	.675			
2. Blues	.627			
3. Reggae	.604			
4. Latin	.533			
5. Christian/Gospel	.503			
6. Western Classical	.460			
7. Rock		.878		
8. Metal		.655		

9. Alternative		.471		
10. Dance/Electronic				
11. R&B/Hip-Hop			.559	
12. Country				
13. Pop				.719
Cumulative Variance	23.73	38.82	48.78	57.55

Extraction Method: Principal Axis Factoring.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

*Dance/Electronic and Country as genres did not load onto any factor from the analysis due to suppression of small coefficients below .40.

Figure 5.1

Scree plot of Factor Analysis for Musical Taste
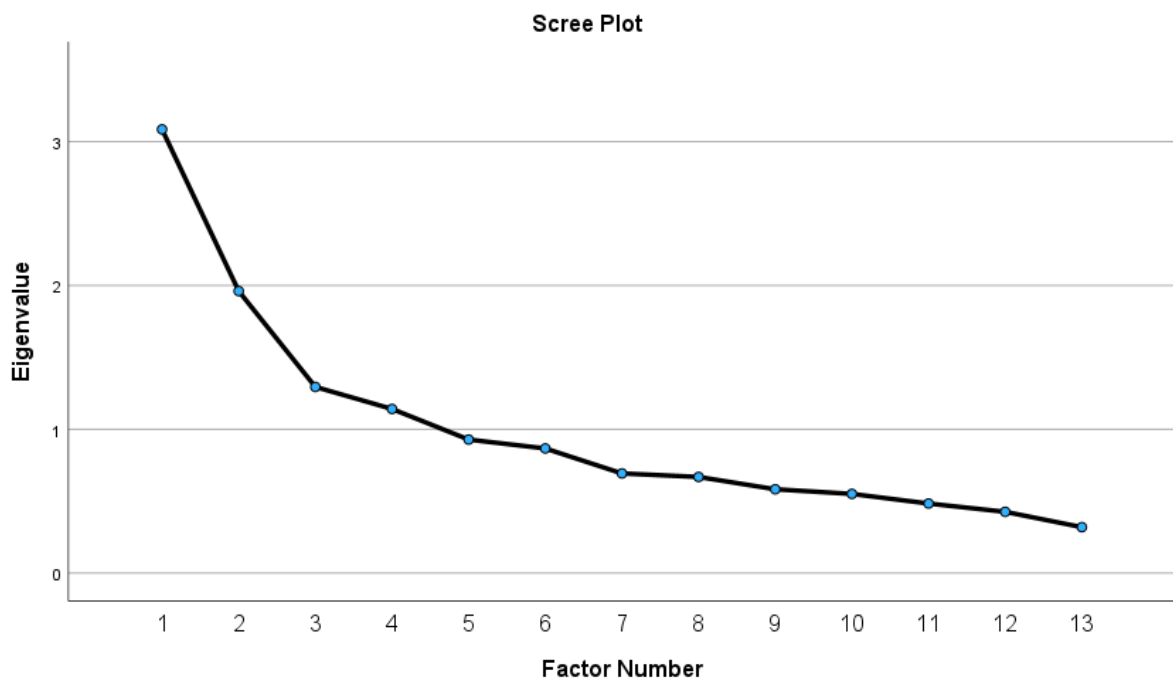
Goals of Music Consumption. This measure was adapted from Lonsdale and North's (2011), which itself was based on McQuail et al.'s (1972) media gratification model which considers the reasons why individuals use media. There are 30 items which are assessed on a seven-point Likert scale (1 = 'not at all', 7 = 'completely') each of which assesses the extent to which an individual is likely to use music for a specific goal. Table 3 summarises the items. Since the measure has not been tested across different cultures, an exploratory factor analysis was conducted to determine the underlying factor structure. The factor analysis showed that there were six factors with eigenvalues greater than 1, which accounted for 66.32% of the variance. The factors were labelled 'Coping', 'Identity', 'Learning', 'Relationship', 'Boredom', and 'Entertainment' and loadings are presented in Table 2 with a scree plot in Figure 2. Factor scores were calculated for use in the analysis of the main hypotheses. Reliability analysis showed Cronbach's α = .91.

Table 5.2

Factor loadings of goals of music consumption measure

	Rotated Factor Matrix[a]					
	Factor					
	Identity	*Coping*	*Learning*	*Relationships*	*Boredom*	*Entertainment*
1.To create an image for myself	.898					
2. To express my identity	.810					
3. To construct a sense of identity of myself	.761					
4. To explore possible identities	.753					
5. To discover who I really am	.713					
6. To portray a particular image to others	.711					
7. To display my membership of social groups/subcultures	.632					
8. To 'fill' uncomfortable silence						

9. To relieve stress/anxiety	.913		
10. To relieve anxiety	.897		
11. To help get through difficult times	.697		
12. To make me feel better	.689		
13. To alleviate feelings of loneliness	.536		
14. To take my mind off things	.536		.433
15. To escape the reality of everyday life	.525		
16. To express my feelings and emotions	.448		
17. To set the 'right' mood	.413		
18. To obtain useful information for daily life		.872	
19. To learn how to do things		.750	
20. To learn how to behave in the future		.585	
21. To learn how other people think	.439	.463	

22. To stay in touch with current fashions and trends						
23. To spend time with family				.737		
24. To spend time with friends				.659		
25. To have something to talk about with others				.615		
26. To keep up with current events			.436	.456		
27. To pass the time					.835	
28. To relieve boredom					.747	
29. To relax		.425				.717
30. To be entertained						.671
Cumulative Variance	29.28	42.27	50.98	57.34	62.38	66.32

Extraction Method: Principal Axis Factoring.
 Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 7 iterations.

Figure 5.2

Scree plot of Factor Analysis for Goals of Music Consumption
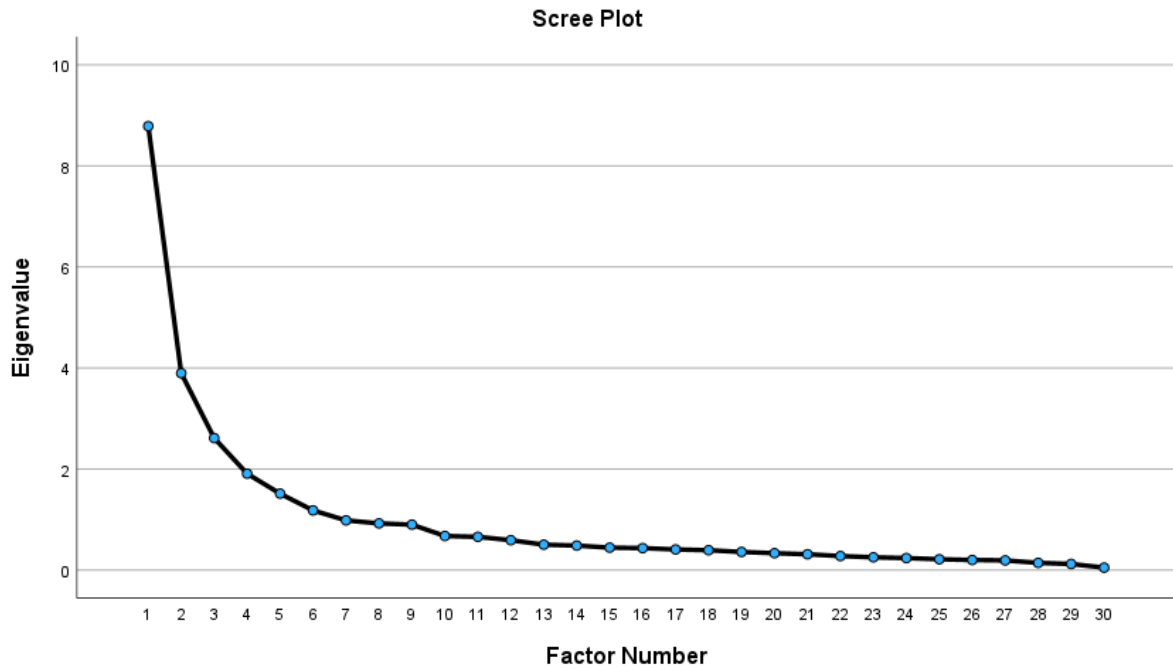
5.7 Results

Table 3 shows the descriptive statistics for the variables.

Table 5.3

Descriptives

Pearson's R	TL	RM	HAP	LAP	SSS	Mean (SD)	Cronbach's α
TL	-					4.18 (0.64)	.693
RM	0.207*	-				4.09 (0.60)	.825
HAP	0.161*	-0.107*	-			3.42 (0.82)	.768
LAP	0.097	0.152*	0.133*	-		3.73 (0.95)	.875
SSS	-0.061	-0.033	-0.224*	-0.066	-	5.00 (1.48)	-

Note: *p < .05. As SSS is a single item measure no Cronbach's α was computable.

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TL = Tightness looseness, RM = Relational Mobility, HAP = High Arousal Positive, LAP = Low Arousal Positive, SSS = Subjective Socioeconomic Status

5.7.1 Liking for music

H1 proposes a relationship between musical taste and cultural dimensions. Four separate regression analyses were conducted (see Table 4). Tightness looseness, relational mobility, and ideal affect (HAP and LAP) were the predictor variables in each analysis, and the musical taste factor scores were the outcome variable in each of the respective analyses. None of the analyses produced significant results, Western (R^2 = .017, p = .38), Rock (R^2 = .006, p = .85), R&B (R^2 = .016, p = .41), and Pop (R^2 = .035, p = .07).

Table 5.4

Results for Hypothesis 1 (Cultural dimensions and musical taste)

	Western		Rock		R&B		Pop	
	Coefficient (SE)	95% CI	Coefficient (SE)	95%CI	Coefficient (SE)	95%CI	Coefficient (SE)	95% CI
Intercept [a]	0.295 (.61)	[-.90, .1.50]	0.50 (.64)	[-.76, 1.76]	-0.91 (.49)	[-1.88, .07]	-0.83 (.53)	[-1.87, .21]
RM	0.110 (.09)	[-.08, .30]	-0.06 (.10)	[-.26, .13]	0.09 (.08)	[-.06, .24]	0.07 (.08)	[-.09, .24]
TL	-0.13 (.09)	[-.13, .09]	-0.00 (.09)	[-.19, .18]	0.06 (.07)	[-.08, .21]	-0.01 (.08)	[-.16, .15]
HAP	-0.03 (.09)	[-.03, .09]	-0.05 (.08)	[-.23, .13]	0.05 (.07)	[-.08, .19]	0.15* (.07)	[-.00, .29]
LAP	-0.02	[-.02, .07]	-0.02	[-.17, .14]	0.02	[-.10, .14]	0.02	[-.11, .14]

	(.07)	(.08)	(.06)	(.06)
Mode Fit Measures	$R^2 = .0173$ $F(4, 241) = 1.06$	$R^2 = .0057$ $F(4, 241) = 0.347$	$R^2 = .0164$ $F(4, 241) = 1.00$	$R^2 = .035$ $F(4, 241) = 2.19$

To address each of the specific hypotheses (H1a-d), separate regressions were conducted using the same predictor variables but with specific genres as outcome variables in each test to reflect the specific hypothesis in question. Bonferroni correction was applied to each of the tests (alpha of $p = .0125$). Hypothesis 1a suggested that there would be a negative correlation between tightness and liking for rock and metal. Results showed that there were no significant relationships, rock ($b = -.013$, $p = .926$) and metal ($b = .023$, $p = .863$). Hypothesis 1b predicted a positive relationship between relational mobility and liking for jazz, blues and religious music. Results showed that there were no significant relationships, jazz ($b = .077$, $p = .579$), blues ($b = .109$, $p = .409$) and religious music ($b = .055$, $p = .636$). Hypothesis 1c predicted a positive relationship between HAP and liking for pop, which was not significant ($b = .219$, $p = .017$). Hypothesis 1d predicted a positive relationship between LAP and liking for jazz, which was not significant ($b = .057$, $p = .601$).

5.7.2 Goals of music consumption

Six multiple regressions were conducted to test the second main hypothesis. Tightness looseness, relational mobility, and ideal affect (HAP and LAP) were the predictor variables in each analysis, and the six goals of music consumption factor scores were the outcome variable in each of the respective analyses. Results are shown in Table 5. Three significant regressions were found concerning the factors of Coping ($R^2 = .040$, $p = .042$), Relationships ($R^2 = .061$, $p = .004$), and Entertainment ($R^2 = .057$, $p = .007$), while the other factors did not produce any significant relationships with the cultural dimensions, Identity ($R^2 = .029$, $p = .128$), Learning ($R^2 = .029$, $p = .123$), and Boredom ($R^2 = .004$, $p = .021$).

Table 5.5

Results for Hypothesis 2 (Cultural dimensions and goals of music consumption)

	Coping		Identity		Learning		Relationships		Boredom		Entertainment	
	Coefficient (SE)	95% CI	Coefficient (SE)	95%CI	Coefficient (SE)	95% CI	Coefficient (SE)	95% CI	Coefficient (SE)	95% CI	Coefficient (SE)	95%CI
Intercept [a]	-0.22 (.67)	[-1.53, -1.10]	-1.42* (.67)	[-2.73, -.11]	-0.94 (.64)	[-2.21, .33]	-0.73 (.60)	[-1.90, .45]	0.41 (.64)	[-.85, 1.67]	-0.90 (.60)	[-2.08, .28]
RM	-0.20 (.10)	[-.40, .00]	0.06 (.10)	[-.14, .26]	0.11 (.10)	[-.09, .31]	-0.00 (.09)	[-.19, .18]	-0.08 (.10)	[-.27, .12]	0.15 (.09)	[-.03, .33]
TL	0.19* (.09)	[.00, .39]	0.26* (.10)	[.07, .05]	0.01 (.09)	[-.18, .19]	-0.01 (.09)	[-.18, .16]	-0.04 (.09)	[-.22, .15]	-0.08 (.09)	[-.26, .09]
HAP	0.15 (.09)	[-.04, .33]	0.05 (.09)	[-.14, .23]	-0.04 (.09)	[-.22, .14]	0.30* (.08)	[.13, .46]	-0.02 (.09)	[-.20, .15]	0.21* (.08)	[.04, .37]
LAP	-0.08 (.08)	[-.02, .08]	-0.02 (.08)	[-.18, .14]	0.16* (.08)	[.10, .32]	-0.06 (.07)	[-.21, .08]	0.04 (.08)	[-.11, .20]	-0.02 (.07)	[-.16, .13]

Model Fit Measures					
$R^2 = .040$	$R^2 = .029$	$R^2 = .029$	$R^2 = .061$	$R^2 = .004$	$R^2 = .057$
$F(4, 241) = 2.52$	$F(4, 241) = 1.81$	$F(4, 241) = 1.83$	$F(4, 241) = 3.92*$	$F(4, 241) = 0.23$	$F(4, 241) = 3.64*$

To address Hypotheses 2a and 2b, the specific relationships between each of the variables concerned were identified in the analyses conducted for the main analyses. Bonferroni's correction was applied with alpha of p = .0125. Hypothesis 2a proposes a positive relationship between tightness and using music to cope with stress, but the relationship between tightness and scores on the Coping factor was not significant (b = .19, p = .048). Hypothesis 2b predicted a positive relationship between relational mobility and utilising music as a means of identity expression to appear unique, which was not supported (b = .06, p = .561). There were two other significant relationships between the variables that were not expected, namely between tightness and Identity (b = .26, p = .008), and between HAP and Relationship (b = .29, p < .001). These are considered further in the Discussion section.

5.7.3 Subjective Socioeconomic Status

To address H3, two multiple regressions were conducted to examine the relationship between SSS, musical taste and goals of music consumption. The results of these are shown in Tables 6 and 7. The regression model shows a significant relationship between scores on the Pop factor and SSS (R^2 = .024, p = .014), while the goals of consumption were not related to SSS.

Table 5.6

Results for Hypothesis 3 (SSS and Musical Taste)

	Western		Rock		R&B		Pop	
	Coefficient (SE)	**95% CI**	**Coefficient (SE)**	**95%CI**	**Coefficient (SE)**	**95%CI**	**Coefficient (SE)**	**95%CI**
Intercept [a]	0.20 (.20)	[-.19, .59]	-0.22 (.20)	[-.06, .18]	-0.16 (.16)	[-.47, .16]	0.40* (.17)	[.07, .74]
SSS	-0.04 (.04)	[-.11, .03]	0.04 (.04)	[-.03, .12]	0.03 (.03)	[-.03, .09]	-0.08* (.03)	[-.15, -.02]
Mode Fit Measures	$R^2 = .005$ $F(1, 244) = 1.12$		$R^2 = .005$ $F(1, 244) = 1.29$		$R^2 = .004$ $F(1, 244) = 1.04$		$R^2 = .024$ $F(1, 244) = 6.11*$	

Table 5.7

Results for Hypothesis 3 (SSS and Goals of music consumption)

	Coping		Identity		Learning		Relationships		Boredom		Entertainment	
	Coefficient (SE)	95% CI	Coefficient (SE)	95%CI	Coefficient (SE)	95% CI	Coefficient (SE)	95% CI	Coefficient (SE)	95% CI	Coefficient (SE)	95% CI
Intercept [a]	-0.01 (.22)	[-.44, .42]	-0.06 (.22)	[-.49, .36]	0.29 (.21)	[-.12, .70]	-0.15 (.20)	[-.53, .24]	-0.33 (.20)	[-.73, .07]	0.22 (.20)	[-.17, .60]
SSS	0.00 (.04)	[-.08, .08]	0.01 (.04)	[-.07, .09]	-0.06 (.04)	[-.14, .02]	0.03 (.04)	[-.05, .10]	0.07 (.04)	[-.01, .14]	-0.04 (.04)	[-.12, .03]
Model Fit Measures	$R^2 = .000$ $F(1, 244) = 0.00*$		$R^2 = .000$ $F(1, 244) = 0.10$		$R^2 = .009$ $F(1, 244) = 2.10$		$R^2 = .002$ $F(1, 244) = 0.59$		$R^2 = .011$ $F(1, 244) = 2.90$		$R^2 = .005$ $F(1, 244) = 1.33$	

5.8 Discussion

The current study addresses the relationship between cultural dimensions, musical taste and goals of music consumption within an Australian population. The first hypothesis concerns the relationship between cultural dimensions (namely tightness looseness, relational mobility, ideal affect) and musical taste. The results showed no such associations, however. Neither were Hypotheses 1a-d supported.

Hypothesis 2 concerned the relationship between cultural dimensions and the goals of music consumption. Three out of the six factors that were extracted from the measure of uses of music were significantly related to the cultural dimensions, specifically music as a means of coping, forming relationships and entertainment. These significant relationships specify the potential influence that culture has on motivations for consuming music. There was no support for the more specific hypotheses proposed concerning particular uses of music and specific cultural dimensions.

The research did, however, identify several other meaningful relationships concerning culture and uses of music that were not subject to formal hypotheses but which in hindsight seem intuitive. The positive correlation between tightness and using music for identity expression is interesting, as it is the first time such a relationship has been identified. One plausible explanation of the relationship could be that the strict norms and rules that individuals who are tightly oriented are required to follow may result in using music as an outlet to freely express their 'true self'. Similarly, the positive relationship between using music to establish relationships and HAP was unexpected but can again be explained speculatively. Kuppens (2008) suggests that positive high arousal affective states are often related to positive interpersonal relationships, so that striving for high arousal affective states might predispose the listener to use music to help establish and maintain these relationships.

Both of these unexpected relationships are clear candidates for further research that attempts to replicate and explain.

Hypothesis 3 concerned the relationship between the socioeconomic status of individuals and both musical taste and goals of music consumption. The only significant result concerned liking for Pop. Although socioeconomic status was clearly not a powerful predictor of musical taste, it does relate to liking for genres that fall under the umbrella of the Pop factor.

Overall, the study here suggests that cultural variables cannot explain musical taste among Australians, but can predict the goals of their music consumption. This extends current understanding of music psychology from a cross-cultural perspective. In contrast to a good deal of cross-cultural research, the current study collected data on cultural values at the level of the individual rather than the level of society or nation state. There are notable benefits of investigating culture at the level of the individual participant since it does not assume that all people within a given culture share identical values. For example, compared to other countries, Australia has a relatively high level of looseness (Gelfand et al., 2011) but neither can one infer from this that all Australians have loose cultural orientations. The current findings are also not limited to Australian individuals only, and instead any two individuals who share cultural orientations should also share a predilection for using music in a particular way to assist with coping, forming relationships, and entertainment. Moreover, the findings here increase understanding of music psychology where much of the focus has been on more micro-level individual difference factors such as personality, with relatively little attention paid to broader-ranging influences.

5.8.1 Future Research and Limitations

The findings of the current study should be explored further in future research as this will help validate the current findings. For instance, the unexpected findings seen in the

analyses could be replicated in future research to validate them. Moreover, Australia is a multicultural country, where according to the Australian Bureau of Statistics (2022) over one in four residents are born overseas so that a high percentage of individuals have different cultural heritage. The diversity that manifests from the multiculturalism here can lead to unique behaviours related to music consumption that may not be found in other cultures or countries. There can be further consideration of other interpretations of music genres and uses of music to replicate the current study in the future. There can also be exploration of other cultural models and dimensions to be employed.

One notable limitation of the present study is the self-developed measure of musical taste. Items from the measure were adapted from the Billboard top global charts to allow development of a measure that was applicable to multiple countries and cultures so that these could be compared. However, this approach also excludes specific genres that might be considerably more popular specifically within Australia. Similarly, there is no guarantee that the cultural dimensions included in the study are those that best capture the relationship between culture and music. Tightness, relational mobility, and ideal affect may not be the aspects of culture that best relate to musical taste and uses of music, and were employed because they are relatively well-validated dimensions.

5.9 Conclusion

To conclude, the accessibility of music in the current day means that there is a greater need to understand how individuals with differing cultural values select music and put it to use in the stream of their daily life. The current study shows how cultural dimensions relate to music consumption among university students within Western Australia. We look forward to research employing a broader range of musical genres, and a broader range of cultural dimensions, which will further explain how individuals make use of the choice and accessibility of music that they now enjoy.

CHAPTER 6: PAPER 5 – A CROSS-CULTURAL COMPARISON OF GOALS OF MUSIC CONSUMPTION ACROSS FOUR COUNTRIES.

6.1 Preface

The current chapter builds on the works of the previous four chapters (Chapter 2-5). While the previous chapters focused on individual countries, the current chapter combines all four countries together in a cross-national comparison that considers how relationships between culture and musical behaviour are moderated by country. In effect, this Chapter investigates whether country differences lead to different relationships between cultural dimensions and goals of consuming music.

6.2 Introduction

Music psychology research has predominantly focused on Western populations, and on variables that operate at the level of the individual, such as personality, emotional responses, or a variety of cognitive processes (e.g., Rentfrow & Gosling, 2003; Juslin & Sloboda, 2011). These studies have detailed how numerous variables influence musical taste and motivations for consuming music. For instance, Schafer et al. (2013) in their meta-analysis concluded that individuals mainly use music as means of socialisation and identity expression. Much more recently there has, however, been a growing body of literature that looks at the influence of culture on music consumption (see Bello & Garcia, 2021; Park et al., 2019; Rabinowitch, 2023). For example, Saarikallio et al. (2021) compared Finnish and Indian participants on individualism-collectivism and found that more collectivistic participants were more inclined to use music as means of emotional regulation to achieve positive mood and ensuring group cohesion where this desire aligns with collectivistic tendencies. Music here is used as a tool do induce specific moods reflecting goal-oriented consumption. In contrast, individualistic participants were more inclined to use music for self-reflection and expression purposes. Moreover, Bello and Garcia (2021) looked at musical trends across 39 countries and found

there to be a cultural divergence on popular music whereby music is becoming increasingly

localised and more diverse. Findings such as these are provocative because they specify how

cultural values relate to musical behaviour, and provide readily interpretable findings that

draw upon dimensions that are well-established within research on cross-cultural psychology.

Nonetheless, aside from a smaller body of research, there is not a lot of cross-cultural

comparisons that have been conducted. This current study attempts to do so with by

exploring the cross-cultural differences across four countries.

Hence, the current study compares four countries (three Eastern, one Western) in

terms of the relationship between cultural factors and individuals' motivations for consuming

music. Specifically, the research focuses on Australia, China, Japan, and Malaysia, which

represent one major Western economy and three major Eastern economies, and three well-

established cultural dimensions, namely tightness-looseness, relational mobility and ideal

affect, all of which intuitively should relate to music consumption. Matsumoto (1996) among

others defines culture as a set of values, beliefs and attitudes that are shared collectively by

individuals within a societal or group setting, but which at the same time offer unique insights

from an individual's standpoint. Accordingly, the present study measures the cultural

dimensions at the level of individual participants, as this allows a more detailed capture of the

sample's cultural orientations in comparison to using country-level averages (e.g., using

Hofstede's scores to operationalise cultural characteristic of particular cultures). The four

countries also, at national level, reflect a range of scores on the three cultural dimensions

employed here, and of course provide the opportunity to explore musical behaviour within

the context of Asian cultures. More detailed within-country reports of the data and

conclusions from these four nations are currently at various stages of the publication process,

and the present manuscript focusses explicitly on a between-country comparison of the data

from Australia, China, Japan, and Malaysia (see previous chapters).

6.3 Culture

Since culture is a set of shared values, beliefs and attitudes it has the potential to influence many different aspects of social behaviour and daily life. As such, researchers interested in cross-cultural psychology have developed various dimensions to capture specific aspects of culture that relate to specific behaviours of interests. Although numerous such dimensions exist in the literature, three in particular have clear potential relevance to uses of music. These are tightness-looseness, relational mobility, and ideal affect. These dimensions are usually assessed at individual-level, and their effects in shaping individuals' motivation were examined in the previous chapters. The focus of this chapter is to examine their effects at a cross-cultural level. Although we are aware that culture and country are differing constructs, but in this study, we account for cultural differences using country as a moderator to capture the differences between cultural dimensions of these country to represent cultural differences.

Tightness-Looseness. Tightness-looseness measures the extent to which a culture is tolerant of deviance from accepted norms and standards of behaviour (Gelfand et al., 2012). Tighter cultures often have stricter social norms to which individuals are expected to adhere, and non-compliance with these norms results in stronger negative consequences for the individual concerned. In contrast, looser cultures have much less strict expectations concerning adherence to social norms, and less onerous consequences for individuals who transgress these norms. This is particularly interesting in the context of music. As North and Hargreaves (2008) summarise in detail, from its inception pop music has been associated with anti-authoritarianism. This questioning of established norms and standards has continued to be associated with various genres of pop music from the 1950s onwards, and has attracted attempts at censure from politicians, lobbyists, and various other stakeholders in the status

quo. There are also numerous more specific instances within classical music and jazz of specific composers and performers who have strongly criticised social norms and standards.

The previous chapters examined the effects of tightness-looseness on music taste and goal at individual-level within single societies. The dimension has shown an influence at the culture level across different cultures (see Aktas et al., 2016; Gelfand et al., 2006) however, it is unknown how tightness or looseness exerts its effect at the culture-level specifically concerning music behaviour. One possibility is that people's experience of being tight is qualitatively different in tight versus loose countries. Another possibility is that tightness-looseness exerts its effect on music primarily at the individual-level, resulting in insignificant effect at the cross-cultural-level. The current study explored these possibilities.

Relational Mobility. Relational mobility refers to the extent to which an individual perceives they are free to enter new relationships as they choose (Thomson et al., 2018). Low relational mobility means that the individual is expected to form relationships on the basis of roles, duties, and responsibilities (e.g., 'boss' or 'uncle') whereas high relational mobility means that the individual feels free to form relationships with others on the basis of personal preference (e.g., shared interests, physical proximity).

Previous research on music psychology (e.g., Lonsdale & North, 2011; Schäfer et al., 2013) shows that music is often used as a way of forming interpersonal relationships. As such, relational mobility may be implicated in the role of music in forming relationships, for example by influencing the extent to which individuals use music to express their identity: where relational mobility is high individuals have the freedom to form relationships at will and so would be more inclined to use music to express their identity: much less motivation exists in cases of low relational mobility, since relationships are more pre-determined by the individual's existing social roles. Prior chapters have shown at the level of single societies

and countries that relational mobility is related to individuals' musical taste and goals of music consumption. Similarly to tightness-looseness there has been widely conducted research on how relational mobility can influence behaviour at the cultural level (see Kito et al., 2017; Milfront et al., 2020; Schug et al., 2010), however, there is no evidence of cross-cultural effects of relational mobility on music consumption, which this current study attempts to explore.

Ideal Affect. Ideal affect refers to the extent to which an individual would like to experience certain specific moods/emotions (Tsai et al., 2006). Prior studies show that people in Western cultures are more inclined to prefer higher arousal positive moods (HAP) such as excitement, whereas people in Eastern cultures are more inclined to prefer lower arousal positive moods (LAP) such as calm (Tsai et al., 2007). Within the context of music psychology, this finding holds with recent studies by Liew et al. (2021) reaching the same conclusion concerning music consumption. Similarly, multiple studies have shown that individuals often utilise music as means of emotional regulation (e.g., Schäfer et al., 2013). Furthermore, studies by North et al. (2017; 2019) highlight how different genres of music often reflect or generate different specific moods. For instance, jazz was more likely to elicit moods such as calm, tranquillity, and peace which aligns with LAP while pop was more likely to elicit moods such as power and passion which aligns with HAP. In the light of this we might expect people to be able to use music to achieve specific ideal emotions/moods. For instance, individuals with LAP ideal affect may likely use music to relax whereas individuals with HAP ideal affect would be more likely to use music to gain excitement and energy. Despite these findings on the individual level, there has not been specific findings that allow predictions to be made at a cross-cultural level. Therefore, the current study explores the possibility that there are cross-cultural differences on the ideal affect of individuals on their uses of music.

In summary, the existing evidence suggests a relationship between cultural dimensions and music consumption at individual-level. However, this existing research focuses on specific countries or comparison between two different countries. In contrast the present research looks across multiple countries and considers the ends to which people use music. Hence, the main aim of the current study is to determine if there are relationships between cultural dimensions and uses of music that are common across cultures.

6.4 Current Study and Hypothesis

The current paper compares data from Australia, China, Japan, and Malaysia to investigate how people's motives for using music were related to their tightness-looseness, relational mobility and ideal affect. Previous chapters all showed that music consumption is indeed related to tightness, relational mobility, and ideal affect. These studies into the individual countries alongside with a smaller body of literature (e.g., Kok et al., 2024; Rabinowitch et al., 2023; Saarikallio, 2020) have identified differences between countries in tightness, relational mobility, and ideal affect such that there is reason to presume that there would be cross-cultural differences that influence the individual-level relationships between these dimensions and using music. As such, the present manuscript attempts to understand the relationship between cultural dimensions and goals of music consumption cross-culturally. To achieve this, cultural differences here are hypothesised to be a moderating factor between cultural dimensions and goals of music consumption where the relationship between said dimension and specific goals differ between each culture.

6.5 Methods

6.5.1 Participants

Ethics approval was obtained from the human research ethics committee at the lead author's university. A total of 1052 participants were sampled from across Australia, Malaysia, China, and Japan who each identified as nationals of the country in question, were

aged between 18-30 years, and were university students. These inclusion criteria were included to ensure a degree of homogeneity in the sample from each country. An online questionnaire was utilised to collect information and data from participants. The sample size was determined based on the recommendation of Wolf et al. (2013) which suggests 200 participants per group for confirmatory factor analyses based on their findings whereby sample size requirements remained relatively unchanged for CFAs when there are more than two factors at loadings of 0.65 while in some cases the sample size requirement reduced with the increase of number of factors. The number of indicators also influenced the sample size, where the lower the number of indicators for each factor, the larger the sample size.

6.5.2 Measures

Data collection used a questionnaire concerning goals of music consumption, and the cultural dimensions of tightness-looseness, relational mobility, and ideal affect. Measures were originally prepared in English and translation services were engaged for translation into Chinese and Japanese, and the translations were checked by native speakers who were part of the research team. Malay translations were not required as Malaysian university students all have good English comprehension due to the country's university entry requirements. Previous chapters included a measure of musical taste which was not used in this chapter as the musical taste measure could not achieve measurement equivalence across all four countries that were sampled from. A possible explanation for this would be the subjectivity of music genres and how they are interpreted or appreciated by individuals and societies.

Tightness-looseness. The measure consists of six items on a six-point Likert scale where 1 = 'strongly disagree' and 6 = 'strongly agree'. Measurement equivalence has been achieved by Gelfand et al. (2011) across all four countries in the currently sampled. Example items are 'In this country, there are very clear expectations for how people should act in most situations' and 'People in this country almost always comply with social norms'.

Relational Mobility. The measure consists of 12 items on a six-point Likert scale where 1 = 'strongly disagree' and 6 = 'strongly agree'. Measurement equivalence has been achieved by Thomson et al. (2018) across all countries in the current study. Example items are 'There are few opportunities for these people to form new friendships' and 'They are able to choose the groups and organizations they belong to'.

Ideal Affect. This measure lists 30 different adjectives that describes emotions and moods, and asks participants to rate the extent to which each is desirable on a scale from 1 = 'never' and 5 = 'all the time'. Example items are 'serenity' and 'elation'. Prior equivalence has not been established in Malaysia whereas the measure had been proven to have equivalence in Australia, Japan and China (Tsai et al. 2007). Prior analysis of ideal affect in Malaysia from previous chapters have shown that it is reliable to use within the country's sample. The focus of the present study was on HAP and LAP which are captured by three items each. HAP items are 'excitement', 'enthusiasm', and 'elation' while LAP items are 'calm', 'peacefulness', and 'serenity'. The means of the three items were calculated to produce a score for both HAP and LAP.

Goals of Music Consumption. This measure consists of 30 items assessed on a seven-point Likert scale where 1 = 'not at all' and 7 = 'completely'. Participants are asked how accurate each statement is in relation to the way they consume music. The measure is adapted from Lonsdale and North's (2011) study which in turn was based on McQuail et al.'s (1972) model of general media gratifications. Example items are 'To relax' and 'To pass the time'. As the measure is newly adapted from a prior study, there has been no research to establish measurement invariance across different cultures. As such, an multigroup confirmatory factor analysis (MGCFA) was conducted and reported below.

6.6 Results

Descriptive statistics broken down by country are reported in Table 1.

Table 6.1

Descriptive Statistics

		Dimensions	Mean (SD)	Minimum	Maximum
Country	Australia	Age	20.8 (2.99)	18	29
		TL	4.18 (0.64)	1.83	5.50
		RM	4.09 (0.60)	2.17	5.42
		HAP	3.42 (0.82)	1.00	5.00
		LAP	3.73 (0.95)	1.00	5.00
	Japan	Age	22.1 (2.76)	18	30
		TL	4.29 (0.56)	2.33	5.83
		RM	3.68 (0.56)	2.00	5.25
		HAP	2.51 (0.66)	1.00	4.50
		LAP	3.89 (0.72)	2.00	5.00
	China	Age	21 (0.77)	18	24
		TL	4.48 (0.59)	1.83	6.00
		RM	4.12 (0.65)	2.25	5.42
		HAP	2.73 (0.69)	1.00	5.00
		LAP	3.27 (0.80)	1.00	5.00
	Malaysia	Age	22.5 (2.48)	18	30
		TL	4.64 (0.73)	1.40	6.00
		RM	3.78 (0.63)	1.25	5.58
		HAP	3.07 (0.78)	1.33	5.00
		LAP	3.54 (0.91)	1.33	5.00

*Note: TL = Tightness-looseness, RM = Relational Mobility, HAP = High arousal positive, LAP = Low arousal positive

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6.6.1 Measurement Invariance

Metric equivalence was achieved for the measure of goals of music consumption. Individual exploratory factor analyses (EFA) for each country are detailed in previous chapters. As the present paper's aim is to compare countries and with the literature's exclusive focus on Western countries, the Australian factor structure was used as the reference model for the purpose of MGCFA, where motives for consuming music could be reduced to six factors, namely 'Identity', 'Coping', 'Learning', 'Relationships', 'Time', 'Relaxing'. Items loading of data compiled from four countries onto each factor are listed in Table 1. Items with loadings lower than 0.6 were excluded in order to achieve a better fit across all groups of the data.

Table 6.2

Exploratory Factor Analysis

	Rotated Factor Matrix[a]					
	Factor					
	Identity	*Coping*	*Learning*	*Relationships*	*Time*	*Relaxing*
1.To create an image for myself	.898					
2. To express my identity	.810					
3. To construct a sense of identity of myself	.761					
4. To explore possible identities	.753					
5. To discover who I really am	.713					
6. To portray a particular image to others	.711					
7. To display my membership of social groups/subcultures	.632					
8. To 'fill' uncomfortable silence						

Item				
9. To relieve stress/anxiety		.913		
10. To relieve anxiety		.897		
11. To help get through difficult times		.697		
12. To make me feel better		.689		
13. To alleviate feelings of loneliness		.536		
14. To take my mind off things		.536		.433
15. To escape the reality of everyday life		.525		
16. To express my feelings and emotions		.448		
17. To set the 'right' mood		.413		
18. To obtain useful information for daily life			.872	
19. To learn how to do things			.750	
20. To learn how to behave in the future			.585	
21. To learn how other people think	.439		.463	

22. To stay in touch with current fashions and trends				
23. To spend time with family			.737	
24. To spend time with friends			.659	
25. To have something to talk about with others			.615	
26. To keep up with current events		.436	.456	
27. To pass the time				.835
28. To relieve boredom				.747
29. To relax	.425			.717
30. To be entertained				.671

Extraction Method: Principal Axis Factoring.
 Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 7 iterations.

To see if the factor-structure identified in the Australian data is applicable to other three samples, the MGCFA was conducted with multiple metrics for assessing goodness-of-fit namely, CFI and RMSEA (Jang et al., 2017). In the literature, CFI values of .90 and above are seen to indicate an acceptable fit (Hu & Bentler, 1999) while RMSEA values smaller than .08 are seen to indicate acceptable fit (Browne & Cudeck, 1992). To determine if different levels of equivalence were achieved, model fit comparison of indices is typically used. A ≤.01 change in CFI is acceptable for assessing metric invariance from configural invariance, while ≤.01 change in CFI and ≤.015 change in RMSEA is acceptable for scalar from metric invariance (Boer et al., 2018; Rutkowski & Svetina, 2014).

First a configural invariance model with six factors was assessed and the results indicated an acceptable fit, $x^2(696) = 2094.56$, $p < .001$, CFI = .908, RMSEA = .087. The chi-square was significant, although since it can be argued that this is due to the large sample size employed the other fit criteria are considered. The CFI index indicates that there is an acceptable fit, while RMSEA can be deemed a marginal fit (Kim et al., 2016). Hence, we consider the fit here to be acceptable. Next, metric invariance was tested where $x^2(741) = 2211.58$, $p < .000$, CFI = .903, RMSEA = .087. There was a .005 decrease in CFI and a .001 decrease in RMSEA, and so changes of the indices were within the acceptable limits indicating that metric invariance is achieved here. Scalar invariance was also tested, $x^2(786) = 2799.77$, $p < .000$, CFI = .867, RMSEA = .099, but the changes in indices did not fall within the acceptable range which were suggested to be less than .01 decrease in CFI and less than .015 change in RMSEA from the indices for scalar invariance. Metric equivalence implies that items under each factor/latent construct contribute similarly across all groups (Putnick & Bornstein, 2016). This justifies that the current study will be able to use the factor structures across four different countries included in the dataset and subject them to regression-based analyses. Results of the MGCFA can be seen in Table 3.

Table 6.3

MGCFA Results

				Model Fit Indices					
Fit	chisq	df	*p*	RMSEA	CFI	TLI	SRMR	AIC	BIC
Configural	2094.56	696	.00	.087	.908	.888	.069	67237.12	68784.15
Metric	2211.58	741	.00	.087	.903	.890	.072	67264.14	68588.04
Scalar	2799.77	786	.00	.099	.867	.858	.080	67762.33	68863.10

A series of analyses was conducted where tightness-looseness, relational mobility, and ideal affect were considered as predictor variables while the factors extracted from goals of music consumption measure were outcome variables. Six separate moderation models were conducted, one for each factor of the goals of music consumption measure. Mixed-effect model was selected for the nested nature of the data. Country was dummy coded and used as a moderating variable. County was also entered as a random effect to allow better understanding of the variance that can be accounted at the country. There were three dummy codes, where the first dummy code represents Australia compared to Japan (Australia = 0, Japan = 1), the second dummy code represents China (Australia = 0, China = 1) and the third dummy code represents Malaysia (Australia = 0, Malaysia = 1). Results of these six moderation models are shown in Table 4.

6.6.2 Intra-class Correlation

Prior to examining the moderation effects by country, intra-class correlation (ICC) analysis was examined to determine how much of the variance from each outcome variable can be attributed to country-level differences. This analysis only included country, entered as a random effect. The ICC ranged from 0.00 to 0.38 indicating there was a range from 0 to 38% of variance attributable to country differences in the analysis (see Table 4). The ICC values are analysed using the base model without the cultural dimensions here while the other coefficients in Table 4 are the analysis results of the full model inclusive of the cultural dimensions. ICC values are considered here as they are often used as an index of measurement for cultural membership within cross-cultural studies. This index indicates the amount of variance for group membership (Ng et al., 2016) which in this case translates to membership of a country for participants. The conventional consideration of ICC values is often .05 which suggests that there is enough variance to be accounted by a variable (Peugh, 2010). Within the current study, the factors of Coping, Time and Relaxing did not meet

the .05 cutoff for ICC values. Therefore, these factors are not included in the discussions of the moderation analysis for between country interactions but only included in the general analysis of cultural dimensions and factors of goals of music consumption.

Table 6.4

Moderation Analysis

Predictors	Identity Estimates	Coping Estimates	Learning Estimates	Relationships Estimates	Time Estimates	Relaxing Estimates
(Intercept)	-1.61	-2.50**	-0.13	-0.99	0.29	-1.25*
Country [1]	-1.90	-1.49	0.84	-0.41	-4.75**	-2.95***
Country [2]	1.28	0.97	-1.56	-0.65	-2.02	0.02
Country [3]	0.21	-0.41	-2.04	-1.74	-2.88*	-2.03*
TL	0.38*	0.37**	0.01	0.10	-0.01	0.07
RM	-0.24	0.11	-0.01	-0.04	-0.05	0.09
HAP	0.28	0.13	0.06	0.31**	0.11	0.19*
LAP	-0.08	-0.03	0.12	-0.04	-0.03	-0.01
Country [1] x TL	-0.20	0.17	-0.57*	-0.10	0.47*	0.46***
Country [2] x TL	-0.28	-0.19	0.04	-0.03	0.19	0.04
Country [3] x TL	0.05	0.13	0.43*	0.33*	0.70***	0.40**
Country [1] x RM	0.64*	0.03	0.23	0.18	0.14	0.14
Country [2] x RM	0.04	0.04	0.05	0.08	0.13	0.08
Country [3] x RM	0.19	-0.11	0.26	0.15	-0.05	-0.04

Country [1] x HAP	0.23	-0.02	0.36	0.05	-0.01	-0.19
Country [2] x HAP	0.02	-0.13	0.23	-0.05	-0.15	-0.30**
Country [3] x HAP	0.08	0.21	0.19	0.01	0.05	0.03
Country [1] x LAP	0.02	0.25	-0.34*	-0.09	0.50**	0.28**
Country [2] x LAP	0.07	0.11	-0.16	0.13	0.17	0.13
Country [3] x LAP	-0.20	-0.06	-0.13	0.06	-0.08	0.10
Observations	1052	1052	1052	1052	1052	1052
ICC	0.05	0.01	0.38	0.17	0.04	0.00
R^2	0.081	0.067	0.333	0.388	0.242	0.110

*p <0.05, **p<0.01, ***p<0.001

Country 1 – Australia x Japan, 2 – Australia x China, 3 – Australia x Malaysia

6.6.3 Goals of Music Consumption: Identity

Tightness was related to listening to music for identity ($b = .38$, $p - .05$), and the strength of this relationship did not differ across the four countries indicated by the absence of significant interactions. Relational mobility was related to the identity goal differently between Australian and Japan ($b = .64$, $p < .01$). Figure 1 shows that amongst Japanese participants, higher relational mobility was associated with stronger endorsement of identity as a goal of music listening, but this pattern was not evident among the Australians participants. The model accounted for only a small amount of variance in this variable ($R^2 = .08$).

Figure 6.1

Relational mobility and Identity
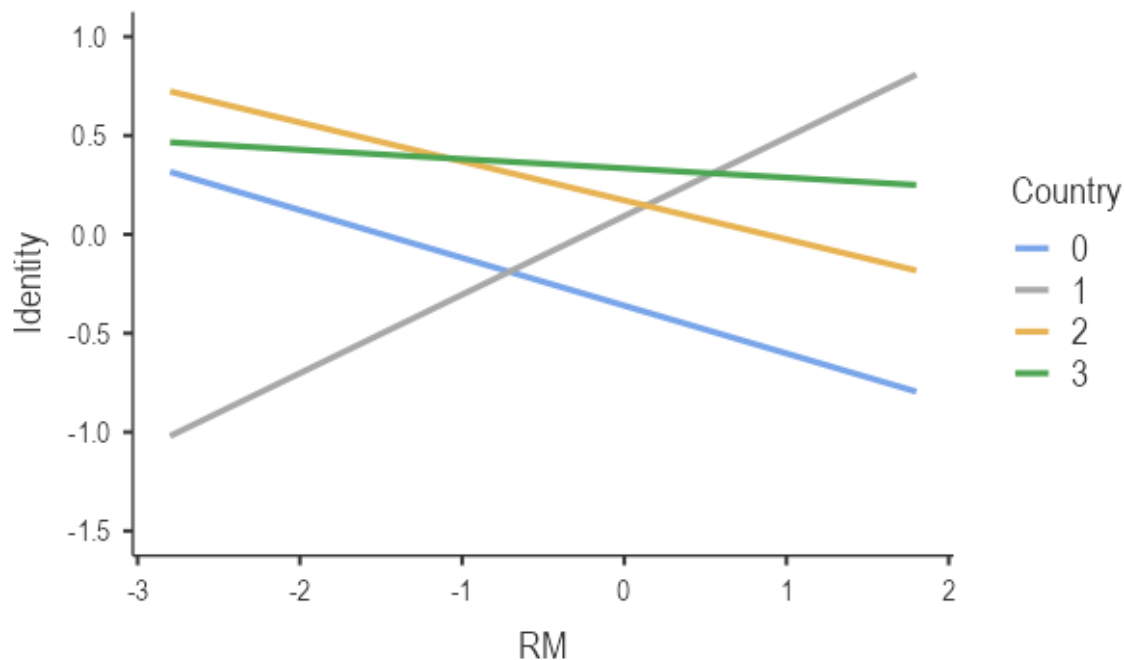
*0 = Australia, 1 = Japan, 2 = China, 3 = Malaysia; RM = Relational Mobility

6.6.4 Goals of Music Consumption: Coping

Tightness was related to listening music for coping purposes ($b = .37, p < .01$), and did not differ across the four countries as there were no significant interactions observed. The model accounted for a small variance for this factor ($R^2 = .07$).
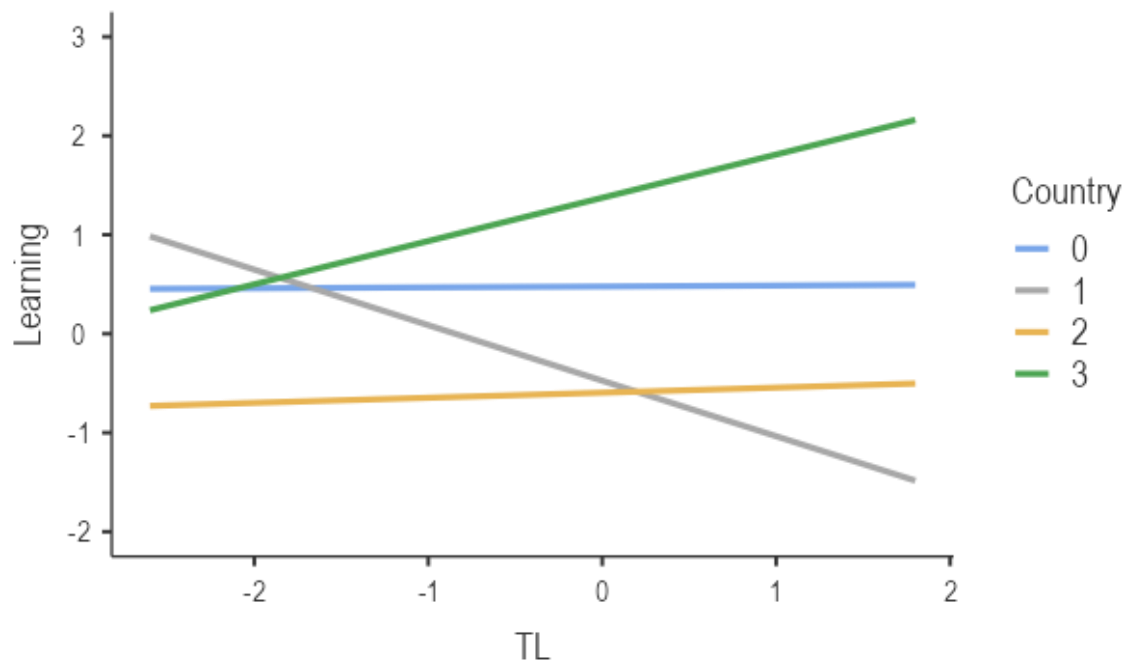
6.6.5 Goals of Music Consumption: Learning

Tightness was related to using music for learning purposes differently between Australian and Japan ($b = -.57, p < .01$), and Australia and Malaysia ($b = .43, p < .05$). Figure 2 shows that among Japanese participants, looseness was associated with a higher likelihood of using music to learn while this relationship was not evident among Australian participants. Figure 2 also showed that among Malaysian participants tightness is related to likelihood of using music for learning. LAP also reflected a difference between Australian and Japanese

participants when it comes to using music for learning ($b = -.34$, $p < .05$). Figure 3 shows that Australian participants who had greater inclination for LAP are more likely to use music for learning, whereas Japanese participants showed the opposite. The model for this factor accounted for a large amount of variance ($R^2 = .33$).
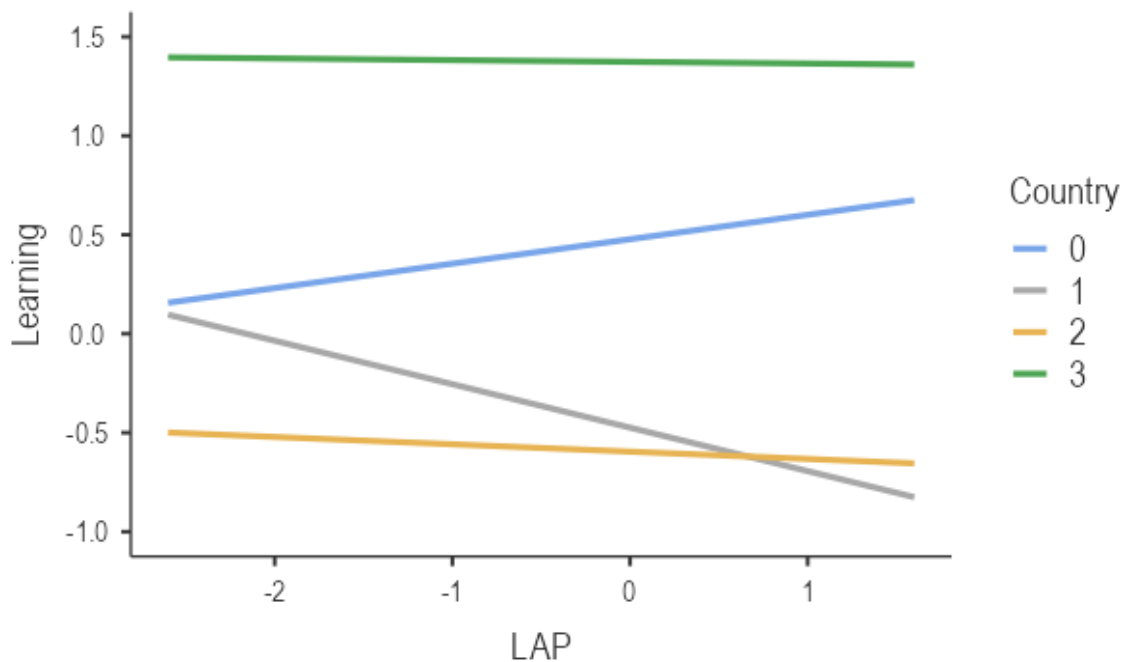
Figure 6.2

Tightness-looseness and Learning

*0 = Australia, 1 = Japan, 2 = China, 3 = Malaysia; TL = Tightness looseness

Figure 6.3

Low arousal positive and Learning

*0 = Australia, 1 = Japan, 2 = China, 3 = Malaysia; LAP = Low arousal positive

6.6.6 Goals of Music Consumption: Relationships

HAP was related to using music to maintain and form relationships equally across all four countries with no significant interactions observed ($b = .31$, $p < .01$). Tightness was related to this factor differently between Australian and Malaysian participants ($b = .33$, $p < .05$). There was a notably stronger relationship between tightness and using music to form and maintain relationships (see Figure 4) amongst Malaysian participants compared to Australian participants. The factor accounted for a large effect size ($R^2 = .38$).

Figure 6.4

Tightness-looseness and Relationships
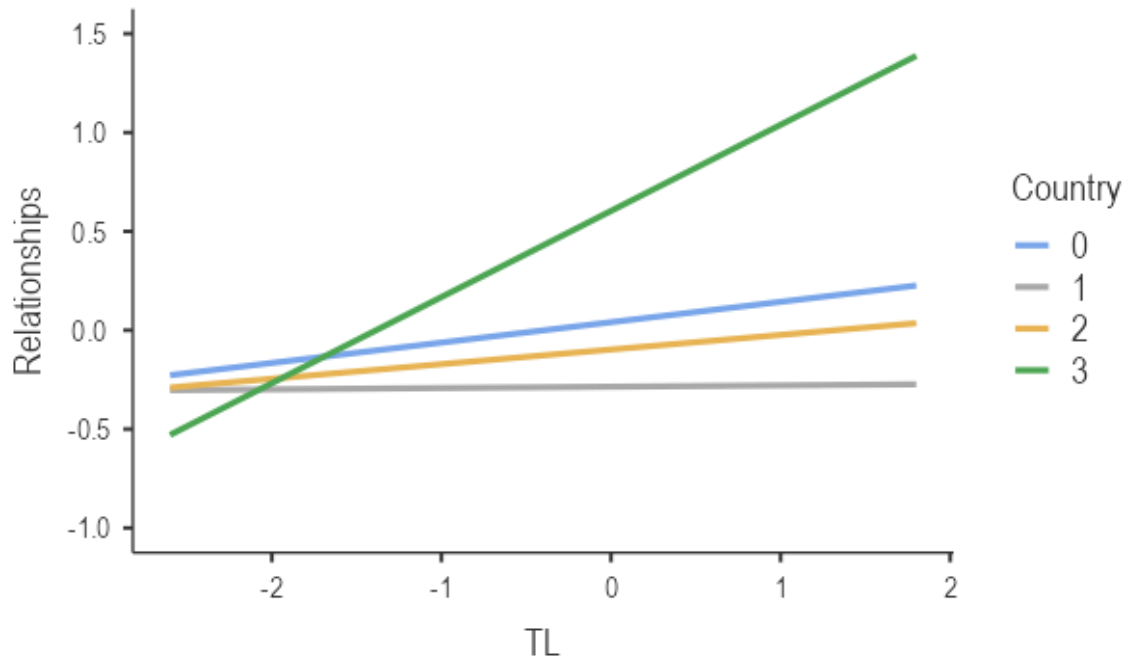
*0 = Australia, 1 = Japan, 2 = China, 3 = Malaysia; TL = Tightness looseness

6.6.7 Goals of Music Consumption: Relaxing

HAP was related to using music to relax across all four countries ($b = .19$, $p < .05$). The model here accounted for a small effect size ($R^2 = .11$).

6.6.8 Goals of Music Consumption: Time

No cultural dimensions were related to Time as a factor across the countries. The model here accounted for a medium effect size of ($R^2 = .24$).

6.7 Discussion

The current study is one of the first few attempts to investigate cultural factors and goals of consuming music on a culture-level instead of the individual level unlike the previous chapters. Aside from interactions where the relationship between a given cultural dimension and a given use of music differed between countries, there are also direct significant relationships between culture and uses of music that persisted across countries. Here we attempt to interpret the specific findings in relation to existing literature by focussing on each cultural dimension in turn. Given the lack of previous research (and research

findings) some of these proposed interpretations are inevitably speculative, and instead are presented as candidates for future research.

Tightness-looseness

There were significant moderation by country differences for tightness-looseness. In the comparison between Australia and Japan, significant interactions were observed concerning the negative relationship with Learning. There were also significant interactions observed with Learning and Relationships for the comparison between Australians and Malaysians.

The relationship between tightness-looseness and using music to establish and maintain relationships was also moderated by the country differences between Australia and Malaysia. Figure 4 shows that although the relationship in both Australia and Malaysia was positive, this relationship was much stronger among Malaysian participants. The use of music as means of social bonding, fostering, and maintaining relationships is shown by various studies (e.g., Tarr et al., 2014). In the context of cultural tightness, due to Malaysia being a more collectivistic country, this might reflect the need for more prosocial behaviours being fostered within society. This could lead to more conformity to the norm of engaging in prosocial behaviour here which for instance could be form new relationships. The inclination of this could lead to an increased propensity to utilise music in forming and maintaining relationships in attempts to engage in prosocial behaviour which is more evident in Malaysia in comparison to Australian participants.

The final significant interaction concerning tightness-looseness is the moderated relationship concerning Learning. Japanese individuals have a strong negative relationship between tightness and learning in comparison to Australian individuals who have a weaker negative relationship between tightness and learning. In contrast, Malaysian participants

produced a positive relationship between tightness and learning. One possible explanation for this is that individuals in tighter countries might have the need to constantly learn and adapt to norms within society to avoid negative consequences (Geeraert et al., 2019).

Relational mobility

The data concerning relational mobility showed only one significant interaction that was moderated by country differences. Australian and Japanese participants differed with regard to the relationship between relational mobility and using music for identity expression. Australian participants showed a negative relationship between relational mobility and Identity, whereas Japanese participants showed a positive relationship. This interaction is discrepant with earlier findings that those with high relational mobility are more inclined to engage in unique identity expression (Takemura 2014; 2015) compared to those lower on relational mobility. One possibility is that societies who have low relational mobility could potentially be utilising music to express their personal identities or identities related to their group memberships, whereas those high on relational mobility may have other means of identity expression aside from using music as a tool.

Low Arousal Positive

LAP ideal affect produced a significant interactions involving participants' nationality and uses of music. Itconcerns country differences in the relationship between LAP and Learning. The interaction in Figure 3 shows that there is a completely different direction of relationship between LAP and using music for learning between Australians and Japanese. Japanese individuals who ideally would like LAP moods are much less inclined to use music to learn whereas Australians who ideally would like lower arousal moods are more inclined to use music to learn. The findings here are unique as there have not been prior literature that links the differences in the relationship here. Although Japan is a country that has been linked

to more inclination towards LAP rather than HAP (Tsai et al., 2007), the findings here likely suggest that Japanese participants associate LAP with other uses of music consumption rather than learning in comparison to Australian participants.

6.7.1 General Discussion

The interactions between variables discussed so far are meaningful and highlight the different ways culture can influence the way individuals consume music. There are also several interactions identified in our analyses that cannot be explained by existing findings. One example of this concerns the difference in relationship between tightness and learning among Malaysian and Japanese individuals: both are tight countries (Gelfand et al., 2012), but having opposite relationships with learning. More specific studies should be carried out to fully understand these interesting interactions.

In this context it is noteworthy that while other studies in this field (e.g., Kok et al., 2024; Schäfer & Mehlhorn, 2013) typically produce relatively small effect sizes, several of the effect sizes in the present data are medium to large (i.e., Learning and Relationships) according to Cohen's (1988) conventions. Using music to learn is clearly related to cultural variables, and of course moderated by country differences. We also highlight the medium effect sizes that were found concerning using music for Relationships: across cultures, people's propensity to use music to build relationships is related to their broader cultural values.

There are also specific relationships between the cultural variables and uses of music that were common across countries. These relationships reflect a general relationship that the variables have without the moderating influence of country, such that these also have clear practical relevance to music streaming services and the like. For example, there is a significant relationship between tightness and using music to help cope with everyday stressors. The findings here suggest that across all four countries as the orientation for

tightness increases, the higher the likelihood of one using music to cope with daily stressors. An explanation for this could be, Gelfand (2006) suggesting that individuals living within tighter societies exposed to more general psychological stress in daily life due to constant adherence to societal norms: this might help explain why tightness is related to individuals using music as a means of coping with everyday stressors, since music is a means of escaping or relieving the stress experienced.

Moreover, there is also a significant relationship between tightness and identity expression through music. This finding suggests an overall increase or orientation towards tightness might correlate with the using of music to express your identity through music across the four countries. This is an interesting relationship that has not been suggested in previous research. The tight social norms and strict expectations that are experienced on a daily basis in tight societies may lead to people using music as a socially acceptable way of presenting themselves to others. Music could be the means by which they are able to freely express their 'true self'. The findings here pertaining to tightness and uses of music consumption are interesting and help contextualise the understanding of tightness as a cultural dimension within the field of music psychology. There are also practical implications here where understanding the relationship between tightness and how people consume music might facilitate better music consumption choices. For instance, streaming services might promote to users how they provide an alternative way of relieving stress or expressing a particular identity.

Additionally, there is also a significant positive relationship between HAP and using music for Relationships, where a higher inclination for HAP relates to an increased likelihood of using music to maintain/form relationships equally across all four countries within this study. These are unsurprising findings since authors such as Burkitt (1997) argue that emotions and mood are key modes of communication in forming and maintaining

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relationships between individuals. Furthermore, positive emotions, especially high arousing ones, have been found to predict greater involvement in social activities (Waugh & Fredrickson, 2007), which reflects the current findings given that HAP comprises emotions such as excitement and enthusiasm. This would imply that individuals who ideally would like to attain HAP may be more inclined to use music as a tool in forming and maintaining relationships. Moreover, the relationship between ideally seeking HAP affect and relaxing is interesting since existing research shows that LAP is unsurprisingly linked to relaxation and other low arousal states (McManus et al., 2019). Nonetheless, future research should investigate this relationship more and in particular might attempt to relate the relationship to preferences for particular musical genres or tracks.

6.7.2 Limitations and Future Research

The sample of the current study only reflects a specific population demographic (i.e., university students aged 18-30) so the findings may not necessarily translate to the general population. There is also no attempt to claim that individuals who have similar orientations to one another will necessarily utilise music identically, as any of a number of other individual difference variables may also impact a person's uses of music. Future research should also attempt to widen the scope of the study and include more countries/cultures. Additionally, data concerning goals of music consumption was obtained using an adapted measure which has not been shown to be applicable across all different cultures and countries, which may impede future use in different contexts. Although the MGCFA conducted indicates that there is equivalence across cultures, it only applies to the four countries that were included in the current study. Future research could look at broadening the psychometric validity of the measure.

Moreover, future research can also look at exploring other cultural dimensions that could be mapped onto music consumption, such as individualism-collectivism. The current

study applies only three specific cultural dimensions whilst there are numerous other dimensions that have not been considered here. This will allow better insight into the underlying processes behind the relationships identified here.

6.8 Conclusion

To conclude, the current study investigates country-level differences in the relationship between specific cultural dimensions and goals of consuming music. The findings here provide interesting insights concerning how cultural factors shape the goals of music consumption. While many of the findings can be interpreted easily in terms of research on topics other than music consumption, other findings are relatively new and we look forward to further research that explains these relationships in detail.

**CHAPTER 7: PAPER 6 – CULTURAL FACTORS AND POPULAR MUSIC ON
SPOTIFY IN DIFFERENT COUNTRIES**

7.1 Preface

The chapter looks at the culture from a different perspective in comparison to the
previous chapters. Culture is assessed at an aggregated national level and considered in terms
of individualism-collectivism, in contrast to previous chapters. These data are compared
against measures based on the top charting songs on Spotify across multiple countries. Three
main hypotheses are formulated based on existing literature that suggests the influence of
culture on music consumption.

7.2 Introduction

Online streaming is rapidly gaining popularity as a means of media consumption. For
example, in the USA alone, paid subscribers to music streaming services have increased from
7.9 million to 72.1 million individuals from the years 2014-2019 (Statista, 2021). Similarly,
as of December 2022 Spotify reported 465 million users globally alongside 195 million
subscribers to its music streaming service. This considerable increase has led to a
corresponding increase in research attention to issues such as psychological ownership of
music (Sinclair & Tinson, 2017), and personality and music preferences (Ferwerda et al.,
2015). Many music streaming services operate in multiple national markets, but apart from
some national variation in catalogue provision, the business model and research have tended
to place very little emphasis on differences between countries.

There are clear theoretical grounds to support research examining a relationship
between music streaming and cultural factors, with prior research indicating the role of
culture in people's perception and expression of music. For instance, Boer and Fischer (2012)
found specific uses for music which appeared to differ across cultures, where Western

societies tend to utilize music for emotional functions (i.e., the expression of emotions) more than non-Western societies. Furthermore, Stevens (2012) showed that individuals from one given culture are sensitive to the tonal and melodic hierarchies of music created in another culture, such that American participants were able to identify tonal hierarchies within traditional Indian music.

In the context of streaming services, Park et al. (2017) found that people's consumption of videos on YouTube seems to be predicted by the openness of each culture. Openness was quantified through a formula which calculates the shortest paths between nodes in a network which were defined by a list of YouTube videos from each country, and specific videos that were popular in each country over the span of six months. Countries that were more open consumed a more diverse range of videos, so that streaming choices were apparently consistent with broader cultural openness. Moreover, Bello and Garcia (2021) note that music listening selections within Spotify appear to be becoming more localized and distinct between countries with indications that there are cultural factors that influence this. They analysed music charts across a four-year span in 39 countries. Bello and Garcia showed that charts between countries were becoming increasingly divergent and localized in terms of the music artists themselves, record labels and particular songs. There was also a corresponding decrease in the percentage of songs shared across the charts of differing countries.

Since music is an inherently cultural product, the relationship between music and culture may extend beyond taste alone into consideration of the functions that music fulfils within a particular culture. This indicates the need for more research that considers cultural factors in relation to music consumption to better understand music consumption behaviors beyond Western societies.

One additional argument concerning the need for cross-cultural research on music listening is suggested by social science research describing a relationship between enjoyment and 'consumption capital'. For example, Adler's (e.g., 1985) research on superstardom proposed an economic approach to aesthetic judgements which states that the more an individual knows about music, the more that they will enjoy listening to it. This knowledge, or consumption capital, arises from direct exposure, information from mass media, or informal discussions with friends and acquaintances. "The accumulation of knowledge through discussion with others is relatively easy if all participants share common prior knowledge" (Crain & Tollison, 2002, p.1). This idea has clear parallels with more overtly psychological research showing that aesthetic responses to artistic objects are related to their degree of meaningfulness to the perceiver (e.g., Martindale & Moore, 1989). Crucially, the prevalence of music streaming means that individuals have more opportunity in the present day than ever before to access the same music as one another should they wish to and so gain consumption capital. However, the extent to which an individual might wish to follow group norms for listening and obtain this cultural capital might reasonably be influenced by several cultural factors.

7.3 Culture and Music Streaming

The current project examined weekly music streaming data harvested from Spotify across 66 societies. Open access Spotify listening charts provide data concerning the most-streamed pieces of music on a society-by-society basis. The data are provided weekly; and allow direct comparison of a large number of societies, which permits a larger dataset and so more robust analyses, in comparison to other streaming platforms (e.g., Tidal, Apple Music). Our focus was on three variables coded from the Spotify weekly chart data: (a) the number of unique artists, (b) the number of musicians credited with performing the music, and (c) the percentage of women performing each track.

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The number of unique musicians appearing on weekly charts may vary across cultures to the extent that people's preference for uniqueness also differs across cultures. In developing this hypothesis, we draw on cross-cultural research concerning the individualism-collectivism dimension. This dimension captures differences across cultures characterized by the extent to which members of individualistic societies see themselves as loosely linked to others and instead independent of them, and who disregard the goals and preferences of the collective and instead emphasize personal preferences and goals. This contrasts with collectivistic societies in which members instead regard themselves as closely linked to others, and identify themselves as part of the larger society so that they encourage sacrificing one's personal gains for good of the larger group (Hamamura, 2011; Triandis, 1995).

Whereas there are many factors of culture examined in the literature on cross-cultural psychology, individualism relative to collectivism is particularly interesting in the context of music streaming and consumption capital. The notion of consumption capital implies that people should be motivated to listen to the same relatively small number of artists and songs in order to maximize shared knowledge and so increase enjoyment: people across all countries should consistently listen to a narrow range of music pieces. Similarly, people in collectivistic countries may be motivated to consume similar music to one another, since this maximizes shared knowledge so shared enjoyment and community cohesion. As such lower levels of individualism may be associated with small numbers of musicians achieving commercial success. Crucially however, people in more individualistic countries may in contrast be motivated to prioritize their individualized music preferences in their listening behaviour, so that at the level of the national music charts, a greater number of musicians may enjoy commercial success in comparison to collectivistic countries.

Findings reported in Kim and Markus (1999) provide some support for this hypothesis, concerning how uniqueness in choice is more emphasized in European-American

(i.e., typically more individualistic) cultures compared to East Asian cultures (i.e., typically more collectivist). This was investigated through a series of studies in which participants from different cultures were asked to choose between, for instance, abstract figures and objects. Participants from East Asian cultures tend to prefer options that represented choices that were more common, whereas participants from European-American cultures were more inclined to make choices that were less common. Similarly, Kim and Drolet (2003) looked at the variety in choices that individuals make in relation to their cultural assumptions. Participants from the United States (a more individualistic culture) were more likely to seek variety in their choices as a form of self-expression whereas participants from Korea (a less individualistic culture) were more likely to make similar choices to one another. In sum, these findings suggest that the degree of variety in the choices that people make is related to the individualism-collectivism dimension of culture.

Hypothesis 1: The number of unique artists on the weekly top 10 charts for each society will be higher in individualistic relative to collectivistic societies.

The number of musicians credited with performing the music may also vary across cultures, to the extent that people in collectivistic cultures may be more likely to prioritize collective success and so there likely an inclination towards group performing over a solo act. (Markus et al., 2006; Triandis et al., 1988; Zhang et al., 2018). Empirical support for this notion is provided by research in various domains. For example, Earley (1989) found that participants from individualistic countries (i.e., USA) were more likely to sabotage group work (i.e., social loafing) to achieve personal success compared participants from collectivistic countries (i.e., China). Markus and Kitayama (1991) suggested that people from individualistic societies are more likely to have higher aspirations for individual achievement

compared to people from collectivistic societies. Zha et al., (2006) subsequently supported this in a comparison of doctoral students from the United States and China showing that students from United States (a more individualistic culture) show higher creative potential in comparison to Chinese students (a more collectivistic culture). This might mean that music charts in individualistic societies contain more musicians due to creativity being encouraged. Similarly, Markus et al. (2006) looked at media coverage of Olympic athletes in Japan (relatively more collectivistic) and United States (relatively more individualistic) showing that the United States coverage of athletes has greater emphasis on individual success while Japanese coverage of athletes places greater emphasis on how any single individual success is a part of a team and broader societal context. In the light of findings such as these, the present research predicted that the number of musicians credited on each track is related negatively to societal individualism scores.

Hypothesis 2: The number of musicians credited with performing the music will be lower in individualistic relative to collectivistic societies.

The present research tests one further hypothesis, namely that the percentage of women recording each track may vary across societies, due to differences across societies concerning gender-equality norms. Numerous studies conducted primarily in North America and Western Europe indicate that the portrayal of women in popular music is often misogynistic (Cundiff, 2013; Flynn et al., 2016). For instance, Cundiff (2013) analyzed rap songs from the Billboard's 'Hot 100' charts from 2000-2010 showing that all of the rap songs analysed contained misogynistic lyrics to a certain extent (e.g., demeaning language, sexual conquest, physical violence). This phenomenon may not be unique to Western culture. For instance, Onanuga (2017) also found demeaning vocabulary used in hip-hop tracks in

Nigeria. Research also indicates that women are under-represented in best-selling music charts. Anglada-Tort et al.'s (2019) study showed a disproportionate gender distribution among singers of the top 5 weekly sales chart from the year 1960 to 2015 in the UK, in that male singers accounted for 62% whereas female singers only accounted for 23% of the successful tracks. Kollman (2021) considered the representation of female musicians in the Alternative genre music charts, again showing that female artists appeared less frequently, and similar findings are reported by Wells (1986) and Tulalian (2019). The present research examined whether there is under representation of female musicians in music streaming charts globally. The literature indicates that under representation of female musicians is widespread across Western societies and potentially also in some non-Western societies, though this remains unclear. To the extent that the degree of female under representation is variable across societies, one intuitive candidate for the underlying factor would be gender equality norm.

Hypothesis 3: The percentage of women recording each track will be higher in societies with stronger gender-equality norm.

Our overarching aim for this project is to consider the role of cultural factors in people's interactions with music streaming services. For this reason, before analysing the three specific hypotheses, we conducted an analysis examining all three outcome variables (number of unique artists, number of musicians per recording, and proportion of female artists) against a measure of cultural distance. To the extent that these variables are culturally influenced, cultures that are more distant from one another should score more differently on the outcome variables relative to cultures that are closer to one another. In the literature, the notion of cultural distance captures how cultures differ from each other, and it has been

quantified differently by different researchers (Demes & Geeraert, 2014; Desmet et al., 2017). In this paper, we used cultural distance scores computed by Muthukhrisna et al. (2020) quantifying cultures' distance, with American culture used as an anchor point. If our outcome variables are related to culture, we expect the cultural distance scores to be correlated with each of them.

7.4 Method

7.4.1 Data

The research used Spotify's weekly charting data for the societies in which the platform is publicly accessible (https://spotifycharts.com/regional). These data include the ranking of number of streams per week per song per society. The data are archived from the time of launch of Spotify in each society. The present research utilised data from the top 10 charts for each of the 52 weeks of 2020, from week commencing 2nd January 2020 to week commencing 24th December 2020. Figure 1 will show a map of the 66 societies considered in the analyses. Note that data was available from 69 societies in total, although not all societies were included in the analyses as data on cultural variables was not available for some (e.g., individualism scores for Cyprus and Nicaragua were not available).

Figure 7.1

Map of countries included in the analysis.
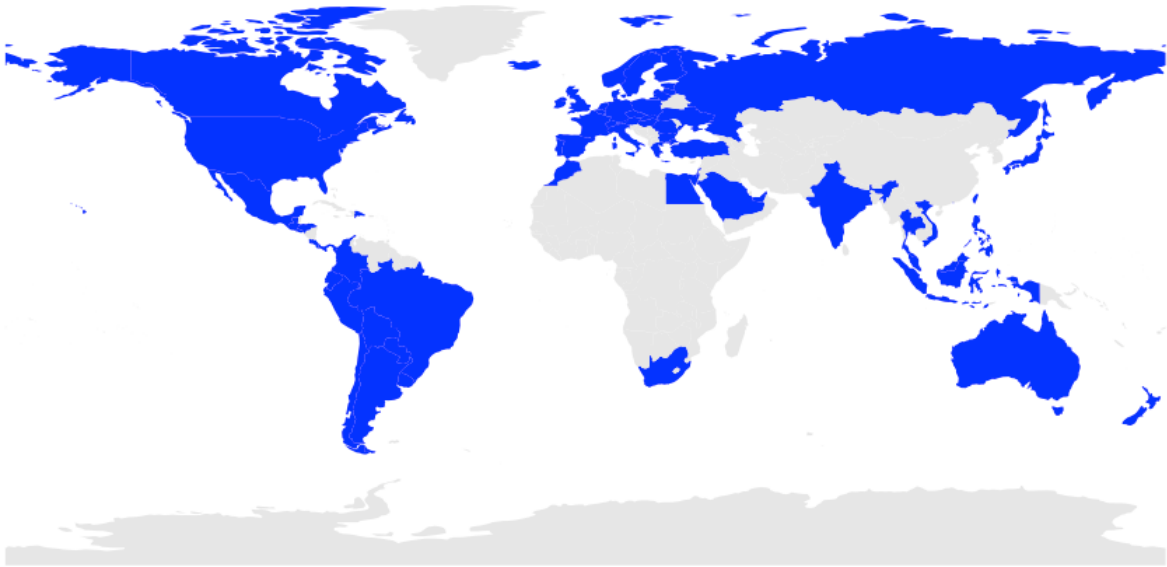
7.4.2 Spotify data coding

Number of unique artists. Within each society, the number of unique artists was calculated by adding 1 to the score every time a new artist appeared on the weekly chart. For example, if a weekly chart contained five artists who had not featured in any previous weekly top 10s then this added 5 to the score. Consequently, the theoretical maximum score for any society was 520 (which would arise if each weekly top 10 contained 10 artists who had not featured previously in any week) and the theoretical minimum score would be 1, which would arise if the same artist occupied all 10 positions in the weekly top 10 for every week during the year. In calculating the number of artists for each week, only the first-named artist of each song was considered. For instance, other artists billed as 'featuring' were not considered, as this method of scoring leads to anomalous variations in the scores between societies that appear to reflect industry practices and naming conventions. For instance, several South American countries have large numbers of songs in the top charts that credit more than five artists on a single track. In contrast, most North American and Western European societies usually only have one or two artists on each track. Hence, counting only

the first-listed artist on each track represented a more conservative test of the hypothesis. In instances where tracks were credited to a band, this band was considered a single entity which could contribute only 1 to the number of unique artists.

Number of musicians credited with performing the music. Calculation of the number of performing artists on each track (hereafter 'band size') included all artists credited on the recording, such as those billed as 'featuring', and also counted the number of members within a band. For example, The Beatles has four members, leading to band size being coded as four. Band size was calculated for each track on the top 10 weekly charts over the 52-week period for all societies. Hence, the band size score for each track is calculated separately for each week. Individuals such as the producer, session musicians and others who were not billed as the principal performers were not included. Band size data was obtained from various online sources, such as biographies and music reference websites (e.g., allmusic.com, Wikipedia). In cases where the memberships of bands changed over time, the band size calculation used data concerning membership for the period during which the given track was recorded.

Percentage of women recording each track. Band size data (see above) was used to calculate the percentage of artists on each track who were female. The gender of the musicians on a recording was determined through biographies and music reference websites (e.g., allmusic.com, Wikipedia). This was done based on the gender and sex information provided by these sources such as explicit reference/pronouns given to a person (i.e., 'he' or 'her').

7.4.3 Societal level data

Individualism scores for each society were sourced from https://www.Hofstede-insights.com/ (e.g., Hofstede, 2011; Litvin, 2019). While the cultural dimensions discussed by Hofstede at times have come under scrutiny, they have nonetheless been regarded as a

useful way of representing cultural variability (e.g., Beugelsdikk & Welzel, 2018; Kaasa, 2021; Park et al., 2017). Hofstede initially generated the individualism scores through a questionnaire administered to IBM employees. On the basis of these and subsequent data Hofstede derived several cultural dimensions that were further tested using the Value Survey Method questionnaire which produced country level scores for each dimension (Hofstede, 2001).

The gender inequality index calculated by the United Nations was sourced from their database (United Nations, 2020). The index is based on data concerning reproductive health (e.g., maternal mortality ratio), empowerment of females (e.g., proportion of parliamentary seats occupied by females) and economic status (e.g., labour force participation rate of females above the age of 15 years). Scores on this index range from 0 representing higher gender equality to 1 representing higher gender inequality.

Cultural distance was indexed using the scores originally developed in Muthukrishna et al. (2020) who quantified the cultural distance across many countries on the basis of two different editions of the World Value Survey. This score was available for 34 of the 66 countries for which Spotify data was available.

7.4.4 Control variables

All analyses controlled for gross domestic product (GDP) per capita (in US dollars) (in thousands), national population size (in millions) and ethnic diversity. GDP and population size data were obtained from http://www.worldometers.info (Worldometer, 2021). GDP per capita was included as Spotify contains a paid music streaming tier, and countries with higher GDP per capita likely have more individuals who can afford the subscription fees. Population size was included as a control as this would influence the number of streams of each track. Ethnic diversity was included to control for demographic heterogeneity within each country, which may influence the diversity of music listening preferences captured in

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national music charts. Data for ethnic diversity was obtained from Alesina et al., (2003) where the researchers computed scores for ethnic fractalization. Alesina and colleagues (2003) calculated ethnic fractalization using three different indices of ethnicity, religion, and language. Higher index scores for a society signifies greater ethnic fractalization, and so more ethnic diversity.

7.5 Analysis

The data has a nested structure in that Spotify's charts were scored each week across a period of 52 weeks in 2020 across 66 different societies implying two level structures to the data (weekly data nesting within data for each society). Hence, a linear mixed model (LMM) was used for the analysis via the lmerTest package (Kuznetsova et al., 2017) in R (R Core Team, 2020). This method of analysis was chosen as it can account for the nested effects within the data, and can also specify and account for random effect variance rather than just fixed effect variance (Boisgontier & Cheval, 2016). A separate LMM analysis was conducted for each of the hypotheses. Data and R scripts needed to reproduce the results are available in the paper's OSF page [https://osf.io/yvtju/?view_only=fc161cdf420c493e9b619eb24c7e0d88]. Descriptive statistics can be seen in Table 1.

Table 7.1

Descriptive Statistics.

Variables	N	Mean	SD	Min	Max
Unique Artists	3432	8.28	1.81	1	10

Band Size	34320	1.97	1.63	1	51
Percentage of Female Artists	33280	18.78	36.64	0	100

Note. Number of unique artists is coded weekly (i.e., number of unique artists each week) hence 3432 values are available (= 52 weeks across 66 countries). Band size and percentage of female artists are both coded for each of 10 songs appearing on a weekly chart, hence 34320 values are available (= 10 songs x 52 weeks across 66 countries). *N* is smaller for the latter variable because gender inequality scores for Hong Kong and Taiwan were not available.

7.6 Results

Linear mixed-effect models are shown to be fairly robust to the violations of distributional assumptions (Schielzeth et al., 2020). Nevertheless, before the main analyses, all variables were visually inspected for their normality and the outcome variables also for distribution of residual. One noticeable trend found in the distribution of residual for the band size outcome variable was a spike in residuals towards December suggesting greater variability, that had a wider range of artist compared to normal. As this study aims to research trends in music charts, we nonetheless opted to retain the data in its original form, since the apparent increased range in the number of artists in music to which people listened during December represents a valid part of people's music listening over the course of the year as a whole. In addition to this, the band size outcome variable had outliers which were determined using the mean of the outcome variable score for each country and interquartile range. As

such, values for three countries (i.e., Japan, Vietnam, Philippines) were removed from the analysis.

Before the hypothesis testing, we explored the extent to which the three outcome variables differ across cultures by inspecting intraclass correlations and also each variable's relationship with cultural distance (see Table 2). Intraclass correlations computed in LMM models that only included the random intercept for country were .368, .258, and .384 respectively for unique artists, band size and percentage of female artists. These results show that a substantial proportion of the outcome variables' variance (between 25.8% to 38.4%) is attributable to society-level differences. To examine whether cultural distance accounts for these societal-level differences, another set of LMM analyses using cultural distance as a predictor were conducted. Cultural distance was a significant predictor of the number of unique artists listed in the Spotify data ($b = -.003$, $SE = .0005$, $t = -5.854$, $p <.001$), as well as predicting the number of musicians credited with performing the music ($b = .0009$, $SE = .0002$, $t = 4.957$, $p <.001$). Percentage of female artists on each track was not significantly predicted by cultural distance (b = .00001, $SE = .00008$, $t = 1.28$, $p = .201$).

These results suggest that two outcome variables, the number of unique artists and band size, differ systematically across cultures, supporting the need for cross-cultural analysis as reflected in Hypotheses 1 and 2. On the other hand, the percentage of female musicians was not related to cultural distance, though it does differ substantially across societies. This result suggests that differences across societies on this variable are not specifically cultural in nature and may instead arise from other factors, such as differences between societies in terms of economic and demographic factors. The table for this initial test can be seen in Table 2.

Table 7.2

Linear Mixed Model predicting the cultural distance to America on outcome variables

Variables	*b*	*SE*	*t*	*p*	*95% CI*
Unique Artist	-0.003	0.0005	-5.854	<.001	-.004- -.001
Band Size	0.0009	0.0002	4.957	<.001	.0005-.001
Female Percentage	0.00001	0.000008	1.28	0.201	-.000005 - .00003

7.6.1 Number of unique artists

To test Hypothesis 1, the LMM model used individualism scores for each society as the predictor, the number of unique artists on the Spotify chart as the outcome variable (hereafter 'unique artists'), and GDP, population size and ethnic diversity were specified as covariates. The model also entered date (i.e., different weeks of the year) as a random effect, to allow for weekly fluctuations in the Spotify data (such as national holidays, which might be expected to lead to increased or otherwise atypical streaming).

Across countries, a mean of 8.28 unique artists (*SD*= 1.81*)* appeared each week for each society across a 52-week period. Figure 2 visualizes the mean number of unique artists across all societies (on the Y-axis) and their relationship with scores for individualism (on the X-axis). The LMM analysis showed that individualism was positively associated with the number of unique artists in the Spotify data ($b = .021$, $SE = .002$, $t = 14.627$, $p <.001$) (see Table 3). According to this analysis, a 1-point difference in individualism scores is estimated to predict a difference of .021 unique artists per week in the Spotify data. For example, Australia has an individualism score of 90 whereas Honduras has a score of 20. This 70-point difference in individualism scores would result in a difference of 1.47 (70 x 0.21) unique

artists each week between these two societies. Data concerning ethnic diversity and GDP

indicated that societies with greater ethnic diversity and higher GDP tended to have a larger

number of unique artists on the chart. The table for the hypothesis can be found in the

Supplementary Materials

Figure 7.2

Mean of unique artists and Individualism scores for each society (Hypothesis 1)
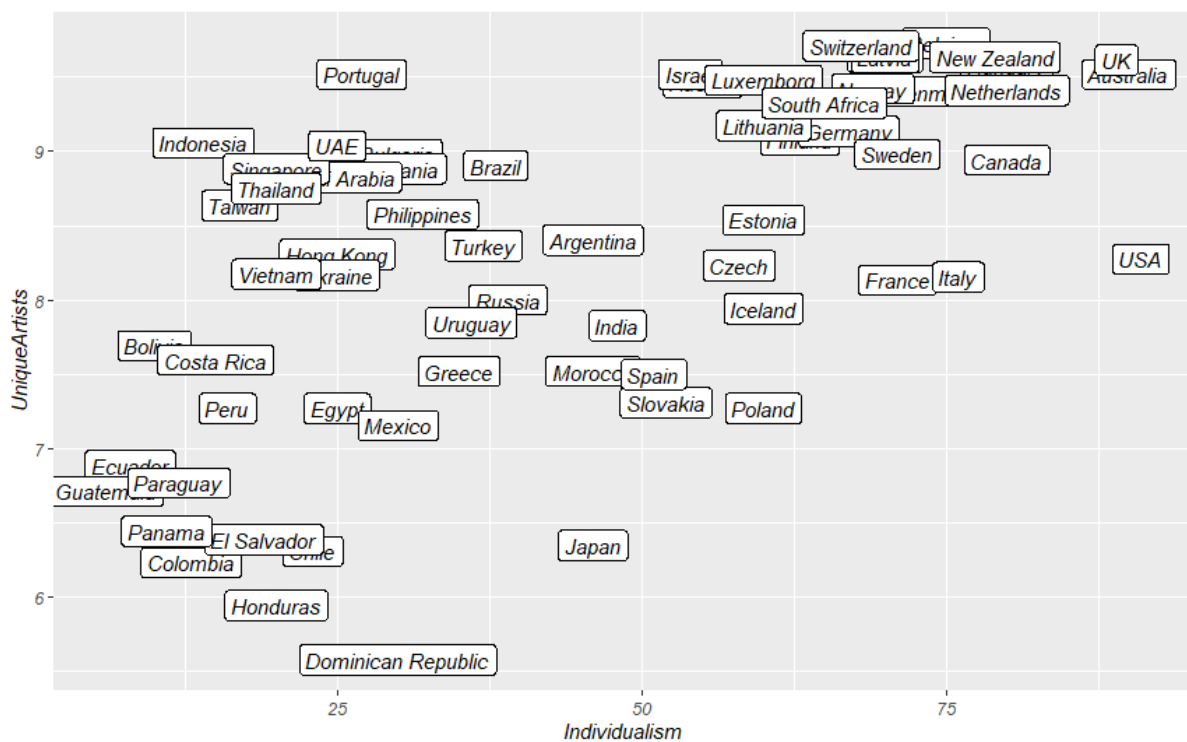

Table 7.3

Linear Mixed Model predicting the number of unique artists on Spotify charts (Hypothesis 1)

Variables	b	SE	t	p	CI 95%
Individualism	0.021	0.002	14.62	<.001	.019-.025

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GDP	0.011	0.006	7.863	<.001	.009-.015
Population	-0.0001	0.0006	-1.657	0.098	-.0006-.00005
Ethnic Diversity	0.932	0.140	6.647	<.001	0.657-1.207

Note: GDP was scaled down by a thousand, Population was scaled down by a million.

7.6.2 Band size

To test Hypothesis 2, the number of musicians credited with performing the music (i.e., 'band size') was entered as the outcome variable in a LMM model, with the other aspects of the model identical to previously. Across each week in all countries, the mean band size was 1.97 ($SD = 1.63$) (Figure 3). Results of the LMM indicated that individualism was associated negatively with band size ($b = -0.003$, $SE = .0005$, $t = -7.426$, $p <.001$) (see Table 4). On the basis of the results, the 70-point difference in individualism between Australia and Honduras would translate to .35 fewer musicians credited on each track in Australia compared to Honduras. All covariates were significant indicating that societies with greater ethnic diversity and GDP tend to have smaller band sizes while countries with larger population sizes tend to have larger band sizes. It is interesting to note that with the inclusion of the outliers, the results of this analysis remained the same whereby there was a significant negative relationship between individualism and band size.

Figure 7.3

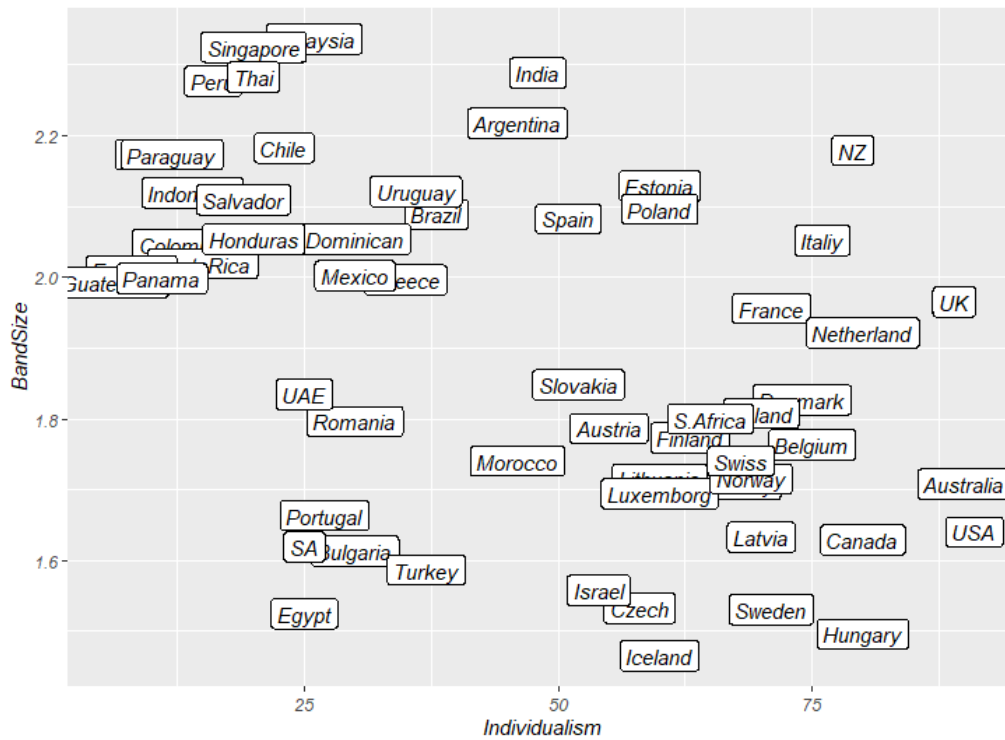*Mean band size and Individualism for each society (Hypothesis 2)*

Table 7.4

Linear Mixed Model predicting band size on Spotify charts (Hypothesis 2)

Variables	*b*	*SE*	*t*	*p*	*CI 95%*
Individualism	-0.003	0.0005	-7.426	<.001	-0.004- -0.003
GDP	-0.001	0.0005	-2.238	<.001	-.002- -.0001
Population	0.0002	0.00005	5.042	<.001	.0002-.0003
Ethnic Diversity	0.110	0.044	2.459	<.001	0.022-0.19

Note: GDP was scaled down by a thousand, Population was scaled down by a million.

7.6.3 Percentage of women recording each track

To test Hypothesis 3, the percentage of females was entered as the outcome variable in a LMM model and the gender inequality index for each society was entered as the predictor. Other aspects of the model were as previous analyses. Across each week in all countries, 18.78% of artists were women ($SD = 36.64$) (Figure 4). Results of the LMM analysis indicate that the percentage of females was related negatively to gender inequality, so that the percentage of females was higher in more gender equal societies ($b = -18.98$, $SE = 2.231$, $t = -8.060$, $p < .001$) (see Table 5). For example, Guatemala's gender inequality index is 0.492 while Switzerland's gender inequality index is 0.037. This 0.455-point difference in gender inequality index based on the results of the LMM analysis would indicate 8.64% fewer females on each track in Guatemala compared to Switzerland. The LMM also showed that ethnic diversity and population were significant predictors of the number of the proportion of female recording artists, so that societies with greater ethnic diversity and population size had a larger proportion of female artists.

Figure 7.4

Mean Female percentage and Gender inequality index for each society (Hypothesis 3)
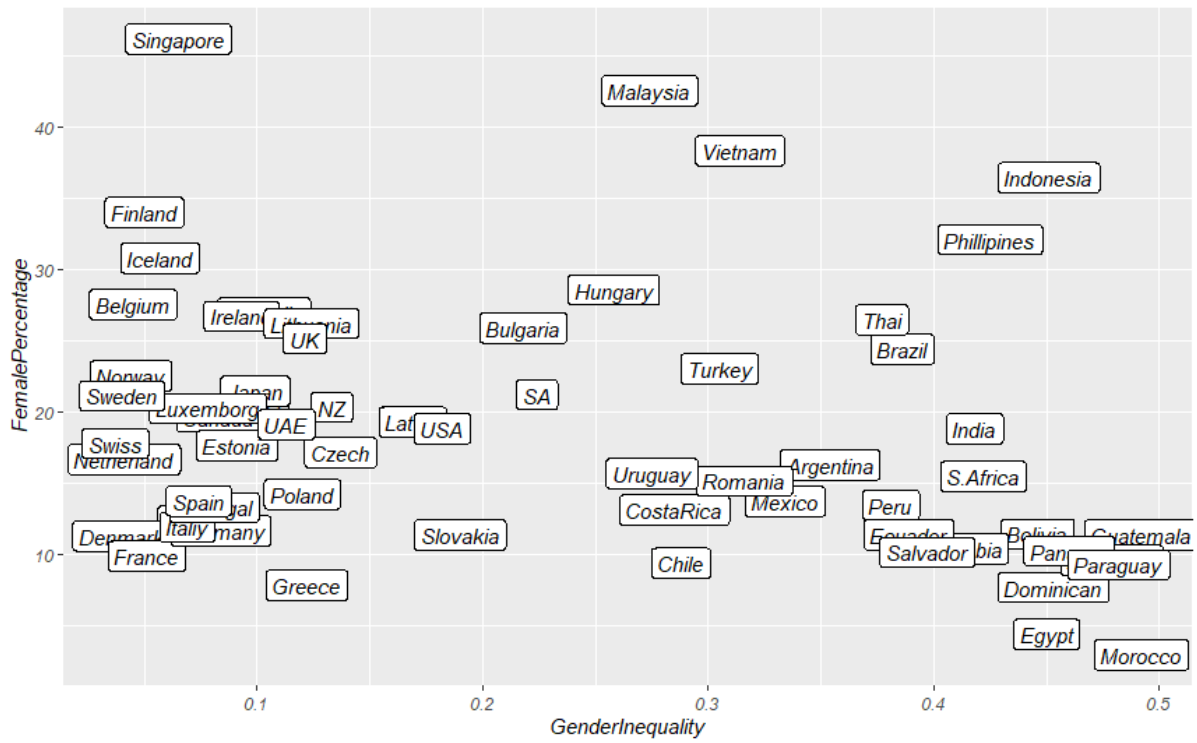
Table 7.5

Linear Mixed Model predicting representation of female artists in Spotify charts (Hypothesis 3).

Variables	b	SE	t	P	CI 95%
Gender Inequality	-18.98	2.231	-8.060	<.001	-22.35- -13.61
GDP	0.02	0.01	1.514	0.13	-.006- .05
Population	0.006	0.001	5.134	<.001	.003-.008
Ethnic Diversity	7.413	1.046	7.087	<.001	5.360-9.462

Note: GDP was scaled down by a thousand, Population was scaled down by a million.

7.7 Discussion

This study aimed to investigate three hypotheses, which specific looked at the cultural dimension of individualism-collectivism and how it predicts the number of unique artists and band size of songs appearing on the top 10 charts of Spotify weekly across multiple countries. Additionally, the study also looked at the percentage of female artists in each band of the top 10 charting songs in Spotify in relation to the gender inequality index of each country. This study seeks to highlight the influence that culture can have on the musical trends and popular music that are consumed by consumers across different countries. Our analyses showed that there are society-level differences in national music charts. Of the three variables examined, the number of unique artists and band size differed systematically across cultures, indicated by a significant correlation with cultural distance. The percentage of females on each track also differed between societies, but was not correlated with cultural distance indicating that societal-level differences on this factor are not cultural in nature (or at least not related to the cultural difference from American culture).

All three hypotheses were supported. In regard to Hypothesis 1, more individualistic societies had a larger number of unique artists on their charts, consistent with the hypothesis that listening preferences in these societies may be more diversified, whereas more collectivist societies preferred a smaller range of music artists that are listened to more commonly. These findings are consistent with earlier findings where choices were more diverse in individualistic societies relative to collectivistic societies (Kim & Drolet, 2003; Kim & Markus, 1999). The present study shows that a similar phenomenon exists in national music charts, whereby an increase in national individualism scores is likely to lead to an increase in the number of unique artists among the popular music that individuals consume.

In regard to Hypothesis 2, the data indicated that music performed by a smaller number of musicians/artists is more likely to be streamed in individualistic cultures whereas collectivist cultures are more likely to stream music performed by a larger number of musicians. This finding is consistent with the hypothesis that musicians in collectivistic societies are more likely to enjoy commercial success in large groups in comparison to individualistic societies. The current finding is similar to the findings of Markus et al., (2006) where people from collectivistic cultures may prioritize collective rather than individual creative processes. This aspect of the present findings was particularly apparent in the data from Asian societies (see Figure 3), which generally have lower individualism scores and a larger number of artists credited on each track, whereas Western societies (e.g., USA, UK, Canada) tended to have higher individualism scores and a smaller number of artists credited on each track. Note that conclusions concerning Hypothesis 2 should be interpreted with some caution due to the violations of normality and homoscedasticity that were observed.

With regard to Hypothesis 3, the data indicated that countries with a higher degree of gender equality tend to stream music performed by a higher proportion of female musicians. The generally low proportion of female musicians within each society are consistent with Anglada-Tort et al., (2019) and Kollman (2021) showing that there is an underrepresentation of female artists. The novel contribution of the present research in this respect, however, is that the extent of the under-representation differs across societies and is related to gender equality scores for each society: the under-representation of females is more pronounced in societies that have higher gender inequality.

It is interesting to note that ethnic diversity, which was employed as a control variable, was statistically significant across all the analyses reported here, indicating the potential importance of this in understanding musical taste across societies. For instance, the present research found a positive relationship between ethnic diversity and band size and a

negative correlation between the former and the percentage of female artists on tracks. These significant relationships show that demographic factors alone can predict some of the differences in musical taste across different countries. Establishing the unique contribution of this variable to music streaming preferences will require further research involving a range of potential covariates.

Overall, these findings are consistent with previous research (e.g., Boer and Fischer, 2012) showing that cultural factors relate to musical taste, and highlight specifically that music streaming preferences are related to societal level individualism. The potential role of these variables in streaming preferences in turn has various possible implications for streaming platforms that operate across societal boundaries. For instance, one possible implication is the potential to refine recommendation algorithms: in collectivistic societies, streaming services might promote songs or music artists that are currently being consumed by the majority of the population in that society, whereas in individualistic societies these same recommendation algorithms might assign greater weighting to candidate pieces based on the listener's own tastes rather than the streaming choices of others.

7.7.1 Limitations

However, there is also an important limitation to conclusions of this nature. Specifically, the present results tell us nothing about the streaming preferences of any given individual. While residence in a particular society might suggest that a given person has certain cultural values, in practice each member of the population will differ in their individualistic orientation and views concerning gender inequality that are reflected in their personal music streaming. The importance of this caveat is underscored by the fact that subscriptions to music streaming services are of course paid for by individuals rather than populations. More simply, the present data tell us about broad societal trends concerning

individualism and gender equity, but tell us little about the preferences of an individual paying customer.

Furthermore, the music analyzed was identified using Spotify's chart data. This source may or may not provide an accurate representation of each society's listening habits and trends. Other platforms are more popular in some societies and for certain genres (e.g, Wynk, Gaana). Future research will need to weigh this consideration against the greater accessibility and availability of Spotify chart data. Moreover, given the number of recent papers that have published data sourced from Spotify (e.g., Diaz, 2017; Vonderau & Fleischer, 2019), there is arguably now an academic need to establish whether this source is truly representative of societal music taste. Future research may also attempt to develop a formula that aggregates the number of streams for given track across various different platforms and combine this with listening data from non-digital sources.

Another notable limitation of the present findings concerns effect size. While the hypotheses were supported, the practical significance of the results is more debatable. For example, one could question the practical value of the finding that a music chart should have one less unique artist per week between societies that differ 50 points on individualism. On the other hand, the findings are theoretically important as they indicate that cultural values play roles in music streaming that are consistent with what we might expect based on previous literature (e.g., Boer & Fischer, 2012; Stevens, 2012). Moreover, it is arguable that, given the large number of factors that undoubtedly influence music streaming (wide-ranging factors such as marketing, income, personal taste, and so on) it is notable that cultural factors are related to the chart performance of songs and deserve consideration by practitioners. Additionally, major music labels and companies may be able to exert a certain amount of influence on the songs that are promoted to consumers (e.g., Aguair and Waldfogel, 2018). This promotion may of course influence the type of songs that are popular in each country.

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Additionally, the definitions of the criterion variables may intuitively be a limitation itself as the operationalisation of 'band size' or 'unique artist' may not necessarily be uniformly recognized by all researchers or readers. Different ways of defining these variables could produce different results to those reported here. While this is of course a truism, what is unknown is the extent to which research findings are sensitive to different ways of conceptualising the variables. There is also a lack of consideration of how gradual changes over time in culture might lead to changes in the way individuals consume, use and appreciate music overall. This change is further reflected in the popular consumption of music as can be interpreted in the top charts of music services, for example as found in Bentley et al. (2007) and Lech et al. (2024). This ties very much into findings of studies that we have cited earlier such as Bello and Garcia (2020), which show which show it is becoming increasingly difficult for given tracks to reach the top of streaming and sales charts, and it seems likely that this is due to changes in (music) culture.

Finally, as noted above, a very large number of musicians are credited on many popular recordings in Central and South America. This meant that measurement of the number of unique artists (Hypothesis 1) focused on only the first listed musician. While this seems a tolerable solution under the circumstances, and all credited artists were included in the assessment of Hypothesis 2, we would have preferred a more elegant technique in testing Hypothesis 1 that captured a greater portion of the available data.

7.7.2 Future Research

Future research might consider other applications of cultural dimensions to cross-societal differences in music streaming preferences. For instance, tightness/looseness (Gelfand et al., 2012), and relational mobility (Thomson et al., 2018) are important recent additions to the literature that have enabled new cross-cultural insights and have intuitive appeal as possible explanations for various aspects of music listening. For example,

tightness/looseness may relate to the degree of societal level heterogeneity in music listening and relational mobility may have implications for coverage of interpersonal relationships in lyrics. Similarly, in terms of longer-established cultural dimensions, societies with higher power distance scores (Hofstede, 2001) might prefer musical genres that have greater social status and prestige compared to lower power distance societies.

Similarly, future research might investigate whether the present findings can be replicated concerning preferences for other consumer products. For instance, future research might consider whether the findings reported here are replicable across all entertainment media and other experiential products, whereas the effects reported here might be less likely to be observed in purchasing of more mundane products (which are arguably less likely to be a source of group cohesion and social identity).

Additionally, future research could also consider a mixed methods approach, incorporating interviews with individuals from differing societies. While this would be a significant undertaking across multiple cultures, it would also lead to a much richer understanding of the role of particular cultural dimensions in musical taste, and lead to some nuanced and specific hypotheses concerning why the two are related.

7.8 Conclusion

In conclusion, the present findings have theoretical and perhaps also practical implications for our understanding of the role of culture in musical taste. The findings indicate that future research can usefully consider quantitative dimensions of culture (in this case individualism/collectivism), socioeconomic variables not necessarily related to culture (in this case gender equality), and readily available sources of data (in this case music streaming data and internet sources concerning various other aspects of the music such as band size). The positive findings reported here also highlight the need for development of methodological approaches that can combine the various means by which entire populations

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access music; and which take advantage of the precision offered by quantitative measurement of cultural factors while also developing in-depth insights concerning the cause of relationships between these factors and musical taste.

CHAPTER 8: GENERAL DISCUSSION

The overarching research question of this thesis was whether culture is related to the ways in which music is consumed. The evidence provided here suggests that it is. Chapters 2 to 5 looked at cultural dimensions, musical taste and goals of music consumption within specific countries, while Chapter 6 conducted a cross-country comparison between the cultural dimensions and goals of music consumption. Finally, Chapter 7 looked at top charting songs on Spotify and their relationship to individualism-collectivism and gender equity. Culture was assessed on different levels within the chapters of this thesis. Chapters 2 to 5 focused on individual level orientation on specific cultural dimensions while chapter 6 looked at cross national differences across countries using data collected at the individual level. Chapter 7 utilized data concerning cultural dimensions which were aggregated at the national level.

8.1 Chapters 2-5

Chapters 2 to 5 tested the relationships concerning both musical tastes and goals of music consumption and each of tightness-looseness, relational mobility and ideal affect. It also tested the relationship between subjective socioeconomic status and both musical taste and goals of music consumption. Across all four countries that were examined (i.e., Japan, China, Australia, and Malaysia) there were different relationships between the variables. Two types of significant relationships were identified, one showing that culture could explain a significant portion of the variance in the consumption of music. The other type of significant finding showed significant relationships between particular cultural dimensions and specific aspects of both musical taste and uses of music.

8.1.1 Musical Taste

To assess music consumption, musical taste was measured to be tested against specific cultural dimensions that will allow better understanding of culture's influence on

music consumption. In Japan (Chapter 2), regression models showed that cultural dimensions were able to significantly predict all the musical taste factors. Within China (Chapter 3), only one factor (Non-Mainstream Music) was significantly predicted by cultural dimensions while the other factors were not. There was also a specific finding here concerning HAP and Non-Mainstream music which seems to align with findings from previous works concerning affect and alternative genres (see North et al., 2019) where they found higher arousal and energy to come from consumption of said genres. In Malaysia (Chapter 4), cultural dimensions significantly predicted liking for the Pop factor, and there was a specific relationship between variables of HAP and liking for Pop genre. Finally, in Australia (Chapter 5) cultural dimensions did not predict the liking for any music.

8.1.2 Goals of Music Consumption

To assess music consumption, goals of music consumption was measured to be tested against specific cultural dimensions that will allow better understanding of culture's influence on music consumption. Within Japan (Chapter 2), cultural dimensions significantly predicted the goals of consuming music for Identity, Coping, Trendy and Time but not Activity. Additionally, tightness predicted the use of music to cope with daily stressors, while relational mobility significantly predicted using music for identity expression. Both of these relationships were hypothesized based on prior research (Gelfand, 2006; Takemura, 2014). Aside from the hypothesized specific relationships, there were a few other unexpected relationships between variables: tightness predicted using music to be trendy, while HAP predicted using music for identity expression and being trendy, and LAP predicted using music for coping and passing time.

In China (Chapter 3), cultural dimensions significantly predicted four out of seven factors for the goals of music consumption, namely Coping, Trendy, Solace and Boredom. There were also some specific relationships observed between the variables, namely that

relational mobility predicted using music for coping with stressors, while HAP predicted using music for being trendy and relieving boredom.

Malaysia (Chapter 4) showed that cultural dimensions significantly predicted four out of the six factors for the goals of music consumption, namely Coping, Boredom, Learning and Time. There were also some significant relationships between specific variables that were hypothesised, namely that tightness will significantly predict the use of music for coping with daily stressors. In addition to this, there were also additional significant findings that were not expected, namely that tightness predicted using music to alleviate boredom and learn things, while HAP predicted using music to pass time.

Finally, in Australia (Chapter 5) two out of six uses of music were significantly related to culture, namely Relationships and Entertainment. In addition to these more general relationships, tightness predicted using music to express identity and HAP predicted using music to form and maintain relationships.

The findings here indicate that culture can have overall predictive utility for musical taste and goals of consuming music as the findings and results suggest there to be significant relationships between them. Although the findings do not reflect consistent relationships across cultures in each country, it does suggest that within each country the influence of culture on the music consumption of individuals has some merit and is worth further consideration and investigation.

8.1.3 Socioeconomic status

The results also showed that socioeconomic status could significantly predict the goals of music consumption and musical taste of individuals. Socioeconomic status was included in the research as it is arguably related to various cultural dimensions (e.g., power distance) as a consequence of its impact on social hierarchies. There were some interesting

findings concerning this variable within the four countries. For example, subjective socioeconomic status significantly predicted the musical taste and goals of music consumption of individuals in Japan, China and Australia. However, Malaysia only produced significant regression models between socioeconomic status and goals of music consumption, while there were no significant regressions observed in relation to musical taste.

In summary, Chapters 2-5 here show that there is reasonable justification to conclude that cultural dimensions can predict the musical taste and goals of music consumption of individuals. The relationship appears to be wider-ranging in the case of uses of music rather than musical taste. The findings of these four chapters reflect culture's influence on music consumption at an individual level within each specific country.

8.2 Chapter 6

Chapter 6 found significant interactions at a cross-cultural level concerning culture and goals of music consumption, and common relationships concerning how culture affects musical behaviour across four countries. While arguably less theoretically-interesting, these common relationships speak directly to the research question of the thesis concerning how culture relates to musical behaviour. This chapter utilized the data from the previous four chapters to conduct a cross-national analysis of the relationships between cultural dimensions and goals of music consumption. A mixed-model approach was used here where country was entered as a random effect to represent it as a moderator for the relation between cultural dimensions and goals of music consumption. With regard to the common relationships across all four countries, cultural tightness significantly predicted the use of music to cope with daily stressors and identity expression. HAP ideal affect significantly predicted using music for both forming and maintaining relationships and also relaxing across all four countries. Aside from these common relationships across countries, specific interactions were also observed between countries. For instance, relational mobility predicted the use of music for identity

expression differently between Australia and Japan. Cultural tightness predicted the use of music for learning differently between Australia, Japan and Malaysia. Furthermore, LAP predicted the use of music for learning differently between Australian and Japanese participants, while HAP predicted that using music to form and maintain relationships were different between Australian and Malaysian participants respectively. The findings of this chapter complement the findings of the previous four chapters as they widen the scope of the conclusions to a cross-country comparison rather than an in-country analysis. Furthermore, the findings here also provide better insight into how music might be affected by culture on a broader and cross-cultural level.

8.3 Chapter 7

Chapter 7 described looked at top charting music on Spotify across over 60 countries. It investigated whether there were significant relationships between national individualism-collectivism scores, gender inequality scores and the number of unique artists, total band size, and proportion of each band comprising female artists. All hypotheses were supported showing that national scores for individualism collectivism significantly predicted the number of unique artists and the band size of top charting songs on Spotify, while national scores on the gender inequality index significantly predicted the proportion of female artists. This chapter adds to the findings of the thesis on a broader level where national culture can be seen to be quite significant predictors in the way music is used and consumed as reflected on top charts of songs.

All together, the findings of all six research chapters within this thesis found significant relationships between various aspects of culture and music consumption. The findings of the thesis were regularly consistent with hypothesised relationships, but the research also identified several novel and unexpected (but intuitive) relationships that deserve further research to develop our understanding of the theoretical processes in question. For

example, despite there being prior literature that indicates tighter countries are more inclined to be adapted to learning and picking up trends due to the conforming nature of society, the interaction between Japan and Malaysia (both which are considered tight countries) showed opposing relationships between tightness and using music to learn.

More generally, the findings here were obtained using different means of assessing culture as can be seen across the different chapters: it was considered at an individual level within specific countries (Chapters 2-5), at the individual level across multiple countries (Chapter 6), and national aggregate scores for cultural orientations (Chapter 7). In each case, the findings of the thesis showed significant relationships showing that culture influences musical behaviour, irrespective of how the former is conceptualised. This in turn supports the overall research question of the thesis.

8.4 Theoretical Contributions

The cultural dimensions employed within the current thesis have not previously been applied to music widely, and in some cases not at all. The literature reviewed in this thesis indicates that there is an emerging body of research on the application of these dimensions to music consumption.

Aside from that, the current findings align with and extend findings from two directly relevant pieces of earlier research. First, like Boer et al. (2012) the present findings also show that cross-cultural variables can influence musical behaviour. Specifically, the current thesis reiterates Boer et al.'s (2012) finding that cultural factors can predict the social functions of music use amongst individuals. The current findings are also consistent with the findings of Liew et al. (2021) in showing that individuals' culture and affective state influence their musical consumption. The findings here further support the apparent relevance of cultural variables in music consumption.

The current findings also highlight however that there is a lack of understanding of the theoretical basis of several of the relationships concerning culture and music. An example of this is highlighted by the interactions of LAP and using music to learn between Japanese and Australian participants. There has been no prior literature that can assist in interpreting this pattern of findings, and so a significant amount of future research will be needed to explain what is driving this particular pattern of findings. The present research also of course makes theoretical contributions to our understanding of music psychology. As noted at the beginning of the thesis there is a dearth of evidence concerning how specifically musical behaviour relates to cultural factors at Doise's ideological level, and the present research is one of very few attempts to date to address this. The quantification here of new and interesting relationships concerning cultural factors and musical behaviour deserves to be investigated further. There are also hypotheses that can be refined further: for instance, the relationship between relational mobility and niche genres might be negative (rather than positive as proposed earlier) since liking for niche genres of music could make an individual unique and standout, but may also make it harder for others to connect with them.

The encouraging findings here also lead us to speculate that other cultural dimensions that have not been studied previously in this context can be mapped onto music consumption. For example, individualism and collectivism could also be applied to musical taste by research that is similar to that reported in Chapters 2-5. Furthermore, other cultural frameworks like Hofstede's dimensions (Hofstede, 2011) could also be applied similarly to determine how they map onto music consumption. The same approach could be attempted at an aggregated national level. For example, the number of unique artists within charting songs might also correlate with cultural tightness, since tighter cultures are less inclined to be open and acceptable towards new products (Li et al., 2017).

Finally, the findings may also apply to our understanding of consumer psychology. Music consumption is also a form of consumerism, and although there is a larger literature concerning how culture relates to consumption in general, the findings in the present research are particularly interesting given the growing commercial significance of music streaming. An example of this would be the limited research to date within the field of consumer psychology that has investigated consumer behaviour in relation to the specific cultural dimensions employed within this thesis. As such, the present thesis could act as a precedent in the l consumer psychology literature by indicating that factors such as tightness and ideal affect provide a much better understanding of consumer behaviour in general than has been shown to date. For example, the finding that tightness correlates across multiple cultures with using music for identity expression might translate to other means of consumerism that concern identity expression.

8.5 Practical Implications

Aside from theoretical contributions, there are also several managerial implications of the findings reported here. The main implication is that the findings concerning culture could be mapped onto the musical taste of individuals and societies. For instance, streaming services could promote particular genres so that consumers in tighter societies (which are more reluctant to accept newer works as they are more inclined to adhere to the norm) receive fewer recommendations for new music. Perhaps these same services should also attempt to measure for instance a given user's level of tightness. The findings of the thesis provide specific directions for this across the countries investigated: for example, tightness within Malaysia seems to predict a greater liking for pop genres of music. Additionally within China, liking for non-mainstream music (e.g., rock, metal) seems to be predicted significantly by cultural dimensions which can suggest culture's influence on liking for this genre. Furthermore, as found in Chapter 7, individualism also correlated significantly with a higher

number of unique artists appearing on the charts, which implies that there should be a wider range of artists promoted within more individualistic countries. More specifically, the findings can be used in the field of advertising in hopes that a particular piece of music might attract the attention of more individuals within society.

Another managerial implication of the current findings concerns refining the music recommendation algorithms used by streaming companies. As discussed earlier, the current preferred method of consuming music is increasingly leaning towards music streaming. The basis of music streaming is largely reliant on the algorithms that power recommendation systems, suggesting new tracks that align with the music typically enjoyed by the consumers in question (O'Dair & Fry, 2019). These algorithms help consumers discover new music that aligns with their tastes based on previous consumption patterns which might lead to motivation or intention to continue subscribing to the streaming service. As such, better finetuning of the algorithm has implications for revenue. For instance, the recommendation systems can adopt the findings here to better inform the musical taste of individuals with certain cultural orientations.For example, the chapter concerning Japan shows that liking for rock music genres seems to be related to a user's scores on cultural dimensions.

Finally, the current findings can also help improve the application of music in different contexts depending on what individuals need it for. The findings here on the goals of music consumption shed light on how music can be applied to different situations where individuals try to achieve specific goals. Aside from individuals, these findings can similarly be applied by streaming companies where they might promote music differently in different cultures to match the specific goals of consumption. For example, the findings of common relationships across between cultural dimensions and using music to achieve particular goals can be applied by streaming companies in developing playlists to suit particular purposes. Moreover, the finding that individuals from Japan and Australia have different inclinations

between LAP ideal affect and using music to learn about new trends means that consumers in those countries use music differently to learn about trends, and so content in particular countries or for particular consumers can be tailored accordingly. . However, the findings here of course need further investigation in a wider range of countries before they can be applied more generally.

The findings and interpretation here are based on student samples, and so it is not clear to what extent they can extrapolated to entire national populations. This remains an issue for future research. However, two points are worth making in this context. First there are no grounds to suspect that the profiles of cultural values found in the present samples should be unique to students. Second the dimensions investigated here can be assessed in any individual, and so a given profile of cultural values ought to give rise to a particular type of music consumption irrespective of whether the person concerned is a student. This remains an empirical argument, however, until such time as data is collected with non-student samples.

8.6 Limitations and Future Research

While the current thesis has uncovered many new relationships that are interesting and novel, there are also some limitations to the conclusions and research presented here. Different individuals of course have differing cultural values, and so the specific relationships between cultural dimensions and music reported in Chapters 2-5 apply at the level of individuals rather than the level of groups or countries. Similarly, culture accounted for only a portion of the variance in individuals' musical taste and goals of consuming it. There are undoubtedly other variables that could potentially account for a similar (or larger) amount of variance. In this context it should also be noted, however, that the relatively small effect sizes identified here concerning culture are often observed in social psychological research concerning music (e.g., Schäfer & Mehlhorn, 2011; Way et al., 2020). Future research should

expand to a greater number of countries than tested here and employ a wider range of cultural dimensions to provide a more comprehensive overview of how culture relates to music consumption. This includes potentially comparing data concerning newer cultural dimensions against those which are more established in the literature. This might provide deeper insights into the different cultural dimensions which allows for results that are comparable to previous studies and build upon these.

Another limitation of the current research (and much of the literature on musical taste) is the lack of a pre-existing reliable measure of musical taste that can be used across various cultures. It is notable that the musical taste measure did not achieve measurement equivalence in the comparison chapter (Chapter 6). A more concrete illustration of this is provided by the differing factor structures for musical taste that were identified in each country investigated in Chapters 2-5. Although this clearly illustrates that the notion of 'music' differs between cultures, it also hinders attempts to make direct comparisons of musical taste across multiple cultures. Studies could look at conceptualizing a measure that is cross-culturally sound where there are a set number of genres that are likely defined and interpreted similarly across multiple cultures. Building on this point, this thesis also did not fully consider the impact of local music genres and styles that are popular in only specific societies/countries. Future research should attempt to include local music styles (e.g., Dikir Barat in Malaysia, C-Pop in China) and measure the relationship between liking for these and cultural dimensions. As explained earlier in the thesis, local music styles were not considered here to allow for a more general list of genres that could be compared cross-culturally, but inclusion of these will be essential to eventually gaining a full understanding of the relationship between music consumption and culture.

Furthermore, there is a lack of consideration for specific individual differences within the chapters of the thesis. For instance, the studies here did not quite consider factors like

gender, age or musical background which may have accounted for some variance in the relationship between music consumption and cultural dimensions. Future research could incorporate these variables to identify any potential confounding influences. It would also have been interesting to consider time as a variable. For example, Mittal and Royne (2010) concluded that there is intergenerational influence on consumption choices for products ranging from cosmetics and makeup to food. It would be interesting to investigate how cultural values and musical behavior are transmitted between generations. Additionally, data collection took place during the COVID-19 pandemic, and it remains unclear what if any long-term impacts this might have on musical trends and consumption in general.

Additionally, future research might also want to challenge the convention within the cross-cultural literature that culture is the main influencer that shapes an individuals' (music) consumption: it may be fruitful to consider alternative assumptions such as music consumption potentially shaping one's cultural orientations or values instead. Although cross-cultural research typically characterises culture as an independent variable, the evidence is only correlational and so directionality cannot be inferred.

Finally, another potential limitation of the thesis is the reliance on a self-developed measure of musical taste. Within the literature, there are a number of measures quite commonly used to assess an individual's musical preference (e.g., STOMP-R) (Rentfrow & Gosling, 2003) which have produced variable findings in different cultures. However, Boer et al.'s (2012) measure does appear to have promise in cross-cultural contexts and it's omission here is unfortunate. The present findings, showing differences in musical taste and uses of music across cultures, highlight the need for psychometrically-sound measures that function across and within specific cultures.

8.7 Conclusion

To conclude, the overarching research question of this thesis was to better understand the relationship between culture and music psychology. In doing so, six separate studies were conducted where culture was considered from the individual level to a nationally-aggregated level. The findings indicate to some extent at least that culture relates to people's musical taste and the ways in which they use music. This extends our understanding of cross-cultural psychology, consumer psychology, and the social psychology of music, as the current thesis is also one of the earlier works to assess the relationship between culture and music in more than two countries, and to have utilised ideal affect, relational mobility, tightness, and individualism in doing so. Recent years have seen significant technological changes and shifts in music consumption: there is a clear need to better understand music consumption in the context of nationwide patterns of usage and unprecedented choice. We look forward to future research extending the work of the current thesis.

REFERENCES

Abdul-Latif, S., & Abdul-Taib, A. (2020). An examination of ethnic-based consumer ethnocentrism and consumer animosity. *Journal of Islamic Marketing, 13*(4), 781-806. https://doi.org/10.1108/JIMA-08-2019-0165

Adler, N. E., Epel, E. S., Castellazzo, G., & Ickovics, J. R. (2000). Relationship of subjective and objective social status with psychological and physiological functioning: Preliminary data in healthy, White women. *Health Psychology*, 19(6), 586–592. https://doi.org/10.1037/0278-6133.19.6.586

Anderson, A., Maystre, L., Mehrotra, R., Anderson, I., & Lalmans, M. (2020, April 20–24). *Algorithmic effects on the diversity of consumption on Spotify* [Conference session]. Proceedings of the Web Conference 2020 (WWW' 20), Taipei. https://doi.org/10.1145/3366423

Australian Bureau of Statistics [ABS] (2022). Cultural diversity of Australia. https://www.abs.gov.au/articles/cultural-diversity-australia

Bello, P., & Garcia, D. (2021). Cultural divergence in popular music: The increasing diversity of music consumption on Spotify across countries. *Humanities and Social Sciences Communications*, 8, Article 182. https://doi.org/10.1057/s41599-021-00855-1

Berry, J. W. (1979). A cultural ecology of social behavior. *Advances in Experimental Social Psychology, 12*, 177-206. https://doi.org/10.1016/S0065-2601(08)60262-2

Beugelsdijk, S., & Welzel, C. (2018). Dimensions and dynamics of national culture: Synthesizing Hofstede with Inglehart. *Journal of Cross-cultural Psychology*, 49(10), 1469–1505. https://doi.org/10.1177/0022022118798505

Bian, Q., & Forsythe, S. (2012). Purchase intention for luxury brands: A cross cultural comparison. *Journal of Business Research, 65*(10), 1443-1451. https://doi.org/10.1016/j.busres.2011.10.010

Bicknell, J. (2007). Explaining strong emotional responses to music: sociality and intimacy. *Journal of Consciousness Studies, 14*, 5-23.

Boer, D., & Fischer, R. (2012). Towards a holistic model of functions of music listening across cultures: A culturally decentred qualitative approach. *Psychology of Music*, 40(2), 179–200. https://doi.org/10.1177/0305735610381885

Boer, D., Fischer, R., Strack, M., Bond, M. H., Lo, E., & Lam, J. (2011). How shared preferences in music create bonds between people: Values as the missing link. *Personality and Social Psychology Bulletin*, 37(9), 1159–1171. https://doi.org/10.1177/0146167211407521

Bullock, H. E., & Limbert, W. M. (2003). Scaling the socioeconomic ladder: Low-income women's perceptions of class status and opportunity. *Journal of Social Issues*, 59(4), 693–709.

Cespedes-Guevara J., & Eerola T. (2018). Music communicates affects, not basic emotions: A constructionist account of attribution of emotional meanings of music. *Frontiers in Psychology*, 9, Article 215. https://doi.org/10.103389/fpsyg.2018.00215

Chan, R. Y. K., & Lau, L. B. Y. (2002). Explaining green purchasing behavior. *Journal of International Consumer Marketing, 14*(2-3), 9-40. https://doi.org/10.1300/J046v14n02_02

Charmorro-Premuzic, T., Fagan, P., & Furnham, A. (2010). Personality and uses of music as predictors of preferences for music consensually classified as happy, sad, complex, and social. *Psychology of Aesthetics, Creativity and the Arts, 4*(4), 205-213. https://doi.org/10.1037/a0019210

Chamorro-Premuzic, T., & Furnham, A. (2010). Personality and music: Can traits explain how people use music in everyday life? *British Journal of Psychology, 98*(2), 175-185. https://doi.org/10.1348/000712606X111177

Choi, J., Lee, G., & Lee, J. (2021). The effects of valence and arousal on time perception in depressed patients. *Psychology Research and Behavior Management, 14*, 17-26. https://doi.org/10.2147/PRBM.S287467

Chua, R. Y. J., Huang, K. G., Jin, M. (2019). Mapping cultural tightness and its links to innovation, urbanization, and happiness across 31 provinces in China. *Psychological and Cognitive Sciences, 116*(14), 6720-6725. https://doi.org/10.1073/pnas.1815723116

Chung, Y., Greasley, A., & Hu, L. (2017). The relationship between musical preferences and type D personality. *Psychology of Music*, 47, 3–17. https://doi.org/10.1177/0305735617733809

Colley, A. (2008). Young people's musical taste: Relationship with gender and gender-related traits. *Journal of Applied Social Psychology, 38*(8), 2039-2055. https://doi.org/10.1111/j.1559-1816.2008.00379.x

Coulangeon, P. (2015). Social mobility and musical tastes: A reappraisal of the social meaning of taste eclecticism. *Poetics, 51*, 54-68. https://doi.org/10.1016/j.poetic.2015.05.002

Corazza, G. E., & Lubart, T. (2020). The Big Bang of originality and effectiveness: A

dynamic creativity framework and its application to scientific missions. *Frontiers

in Psychology, 11,* Article 575067. https://doi.org/10.3389/fpsyg.2020.575067

Curhan, K., Levine, C., Markus, H., Kitayama, S., Park, J., Karasawa, M., Kawakami, N.,

Love, G., Coe, C., Miyamoto, Y., & Ryff, C. (2014). Subjective and objective

hierarchies and their relations to psychological well-being: A U.S./Japan

comparison. *Social Psychological and Personality Science*, 5(8), 855–

864. https://doi.org/10.1177/1948550614538641

De Mooij, M., & Hofstede, G. (2002). Convergence and divergence in consumer behavior:

implications for international retailing. *Journal of Retailing, 78*(1), 61-69.

https://doi.org/10.1016/S0022-4359(01)00067-7

Devenport S., & North A. (2019). Predicting musical taste: Relationships with personality

aspects and political orientation. *Psychology of Music*, 47(6), 834–

847. https://doi.org/10.1177/0305735619864647

de Vries, R., & Reeves, A. (2021). What does it mean to be a cultural omnivore?

Conflicting visions of omnivorousness in empirical research. *Sociological

Research Online*, 27(2), 292–312. https://doi.org/10.1177/13607804211006109

Di Santo, D., Talamo, A., Bonaiuto, F., Cabras, C., & Pierro, A. (2021). A multilevel

analysis of the impact of unit tightness vs. looseness culture on attitudes and

behaviors in the workplace. *Frontiers in Psychology, 12*, 652068.

https://doi.org/10.3389/fpsyg.2021.652068

Dong, Y., & Peng, C. J. (2013). Principled missing data methods for

researchers. *SpringerPlus*, 2, Article 222. https://doi.org/10.1186/2193-1801-2-222

Elvers, P., Omigie, D., Fuhrmann, W., & Fischinger, T. (2015). Exploring the musical taste of expert listeners: musicology students reveal tendency toward omnivorous taste. *Frontiers in Psychology, 6*, 1252. https://doi.org/10.3389/fpsyg.2015.01252

Ferwerda, B., Marko, T., & Markus, S. (2009, August 31). Personality traits and music genre preference: How music taste varies over age groups. In Proceedings of the 1st Workshop on Temporal Reasoning in Recommender Systems (RecTemp) at the 11th ACM Conference on Recommender Systems (pp. 16–20). Jönköping University. http://urn.kb.se/resolve?urn=urn:nbn:se:hj:diva-36884

Franzini, L., & Fernandez-Esquer, M. E. (2006). The association of subjective social status and health in low-income Mexican-origin individuals in Texas. *Social Science & Medicine*, 63(3), 788–804. https://doi.org/10.1016/j.socscimed.2006.01.009

Fung, C. V. (1994). Undergraduate nonmusic majors' world music preferences and multicultural attitudes. *Journal of Research in Music Education*, 42(1), 45–57. https://doi.org/10.2307/3345336

Gelfand, M. J., Nishii, L., & Raver, J. (2006). On the nature and importance of cultural tightness-looseness. *Journal of Applied Psychology*, 91(6), 1225–1244. https://doi.org/10.1037/0021-9010.91.6.1225

Gelfand, M. J., Raver, J. L., Nishii, L., Leslie, L. M., Lun, J., Lim, B. C., Duan, L., Almaliach, A., Ang, S., Arnadottir, J., Aycan, Z., Boehnke, K., Boski, P., Cabecinhas, R., Chan, D., Chhokar, J., D'Amato, A., Ferrer, M., Fischlmayr, I. C., . . .Yamaguchi S. (2011). Difference between tight and loose cultures: A 33-nation study. *Science*, 332(6033), 1100–1104. https://doi.org/10.1126/science.1197754

Gilbert, P. (2014). The origins and nature of compassion focused therapy. *British Journal of Psychology*, 53, 6–41. https://doi.org/10.1111/bjc.12043

Hamamura, T. (2011). Social class predicts generalized trust but only in wealthy societies. *Journal of Cross-Cultural Psychology*, 43(3), 498–509. https://doi.org/10.1177/0022022111399649

Hamamura, T., Xu, Q., & Du, Y. (2011). Culture, social class, and independence-interdependence: The case of Chinese adolescents. *International Journal of Psychology, 48*(3), 344-351. https://doi.org/10.1080/00207594.2011.647030

Hofstede, G. (2011). Dimensionalizing cultures: The Hofstede model in context. *Online Readings in Psychology and Culture*, 2(1). https://doi.org/10.9707/2307-0919.1014

International Federation of the Phonographic Industry. (2022). *Global music report: State of the Industry*. https://globalmusicreport.ifpi.org/

Ingham, T. (2021, June 30). The music industry's shift to digital in Japan appears to be gaining tractions. *Musicbusiness Worldwide*. https://musicbusinessworldwide.com/japan-line-misaki-iki-traction-line/

Juslin, P. N. (2013). What does music express? Basic emotions and beyond. *Frontiers in Psychology*, 4, Article 596. https://doi.org/10.3389/fpsyg.2013.00596

Juslin, P. N., Barradas, G. T., Ovsiannikow, M., Limmo, J., & Thompson, W. F. (2016). Prevalence of emotions, mechanisms, and motives in music listening: A comparison of individualist and collectivist cultures. *Psychomusicology: Music, Mind, and Brain, 26*(4), 293–326. https://doi.org/10.1037/pmu0000161

Juslin, P. N., & Sloboda, J. A. (2001). *Music and emotion: Theory and research*. Oxford University Press.

Kaasa, A. (2021). Merging Hofstede, Schwartz, and Inglehart into a single system. *Journal of Cross-Cultural Psychology*, 52(4), 339–353. https://doi.org/10.1177/00220221211011244

Kang, M., & Moscardo, G. (2007). Exploring cross-cultural differences in attitudes between responsible tourist behaviour: A comparison of Korean, British and Australian tourists. *Asia Pacific Journal of Tourism Research, 11*(4), 303-320. https://doi.org/10.1080/10941660600931143

Killin, A. (2018). The origins of music: Evidence, theory, and prospects. *Music and Science, 1.* https://doi.org/10.1177/2059204317751971

Kim, J., Forsythe, S., Gu Q., & Moon, S. (2002). Cross-cultural consumer values, needs and purchase behaviour. *Journal of Consumer Marketing*, 19(6), 481–502. https://doi.org/10.1108/07363760210444869

Koelsch, S., Jacobs, A. M., Menninghaus, W., Liebel, K., Klann-Delius, G., von Scheve, C., & Gebauer, G. (2015). The quartet theory of human emotions: An integrative and neurofunctional model. *Physics of Life Reviews*, 13, 1–27. https://doi.org/10.1016/j.plrev.2015.03.001

Konečni, V. J. (2010). The influence of affect on music choice. In P. N. Juslin & J. A. Sloboda (Eds.), *Handbook of music and emotion: Theory, research, applications* (pp. 698-723). Oxford University Press.

Koo, M. (2022). Residential mobility and consumer psychology through a cultural lens. *Journal of Consumer Psychology*, 32(3), 541–546. https://doi.org/10.1002/jcpy.1309

Krumhansl, C. L. (2017). Listening niches across a century of popular music. *Frontiers in Psychology*, 8, Article 341. https://doi.org/10.3389/fpsyg.2017.00341

Kuppens, P. (2008). Individual differences in the relationship between pleasure and arousal. *Journal of Research in Personality, 42*(4), 1053-1059. https://doi.org/10.1016/j.jrp.2007.10.007

Laukka, P. (2007). Uses of music and psychological well-being among the elderly. *Journal of Happiness Studies, 8*, 215-241. https://doi.org/10.1007/s10902-006-9024-3

Lech, M. E., Lehmann, S., & Juul, J. L. (2024). Is it getting harder to make a hit? Evidence from 65 years of US music chart history. *arXiv,* 2405.07574. https://doi.org/10.48550/arXiv.2405.07574

Li, C. (2013). Little's test of missing completely at random. *The Stata Journal*, 13(4), 795–809. https://doi.org/10.1177/1536867X1301300407

Li, G. C. (2021). From parvenu to 'highbrow' tastes: The rise of cultural capital in China's intergenerational elites. *The British Journal of Sociology, 72*(3), 514-530. https://doi.org/10.1111/1468-4446.12862

Li, M. M., Wang, S., & Lin, Y. (2023). The causal effect of relational mobility on integration of social networks: An agent-based modeling approach. *Current Psychology*, 42(25), 21900–21916. https://doi.org/10.1007/s12144-022-03130-x

Li, R., Gordon, S., & Gelfand, M. J. (2017). Tightness-looseness: A new framework to understand consumer behavior. *Journal of Consumer Psychology*, 27(3), 377–391. https://doi.1016/j.jcps.2017.04.001

Liew, K., Koh, A. H. Q., Fram, N. J., Brown, C. M., dela Cruz, C., Li, N. L., Hennequin, R., Krause, A. E., & Uchida, Y. (2021). Groovin' to the cultural beat: Preferences for danceable music represent cultural affordances for high-arousal negative emotions. *PsyArVix*. https://doi.org/10.31234/osf.io/eqd8t

Liew, K., Uchida, Y., Domae, H., & Koh, A. H. Q. (2023). Energetic music is used for anger downregulation: A cross-cultural differentiation of intensity from rhythmic arousal. *Journal of Applied Social Psychology*, 53(7), 662–673. https://doi.org/10.1111/jasp.12951

Liu, M., Hu, X., & Schedl, M. (2019). The relation of culture, socio-economics, and friendship to music preferences: A large-scale, cross-country study. *PLOS ONE*, 14(2), Article e0212495. https://doi.org/10.1371/journal.pone.0212495

Liu, P., Chan, D., Qiu, L., Tov, W., & Tong, V. (2018). Effects of cultural tightness-looseness and social network density on expression of positive and negative emotions: A large-scale study of impression management by Facebook users. *Personality and Social Psychology Bulletin*, 44(11), 1567–1581. https://doi.org/10.1177/0146167218770999

Lonsdale, A. J. (2018). Emotional intelligence, alexithymia, stress, and people's reasons for listening to music. *Psychology of Music, 47*(5), 680-693. https://doi.org/10.1177/0305735618778126

Lonsdale, A. J., & North, A. C. (2011). Why do we listen to music? A uses and gratifications analysis. *British Journal of Psychology*, 102(1), 108–134. https://doi.org/10.1348/000712610x506831

Matsumoto, D. (1996). *Culture and psychology*. Brooks/Cole Publishing.

Matsumoto, D. (2007). Culture, context and behavior. *Journal of Personality, 75*(6), 1285-1320. https://doi.org/10.1111/j.1467-6494.2007.00476.x

Matsumoto, D., & Yoo, S. H. (2006). Towards a new generation of cross-cultural research. *Perspectives on Psychological Science, 1*(3), 234-250. https://doi.org/10.1111/j.1745-6916.2006.00014.x

Masuda T., Nisbett R.E. (2001). Attending holistically versus analytically: Comparing the context sensitivity of Japanese and Americans. *Journal of Personality and Social Psychology*, 81, 922–934.

Markus H.R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, 98, 224–253.

McManus, M. D., Siegel, J. T., & Nakamura, J. (2019). The predictive power of low-arousal positive affect. *Motivation and Emotion*, 43, 130–144. https://doi.org/10.1007/s11031-018-9719

McQuail, D., Blumler, J. G., & Brown, J. R. (1972). The television audience: A revised perspective. In McQuail D. (Ed.), *Sociology of mass communications* (pp. 135–165). Penguin Publishing.

McSweeney, B. (2002). Hofstede's model of national culture differences and their consequences: A triumph of faith—a failure of analysis. *Human Relations*, 55, 89–118. https://doi.org/10.1177/0018726702551004

Mehr, S. A., Singh, M., Knox, D., Ketter, D. M., Pickens-Jones, D., Atwood, S., Lucas, C., Jacoby, N., Egner, A. A., Hopkins, E. J., Howard, R. M., Hartshorne, J. K., Jennings, M. V., Simson, J., Bainbridge, C. M., Pinker, S., O'Donnell, T. J., Krasnow, M. M., & Glowacki, L. (2019). Universality and diversity in human song. *Science, 366*(6468), eaax0868. https://doi.org/10.1126/science.aax0868

Mellander, C., Florida, R., Rentfrow, P. J., & Potter, J. (2018). The geography of music preferences. *Journal of Cultural Economics*, 42, 593–618. https://doi.org/10.1007/s10824-018-9320-x

Merz, Z., Lace, J., Coleman, T., & Roth, R. (2020). Challenging the presumptive link between musical preferences and aggression. *Psychology of Music*, 49(6), 1515–1531. https://doi.org/10.1177/0305735620963756

Meuleman, R. (2021). Cultural connections: The relation between cultural tastes and socioeconomic network resources. *Poetics*, 86, Article 101540. https://doi.org/10.1016/j.poetic.2021.101540

Mittal, B., & Royne, M. B. (2010). Consuming as a family: Modes of intergenerational influence on young adults. *Journal of Consumer Behaviour, 9*(4), 239-257. https://doi.org/10.1002/cb.315

Miyamoto, Y. (2017). Culture and social class. *Current Opinion in Psychology*, 18, 67–72. https://doi.org/10.1016/j.copsyc.2017.07.042

Mithen, S. (2006). *The Singing Neanderthals*. Weidenfeld & Nicholson.

Montagu, J. (2017). How music and instruments began: A brief overview of the origin and entire development of music, from its earliest stages. *Frontiers in Sociology, 2.* https;//doi.org/10.3389/fsoc.2017.00008

Nettl, B. (2005). *The study of ethnomusicology*. University of Illinois Press.

Nguyen, A. N. H., Johnson, T. E., Jeffery, D. W., Danner, L., & Bastian, S. E. P. (2019). A cross-cultural examination of Australian, Chinese and Vietnamese consumers' attitudes towards a new Australian wine product containing *Ganoderma lucidum* extract. *Food Research International, 115*, 393-399. https://doi.org/10.1016/j.foodres.2018.10.086

Nobles, J., Weintraub, M. R., & Adler, N. E. (2013). Subjective socioeconomic status and health: Relationships considered. *Social Science and Medicine*, 82, 58–66. https://doi.org/10.1016/j.socscimed.2013.01.021

North, A. C. (2010). Individual differences in musical taste. *The American Journal of Psychology*, 123(2), 199–208. https://doi.org/10.5406/amerjpsyc.123.2.0199

North, A. C., & Davidson, J. W. (2013). Musical taste, employment, education and global region. *Scandinavian Journal of Psychology, 54*(5), 432-441. https://doi.org/10.1111/sjop.12065

North, A. C., Desborough, L., & Skarstein, L. (2005). Musical preference, deviance, and attitudes towards celebrities. *Personality and Individual Differences*, 38(8), 1903–1914. https://doi.org/10.1016/j.paid.2004.11.016

North, A. C., Hargreaves, D. J., & Hargreaves, J. J. (2004). Uses of music in everyday life. *Music Perception*, 22(1), 41–77. https://doi.org/10.1525.mp.2004.22.1.41

North, A. C., Krause, A. E., & Ritchie, D. (2021). The relationship between pop music and lyrics: A computerized content analysis of the United Kingdom's weekly top five singles, 1999-2013. *Psychology of Music, 49*(4), 735-758. https://doi.org/10.1177/0305735619896409

North, A. C., Krause, A. E., Sheridan, L. P., & Ritchie, D. (2017). Energy, typicality, and music sales: A computerized analysis of 143,353 pieces. *Empirical Studies of the Arts, 35*(2), 214-229. https://doi.org/10.1177/0276237416688063

North, A. C., Krause, A. E., Sheridan, L. P., & Ritchie, D. (2019). Popularity, mood, energy and typicality in music: A computerized analysis of 204,506 pieces. *Psychology of Aesthetics, Creativity, and the Arts*, 13(1), 89–109. https://doi.org/10.1037/aca0000165

O'Dair, M., & Fry, A. (2019). Beyond the black box in music streaming: the impact of recommendation systems upon artists. *Popular Communication, 18*(1), 65-77. https://doi.org/10.1080/15405702.2019.1627548

Papinczak, Z. E., Dingle, G. A., Stoyanov, S. R., Hides, L., & Zelenko, O. (2015). Young people's uses of music for well-being. *Journal of Youth Studies, 18*(9), 1119-1134. https://doi.org/10.1080/13676261.2015.1020935

Park, M., Park, J., Baek, Y. M., Macy, M. (2017). Cultural values and cross-cultural video consumption on YouTube. *PlosOne, 12*(5), e0177865. https://doi.org/10.1371/journal.pone.0177865

Park, M., Thorn, J., Mennicken, S., Cramer, H., & Macy, M. (2019). Global music streaming data reveal diurnal and seasonal patterns of affective preference. *Nature Human Behavior, 3*, 220-236. https://doi.org/10.1038/s41562-018-0508-z

Park, B., Tsai, J. L., Chim, L., Blevins, E., & Knutson, B. (2015). Neural evidence for cultural differences in the valuation of positive facial expressions. *Social Cognitive and Affective Neuroscience*, 11(2), 243–252. https://doi.org/10.1093/scan/nsv113

Park, J., Ko, E., & Kim, S. (2010). Consumer behavior in the green marketing for luxury brand: A cross-cultural study of US, Japan and Korea. *Journal of Global Academy of Marketing Services*, 20(4), 319–333. https://doi.org/10.1080/12297119.2010.9707436

Park, M., Thorn, J., Mennicken, S., Cramer, H., & Macy, M. (2019). Global music streaming data reveal diurnal and seasonal patterns of affective preference. *Nature Human Behavior*, 3, 220–236. https://doi.org/10.1038/s41562-018-0508-z

Pratesi, F., Hu, L., Rialti, R., Zollo, L., & Faraoni, M. (2021). Cultural dimensions in online purchase behaviour: Evidence from a cross-cultural study. *Italian Journal of Marketing, 3*, 227-247. https://doi.org/10.1007/s43039-021-00022-z

Pratto, F., Çidam, A., Stewart, A. L., Zeineddine, F. B., Aranda, M., Aiello, A., Chryssochoou, X., Cichocka, A., Cohrs, J. C., Durrheim, K., Eicher, V., Foels, R., Górska, P., Lee, I., Licata, L., Liu, J. H., Li, L., Meyer, I., Morselli, D., . . .Henkel, K. E. (2013). Social dominance in context and in individuals: Contextual moderation of robust effects of social dominance orientation in 15 languages and 20 countries. *Social Psychological and Personality Science*, 4(5), 587–599. https://doi.org/10.1177/1948550612473663

Rabinowitch, T. (2023). Musical engagement as a duet of tight synchrony and loose interpretability. *Physics of Life Reviews, 44*, 122-136. https://doi.org/10.1016/j.plrev.2022.12.019

Rentfrow, P. J., & Gosling, S. D. (2003). The do re mi's of everyday life: The structure and personality correlates of music preferences. *Journal of Personality and Social Psychology, 84*(6), 1236-1256. https://doi.org/10.1037/0022-3514.84.6.1236

Rentfrow, P., Goldberg, L., & Levitin, D. (2011). The structure of musical preference: A five-factor model. Journal of Personality and Social Psychology, 100(6), 1139-1157. https://doi.org/10.1037/a0022406

Rice, T. (2013). *Ethnomusicology: A very short introduction*. Oxford University Press.

Roy Morgan. (2020). *12.7 million Australians use streaming music services.* https://www.roymorgan.com/findings/12-7-million-australians-use-streamiseven-pointrvices

Rozin, P., Kabnick, K., Pete, E., Fischler, C., & Shields, C. (2003). The ecology of eating: Smaller portion sizes in France than in the United States help explain French paradox. *Psychological Science*, 14(5), 450–454. https://doi.org/10.1111/1467-9280.02452

Ruiz-Mafe, C., Sanz-Blas, S., Hernandez-Ortega, B., & Brethouwer, M. (2013). Key drivers of consumer purchase of airline tickets: A cross-cultural analysis. *Journal of Air Transport Management, 27*, 11-14. https://doi.org/10.1016/j.jairtraman.2012.10.010

Saarikallio, S., Alluri, V., Maksimainen, J., & Toiviainen, P. (2020). Emotions of music listening in Finland and India: Comparison of an individualistic and a collectivistic culture. *Psychology of Music, 49*(4), 989-1005. https://doi.org/10.1177/0305735620917730

Sanders, A. E., Slade, G. D., Turrell, G., Spencer, A. J., & Marcenes, W. (2006). The shape of the socioeconomic-oral health gradient: Implications for theoretical explanations. *Community Dental Oral Epidemiology, 34*(4), 310-319. https://doi.org/10.1111/j.1600-0528.2006.00286.x.

San Martin, A., Schug, J., & Maddux, W. W. (2019). Relational mobility and cultural differences in analytic and holistic thinking. *Journal of Personality and Social Psychology*, 116(4), 495–518. https://doi.org/10.1037/pspa0000142

Savage, M., & Gayo, M. (2011). Unravelling the omnivore: A field analysis of contemporary musical taste in the United Kingdom. *Poetics, 39*(5), 337-357. https://doi.org/10.1016/j.poetic.2011.07.001

Schäfer, T. (2016). The goals and effects of music listening and their relationship to the strength of music preference. *PloS ONE, 11*(3), e0151634. https://doi.org/10.1371/journal.pone.0151634

Schäfer, T., & Mehlhorn, C. (2017). Can personality traits predict musical style preferences? A meta-analysis. *Personality and Individual Differences*, *116*, 265–273. https://doi.org/10.1016/j.paid.2017.04.061

Schäfer, T., Sedlmeier, P., Städtler, C., & Huron, D. (2013). The psychological functions of music listening. *Frontiers in Psychology*, 4, Article 511. https://doi.org/10.3389/fpsyg.2013.00511

Schwartz, K. D., & Fouts, G. T. (2003). Music preferences, personality style, and development issues of adolescents. *Journal of Youth and Adolescents*, 32, 205–213. https://doi.org/10.1023/A:1022547520656

Schwartz, S. H. (2012). An overview of the Schwartz theory of basic values. *Online Readings in Psychology and Culture, 2*(1). https://doi.org/10.9707/2307-0919.1116

Shavitt, S., & Cho, H. (2016). Culture and consumer behavior: the role of horizontal and vertical cultural factors. *Current Opinion in Psychology, 8*(1), 149-154. https://doi.org/10.1016/j.copsyc.2015.11.007

Sims, T., Koopman-Holm, B., Young, H., Jiang, D., Fung, H., & Tsai, J. L. (2018). Asian Americans respond less favorably to excitement (vs. calm)-focused physicians compared to European Americans. *Cultural Diversity and Ethnic Minority Psychology*, 24(1), 1–14. https://doi.org/10.1037/cdp0000171

Singelis, T. M. (1994). The measurement of independent and interdependent self-construals. *Personality and Social Psychology Bulletin, 20*(5), 580-591. https://doi.org/10.1177/0146167294205014

Singelis, T. M., Triandis, H. C., Bhawuk, D. P. S., & Gelfand, M. J. (1995). Horizontal and vertical dimensions of individualism and collectivism: A theoretical and measurement refinement. *Cross-cultural Research, 29*(3), 240-275. https://doi.org/10.1177/106939719502900302

Smith, S. L., & Boyson, A. R. (2002). Violence in music videos: Examining the prevalence and context of physical aggression. *Journal of Communication*, 52(1), 61–83. https://doi.org/10.1111/j.1460-2466.2002.tb0533.x

Statista. (2022). Leading subscription music streaming services in Japan as of October 2020. Retrieved from https://www.statista.com/statistics/1114261/japan-most-used-on-demand-music-streaming-services/#:~:text=According%20to%20an%20online%20survey,by%20Spotify%20and%20Apple%20Music

Statista. (2023). Number of monthly active users (MAU) of the leading music streaming apps in China as of 2021. Retrieved from https://www.statista.com/statistics/711295/china-leading-mobile-music-platforms-by-active-user-number/

Statista. (2024). Number of music streaming subscribers worldwide from the 1st half of

2019 to 2nd quarter 2022. Retrieved from

https://www.statista.com/statistics/669113/number-music-streaming-subscribers/.

Statista. (2021). Preference of music genres among digital music users in China as

of September 2020. Retrieved from

https://www.statista.com/statistics/898939/china-favored-music-genres-among-

online-music-listeners/

Statista. (2023). Preferred digital audio by genre in Australia as of March 2023. Retrieved

from https://www.statista.com/forecasts/1187935/preferred-digital-audio-by-genre-

in-

australia#:~:text=%22Pop%20%2F%20adult%20contemporary%20music%22,resp

ondents%20in%20Australia%2C%20in%202023.

Su, Y., & Li, Y. (2022). Relationship between subjective socioeconomic status and sense

of gain of health-care reform and the mediating role of self-rated health: A cross-

sectional study in China. *BMC Public Health, 22,* 790.

https://doi.org/10.1186/s12889-022-13106-y

Takemura, K. (2014). Being different leads to being connected: On the adaptive function

of uniqueness in "Open societies." *Journal of Cross-Cultural Psychology*, 45(10),

1579–1593. https://doi.org/10.1177/0022022114548684

Takemura, K., Hamamura, T., Guan, Y., & Suzuki, S. (2016). Contextual effect of wealth

on independence: An examination through regional differences in China. *Frontiers

in Psychology, 7.* https://doi.org/10.3389/fpsyg.2016.00384

Takemura, K., & Suzuki, S. (2015). Self-expression and relationship formation in high

relational mobility environments: A study of dual users of American and Japanese

social networking sites. *International Journal of Psychology*, 52(3), 251–255. https://doi.org/10.1002/ijop.12208

Taras, V., Kirkman, B. L., & Steel, P. (2010). Examining the impact of culture's consequences: A three-decade, multilevel, meta-analytic review of Hofstede's cultural value dimensions. *Journal of Applied Psychology*, 95(3), 405–439. https://doi.org/10.1037/a0018938

Teo, T., Hargreaves, D. J., & Lee, J. (2008). Musical preference, identification, and familiarity: A multicultural comparison of secondary students from Singapore and the United Kingdom. *Journal of Reserach in Music Education*, 56(1), 18–32. https://doi.org/10.1177/0022429408322953

Thomson, R., Yuki, M., Talhelm, T., Schug, J., Kito, M., Ayanian, A. H., Becker, J. C., Becker, M., Chiu, C., Choi, H., Ferreira, C. M., Fulop, M., Gul, P., Houghton-Illera, A. M., Joasoo, M., Jong, J., Kavanagh, C. M., Khutkyy, D., Manzi, C., . . . Visserman, M. L. (2018). Relational mobility predicts social behaviours in 39 countries and is tied to historical farming and threat. *PNAS Proceedings of the National Academy of Sciences of the United States of America*, 115(29), 7521–7526. https://doi.org/10.1073/pnas.1713191115

Triandis, H. C. (1995). *Individualism and collectivism*. Westview Press.

Trompenaars, F. (1996). Resolving international conflict: Culture and business strategy. *Business Strategy Review, 7*(3), 51-68. https://doi.org/10.1111/j.1467-8616.1996.tb00132.x

Tsai, J. L. (2017). Ideal affect in daily life: Implications for affective experience, health and social behavior. *Current Opinions in Psychology, 17*, 118-128. https://doi.org/10.1016/j.copsyc.2017.07.004

Tsai, J. L., Knutson, B., & Fung, H. H. (2006). Cultural variation in affect

valuation. *Journal of Personality and Social Psychology*, 90(2), 288–

307. https://doi.org/10.1037/0022-3514.90.2.288

Tsai, J. L., Miao, F., Seppala, E., Fung, H., & Yeung, D. (2007). Influence and adjustment

goals: Sources of cultural differences in ideal affect. *Journal of Personality and*

Social Psychology, 92, 1102–1117. https://doi.org/10.1037/0022-3514.92.6.1102

van Eijck, K. (2001). Social differentiation in musical taste patterns. *Social Forces, 79*(3),

1163-1185.

Way, S. F., Garcia-Gathright, J., & Cramer, H. (2020). Local trends in global music

streaming. *Proceedings of the International AAAI Conference on Web and Social*

Media, 14(1), 705–714. https://ojs.aaai.org/index.php/ICWSM/article/view/7336

Wolf, E. J., Harrington, K. M., Clark, S. L., & Miller, M. W. (2013). Sample size

requirements for structural equation models: An evaluation of power, bias, and

solution propriety. *Education and Psychological Measurements, 73*(6), 913-934.

https://doi.org/10.1177/0013164413495237

Xu, Y., Chen, Y., Burman, R., & Zhao, H. (2014). Second-hand clothing consumption: a

cross-cultural comparison between American and Chinese young consumers.

International Journal of Consumer Studies, 38(6), 670-677.

https://doi.org/10.1111/ijcs.12139

Yoo, Y. J., Saliba, A. J., MacDonald, J, B., Prenzler, P. D., & Ryan, D. (2013). A cross-

cultural study of wine consumers with respect to health benefits of wine. *Food*

Quality and Preference, 28(2), 531-538.

https://doi.org/10.1016/j.foodqual.2013.01.001

Appendix A

Screen grab of the JAMOVI analysis for the mixed effect model in Chapter 6 with the

equation included.

The equation states: Relaxing (Criterion Variable)~ 1 + Country + TL + RM + HAP + LAP + Country:TL + Country:RM + Country:HAP + Country:LAP