Changing perceptions: Interpretation of songs versus lyrics with a domestic violence theme

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Dedication

This thesis is dedicated to Paws and to Alba, who sacrificed many doggy walks and

adventures to sit at my feet during the time spent on this thesis.

No friendship could be more precious to me.

In loving memory of

Alba

I would also like to thank my husband, Shane, for his unwavering patience and support; and

my friend, Denyse, for her generosity and kindness.

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Abstract

Listening to songs is a frequent activity for many people in Western societies. Not only are people exposed to songs in a variety of places, but many people increasingly choose to listen to songs. Some songs are popular despite the antisocial or prosocial nature of the lyrics on important societal topics, such as domestic violence. However, both music and lyrics have the power to communicate, and are processed by the human brain at a complex and detailed level. Of interest to the present study is whether people perceive song narratives and messages differently across these two presentations. The present study explored whether people change their perception of songs with domestic violence content as promoting or opposing domestic violence, when listening to the song compared to reading the lyrics without music. Primarily, the present study aimed to explore the self-reported reasons for changes in song interpretation and perception between the two presentations. Twenty-seven adults (18 females and 9 males), aged between 18 and 65 years, participated in the study. Participants were recruited from both the community and a university in Auckland, New Zealand. A survey research design was used to obtain data in relation to each of eight songs with domestic violence content, and a mixed-method of quantitative and qualitative analyses were employed to analyse the data. The data from the present study showed few statistically significant differences in perceptions between the presentations of song versus lyrics in relation to the potentially prosocial and antisocial domestic violence content of songs. However, qualitative analyses showed that the interpretation of song narratives and messages involves information perceived from both music and lyrics, which can influence the perception of songs. The study also found that incongruence between music and lyrics can result in softer perceptions of antisocial lyrics.

Thus, people may not find antisocial messages in songs objectionable when the music of

those songs is pleasant. Implications for future research are discussed.

Table of Contents

List of Tables and Figures

The earliest record of a solo song composed for the individual voice dates back to French poet-musicians of the eleventh- and twelfth-century (Rowley, 1977). Although the composition of music for voice occurred earlier, in primitive times, these compositions were for multiple voices required in choral singing. Today, in western societies at least, not only are people exposed to solo songs (hereinafter referred to as songs) in a variety of places, such as social, religious, sporting, cultural, public, and private events, but many people also wilfully choose to listen to songs. In fact, this choice is becoming increasingly frequent. For example, in the United States people choose to listen to songs more frequently than reading books or watching movies (Rentfrow & Gosling, 2003); and, in the United Kingdom, listening to songs privately is becoming more common in workplace settings (Haake, 2011). In New Zealand the listening habits of people appears unresearched. However, the possibility exists that people here also listen to songs more often than in previous years, particularly with advances in technology and the advent of personal listening devices. Therefore, listening to songs is an accepted component of everyday living for many people.

Perhaps the popularity of songs stems from the variety of purposes they serve for various listeners. These purposes include managing mood, enhancing emotional states (Hargreaves & North, 1999; Heye & Lamont, 2010), validating memories and feelings of closeness to loved ones (Hays & Minichiello, 2005), therapeutic purposes (Bensimon & Gilboa, 2010; Miranda & Claes, 2009), enjoyment (Juslin & Laukka, 2004), inspiration, concentration, and stress relief (Haake, 2011). Therefore, the activity of listening to songs is both prevalent and purposeful for many people.

Given the prevalence and importance of songs in daily life, areas of interest in research include how music and language are processed in the human brain, the effects of each on listeners, and how people perceive and interpret songs. As will be illustrated, music and language engage the human brain at a detailed and complex level, thereby giving rise to possible effects on listeners which may influence their interpretation of those songs. Furthermore, various social and cognitive factors also tend to influence the interpretation and perception of songs. Of interest to the present study, however, is whether people perceive songs differently when listening to songs compared to reading the lyrics without music. Of primary interest are the self-reported reasons for such differences.

The following paragraphs in this first section begin, firstly, by defining relevant terms. The reader is then briefly introduced to certain aspects of music and language, complexities in the processing of music and language in the brain, and available literature on the interpretation and perception of songs. Finally, the aims of the present study are presented.

The present study adopts an information processing perspective, but social factors that influence song interpretation are included insofar as they influence information processing. Information processing refers here to the way in which song information is processed and responded to, and borrows from the following definition: "the acquisition, recording, organization, retrieval, display and dissemination of information ("Information processing," n.d.). Song interpretation refers to the understanding people derive from lyrics, whether in song or text, and song perception refers to individual judgments from listeners about the category a song belongs in. Finally, active song listening is the focus of the present study; passive listening may differ from active listening in some respects and is not discussed.

Note that although the present study used songs with a domestic violence theme, domestic violence is not of specific interest to this research. The domestic violence theme was chosen based on the recent popularity of the song Love The Way You Lie, by Eminem and Rihaana, both in New Zealand and internationally. The song was popular despite the potentially offensive lyrics, on a serious topic, which could be perceived as normalizing extreme acts of domestic violence in relationships. As such, the songs chosen were unified by content theme and sampled across genre.

Songs

Definition

The words songs and music are often used interchangeably, but technically differ in meaning and are made necessarily distinct throughout this document. Music refers to written notation or musical sound for and by musical instruments or voice; whereas, songs refer to the combination of music and lyrics in composition or performance (*Collins: Student's dictionary*, 2004). Music, then, is one component of songs and lyrics is the other. Lyrics refer to the words of a song either in print or vocalized in song (*Collins: Student's dictionary*, 2004).

The Music Component

A dictionary definition of music in the context of songs refers to sequences of sounds organized melodically, harmonically, and rhythmically, that are produced through singing or music instruments (*Collins: Student's dictionary*, 2004). The same dictionary also acknowledges music as a written or printed representation of those sounds. However, a

closer examination is necessary in order to appreciate the complexity involved in the human brain's processing of music.

Written music is referred to as notation, a set of symbols that form a set of compressed instructions for musicians and/or singers in relation to the performance of a song. Regardless of genre or era, Western tonal music inherently contains five elements of pitch, harmony, timbre, dynamics, and time. These elements are represented by various symbols and words in music notation, and are reflected in the performance of songs. In general, pitch pertains to the frequency of individual notes, the relationships and intervals between notes, and the contour of melody lines; harmony pertains to the systematic combination of notes, such as chords, and other harmonic aspects of tone; timbre pertains to the characteristic sound produced by a particular instrument, such as the individual sounds of a piano and guitar that play the same note; dynamics pertains to loudness and softness, and time is a temporal element that consists of rhythm and meter, such as the position and duration of musical notes in relation to time (Rowley, 1977).

The Lyrics Component

As previously mentioned, the word lyrics refers to the words of a song. Lyrics, however, are written in language and, as such, contain meaning in words, sentences, and paragraphs that not only operate within a set of rules, but also contribute to the overall coherence of the message or narrative of songs. Moreover, the word lyric is further defined as expressing a writer's personal feelings, having the form of a song, a poem with songlike quality, or relating to poetry (*Collins: Student's dictionary*, 2004). As can be observed

from most songs, lyrics often do express feelings or emotion, contain repeated statements, and use rhyming. Hence, these definitions touch on the nature and content of lyrics.

Music and Language

Music and language are both auditory systems, date back several centuries, are found in all cultures past and present (Goldstein, 2008; Wallin, Merker, & Brown, 2000), and are a product of human biology and social interactions (Cross, 2001). In fact, many detailed similarities and differences exist between the two systems. Some of these similarities and differences are explained here insofar as they relate to the processing of song information. Also of importance, however, is the deep level of perceptual engagement and processing that the human brain applies when listening to music and speech. The depth and complexity of this engagement suggests the potential power of music and language to influence the interpretation of songs at levels other than the semantic meaning of words and sentences. This may, in turn, influence how songs are perceived.

Structural similarities and differences

Similarities between the structure of language and music are important because song information is processed at a component level during listening. This detailed processing occurs regardless of whether listeners possess an explicit knowledge of music, acquired through formal training and practice, or an implicit knowledge of music, acquired through ongoing exposure and enculturation. Therefore, because people automatically process music and language at this detailed component level, individual components may affect how people interpret and perceive song narratives and messages.

One similarity between music and language is found in the rule-based structure of each. Both are separate systems of symbols comprising basic units that combine to form higher order structures (Johansson, 2008). The basic units in music are notes and in language are words. In a similar way that notes are combined to form melodies or musical sequences, words are combined to form sentences. In both systems, these structural combinations are governed by syntax, a set of principles that serve as rules (Patel, 2003a). Moreover, specific notes or chords are expected at certain points in a music phrase similar to the way certain words are expected within a specific linguistic context. These expectations result in resolution and satisfaction or tension and surprise in the listener (Besson & Schon, 2001). However, music differs from language in that the grammatical categories of nouns and verbs in language do not correspond with any components in music (Patel, 2003a). Furthermore, music is not semiotic in that, unlike elements of language, elements of music do not refer to specific meanings. This is not to say that music lacks meaning, but that individual components lack a fixed meaning, as will be discussed more fully later in this document.

Other aspects of music and language are also similar. Both contain rhythm, timbre, timing, and pitch. Rhythm in both systems influences the organization of individual components in relation to time (Patel, 2003b). In music, rhythm influences the grouping of notes into phrases, the stable beat of the music, and musical meter referred to as timing. In language, rhythm influences the grouping of words and pauses, the duration of syllables, and stress points on certain syllables. Moreover, in speech, words are grouped together to form larger rhythmic chunks or phrases; in music, notes are also grouped into phrases even though there is no discontinuity between notes (Patel, 2003b). That is, the notes in musical

phrases are intended to be played very smoothly from one to the other, which is not required to the same level in other sequences of continuous notes. Furthermore, timbre is present in both music and speech. In music, timbre is important in identifying the difference in sounds of the same pitch played by different instruments, and, in speech, contrasting sounds such as different phonemes (Kraus, Skoe, Parbery-Clark, & Ashley, 2009). In addition, both music and language are composed of sequential events that unfold in relation to time (Besson & Schon, 2001). However, whereas music employs the strict timing of each note in relation to surrounding notes and a regular underlying beat, speech typically does not. Therefore, in spite of these, and other, differences between music and language, both share structural features and specific elements. When people listen to music or speech, these specific elements are processed in detail. Such is the case when listening to songs.

Structural components and human perception

Humans have a unique ability to perceive music and language. This perceptual ability appears to stem from a biological predisposition that begins in the foetal stage of development (Kisilevsky et al., 2009; Lecanuet, Graniere-Deferre, Jacquet, & DeCasper, 2000). For example, from approximately 19 weeks the human foetus perceives acoustic sound (Birnholz & Benacerraf, 1983; Hepper & Shahidullah, 1994) and, from approximately 32 weeks, discriminates pitch changes of one octave (Lecanuet et al., 2000), 2000). That is, note changes between D and C at the 4th and 5th octaves of a piano respectively. Moreover, language discrimination also begins in the foetal stage of development. For example, at approximately 41 weeks, the foetus responds differently to a

voice speaking in a foreign language compared to a voice speaking in the mother's native language (Kisilevsky et al., 2009), and, in the last trimester of pregnancy, responds to vowels but not to consonants (Gerhardt & Abrams, 2000). One reason may be the considerable differences in pitch, stress, and tone between the English and Mandarin languages used in the aforementioned study (Kisilevsky et al., 2009), and the lower pitch of vowels compared to consonants (Gerhardt & Abrams, 2000). That is, the response of the foetus to language may result from a perceptual ability to detect differences in elements shared between music and language, such as pitch discrimination. Nonetheless, this ability is important for listening to both music and speech because both contain variations in pitch.

Infants also demonstrate the ability to perceive and process complex elements of music and language. For example, from 2 months of age, infants recognize short melodies and discriminate familiar melodies from unfamiliar ones (Plantinga & Trainor, 2009). Older infants notice similarities and differences in the contour of melody lines (Balaban, Anderson, & Wisniewski, 1998; Chang & Trehub, 1977), and the transposition of melodies from one musical key to another (Chang & Trehub, 1977). Complexity is also seen in the processing of the harmonic element. This element encompasses tones that contain energy at a fundamental frequency and at integer multiples of that frequency, sometimes referred to as overtones (e.g. a fundamental frequency of 100 Hz would have energy at 200, 300, 400, … Hz). When the fundamental frequency of a tone is missing or cannot be heard, the human brain calculates this frequency based on the remaining integer multiples of that frequency (Levitin, 2006). In this way, people hear the pitch of the missing frequency as if it were not missing. Young infants demonstrate this ability in complexes of three or more overtones (Clarkson, Martin, & Miciek, 1996).

Perception of the temporal element is also seen from infancy. Infants under 6 months can recognize rhythms at various tempi (Trehub & Thorpe, 1989), can discriminate between rhythm patterns at a basic level (Chang & Trehub, 1977) and, under 12 months, begin to detect silent intervals of various duration in broadband noise (Werner, Marean, Halpin, Spetner, & Gillenwater, 1992). As previously mentioned, language, like music, contains aspects of rhythm. For example, silent intervals are not only found in music, but are also necessary in speech. Research on music perception in infants begins to demonstrate, therefore, a complex and detailed processing of information relating to music and speech.

Perceptual abilities for music in adults are even more complex. For example, when listening to music, the brain perceives and maintains perceptual distance relationships between both individual and groups of pitches, or notes (Janata et al., 2002). This ability enables the listener to perceive intervals between consecutive notes in a melody, or from one chord to the next in a piece of music, and is necessary for the listener to make sense of relative differences in pitch. Moreover, because the brain maintains these relative distances during listening, listeners are able to form expectations about which notes or chords are to come next based on what has passed, and detect incorrect notes or chords (Janata et al., 2002). In fact, the structure of melodies is mirrored in the brain during music listening. That is, when people listen to a melody, the sequential movement of that melody from one note to another is mirrored by brain activity in the prefrontal cortex (Janata, 2005). In this way, the structure of the melody is reflected in the recorded output of that brain activity. Therefore, when people listen to songs, the brain receives and processes a remarkable level of information.

The aforementioned examples demonstrate a perceptual ability for the shared elements of music and language, despite the differences between the two systems. Greater emphasis was placed on music because the perception of that system is perhaps less known to the reader than the perception of language. More importantly, however, in several respects, the aforementioned biological predispositions appear to serve the purpose of perceiving both music and speech. In fact, in early infancy, little differentiation exists between music and speech, and both systems are used as a form of communication between caregivers and infants (Masataka, 2009). Furthermore, because music and speech stem from both biological and environmental factors (Cross, 2001), music and language may only become clearly differentiated through experience gained from ongoing exposure and cognitive maturation (Masataka, 2009). Therefore, biological predispositions for music perception appear likewise necessary for speech perception.

Despite little differentiation between music and language in infancy, infants do demonstrate the ability to perceive aspects of speech not found in music. For example, by three months of age, and in contrast to adults, infants can distinguish phonemes, or units of speech, not only from their native language but from all foreign languages (Cheour et al., 1998). This ability gradually disappears by approximately 12 months of age, but suggests a biological predisposition to language processing and acquisition not relevant to music. Furthermore, by approximately 8 months, infants begin to understand the meaning of familiar words (Fenson et al., 1994). Thus, the ability to perceive language elements specific to speech begins early. These predispositions facilitate an implicit learning that continues to develop through the process of enculturation and ongoing exposure to both music and language.

Brain structures and resources

The complex perception of language and music engages multiple regions in the brain. These areas include the temporal, parietal, frontal, and limbic lobes, the thalamus, cerebellum, Broca's area, and the basal ganglia (Brown, Martinez, & Parsons, 2006; Janata et al., 2002; Zatorre & Krumhansl, 2002). Furthermore, rather than involving separate neural processes and mechanisms, music and language overlap in several areas (Brown et al., 2006; Fedorenko, Patel, Casasanto, Winawer, & Gibson, 2009; Patel, 2003a). For example, Broca's area and the premotor cortex are not only involved in processing language (e.g. Brown et al., 2006), but are also involved in processing musical structure and detecting structural irregularities (Koelsch, 2006). That is, although the left hemisphere favours the generation of sentences, the areas involved in generating both melodies and sentences include the primary motor cortex, Broca's area, the basal ganglia, and parts of the thalamus and cerebellum (Brown et al., 2006). Moreover, processing of temporal information in both language and music relies on general cognitive mechanisms that employ the cortical network previously considered as domain-specific for language (Koelsch, Schmidt, & Kansok, 2002). As Besson and Schon (2001) argue, given that music and language are processed at a component level, the view that linguistic functions are localized in the left hemisphere and music in the right seems implausible. Rather, some aspects of language processing may be favoured by cerebral structures in the left hemisphere but other aspects may involve the right hemisphere, which also likely applies to music (Besson & Schon, 2001). Therefore, evidence suggests that although some areas of the brain are more specific to certain aspects of music and language, many same and different regions are involved in the perceptual processing of both.

More than involving cognitive processes in the brain, music also appears to enhance these processes. Pitch, timbre, and timing are distinctly represented in sub-cortical regions of the brain that can be selectively enhanced through music practice and performance (Kraus et al., 2009). In fact, compared to non-musicians, musicians have increased gray matter in regions of the brain involved in processing music, and musical aptitude has been shown to be positively correlated with increases in gray matter (Schneider et al., 2002). For example, neuro imaging shows that, compared to non-musicians, musicians have pronounced gray matter in Broca's area (Sluming et al., 2002), the primary auditory cortex (Schneider et al., 2002), and motor and visual-spatial regions of the brain (Gaser & Schlaug, 2003).

These enhancements are also reflected in the perceptual ability of musicians to process and respond to music with increased accuracy and speed. For example, compared to non-musicians, drummer musicians are superior in the perception and action of music timing (Krause, Schnitzler, & Pollok, 2010), musicians are quicker to notice incongruent notes in music (Besson, Faïta, & Requin, 1994), and are superior in noticing deviations in the contour of melodies and pitch intervals. Such differences between musicians and non-musicians possibly reflect the level of engagement required in musical training and practice, involving complex motor and auditory skills practiced over many years. In short, complex perceptual abilities and cognitive enhancements demonstrate the human brain's powerful engagement with music.

In brief, music and language are both rule-based systems that share many structural elements. Furthermore, humans process these elements at a component level, engaging many areas of the brain, some of which overlap. Reasonably then, when music and

language are present in song, the possibility exists that the perception of one may affect the perception of the other. Despite the similarities, however, differences do exist between music and language. One important difference is the lack of referential meaning in music that is found in language. Therefore, the following section introduces songs as a form of communication, and considers the power of both music and lyrics to communicate in song.

Songs as Communication

That language serves to communicate is likely obvious to any person reasonably skilled in communication or language literacy. Furthermore, because songs contain lyrics conveyed through language, the communicative nature of lyrics is a reasonable assumption. Less obvious, however, is the potential power of music to communicate and influence the interpretation and perception of songs and lyrics. Thus, the following paragraphs introduce the power of songs as a communications medium.

Songs can be considered a form of communication involving the composer, performer, and listener (Hunter, 1974). Communication begins with the composer, who uses musical theory and notation to represent and convey various cognitive and affective concepts. In turn, performers decode the music notation written by composers, and reproduce sound in an attempt to capture and convey the intended concepts to listeners. As such, composers are skilled at communicating through musical composition and performers are skilled at communicating through musical performance. However, sometimes composition and performance involves several people, and sometimes composers and performers are one and the same person. Furthermore, for popular songs, performers may not always follow music notation, but may instead work with composers or other musicians to master the

performance of songs. Regardless of the method used to learn the performance of a song, and whether or not the composer is the performer, the role of each requires a specific skill set that serves to ultimately communicate to the listener. Ultimately then, the interpretation the listener forms of various songs begins with the concepts conveyed by those songs.

What Music Conveys

A characteristic of Western music is that it conveys various emotions to listeners (Curtis & Bharucha, 2010; Juslin & Laukka, 2004; Juslin & Västfjäll, 2008; Kreutz, Ott, Teichmann, Osawa, & Vaitl, 2008; Rickard, 2004; Waterman, 1996). These include basic and discrete emotions such as happiness, sadness, anger, fear, calmness and serenity (e.g. Ali & Peynircioglu, 2006; Bigand, Vieillard, Madurell, Marozeau, & Dacquet, 2005; Lundqvist, Carlsson, Hilmersson, & Juslin, 2009; Zentner, Grandjean, & Scherer, 2008) and, potentially, affective states such as dreamy, nostalgic, and proud (Zentner et al., 2008). Moreover, empirical evidence exists for the accuracy of the emotions expressed by music (see Juslin & Laukka, 2003 for a review). In fact, as will be seen, positive and negative emotions are expressed through the use of various structural properties in music (Crowder, 1984; Hevner, 1937; Kastner & Crowder, 1990) and without the need for lyrics. When people listen to songs, therefore, the information conveyed is not limited to the lyrical component of those songs.

More than only emotion, music can also convey various cognitive concepts that influence meaning. Special effects, for example, employ certain notes or sounds to simulate an event or experience. Lower notes can simulate the slow rumbling of an earthquake, higher notes can create an impression of birds flying ("Harmony of Music -

The PsychoAcoustics of Music," n.d.), a cascade of notes on certain instruments can simulate the sound of a waterfall, and the whole-tone scale can be used to simulate rain (Smith, 1996). In fact, the use of music in theatre and cinema illustrates the power of music to provide context to visual scenes, and influence expectations of the further development of events in those scenes (Vitouch, 2001). Moreover, recent evidence suggests that music can also transfer specific semantic concepts to listeners and influence how words are processed. Koelsch and colleagues (2004) used priming techniques to compare the processing of semantic meaning in music and language. They presented participants with musical excerpts and sentences which served as a priming stimulus, and then asked participants to decide whether a target word was related to the stimulus previously presented. The results showed that participants associated the musical excerpts with specific words. Moreover, the aforementioned study found that 10.5 seconds of exposure to music was sufficient to influence the semantic processing of words, and that the priming effects of music did not differ from the priming effects of language. Similarly, Daltrozzo and Schön (2009) replicated the previous study but used shorter excerpts of music. The results of their study showed that musical excerpts of one second were sufficient to communicate a concept that would influence the conceptual processing of a word. Further research investigated whether short music excerpts that vary in timbre can elicit meaningful associations. The study found that the perception of a sound can significantly influence the meaning of subsequent words, and vice versa (Painter & Koelsch, 2010). Thus, music in songs can potentially influence the meaning and interpretation listeners form of words in the lyrics.

What Lyrics Convey

The subjective importance of lyrics varies between songs and listeners, and some composers and listeners seem to place more or less emphasis on the lyrics than others. In addition, one need only listen to songs to realize that some lyrics appear cryptic and senseless, whereas others clearly depict a narrative. However, as previously mentioned, lyrics do commonly portray situations and events, and these situations and events are portrayed in relation to characters. For example, Kate Bush wrote the lyrics to the song Wuthering Heights to portray the story in Emily Bronte's novel by the same name. Furthermore, song messages are usually conveyed in relation to life events and concerns. For example, the lyrics to Beds Are Burning, by Midnight Oil, were reportedly written to convey a message about native Australian land ownership. Additionally, within these narratives and messages, lyrics can also convey specific cognitive and emotional concepts. For example, in the lyrics to Whiter Shade Of Pale, Keith Reid attempted to convey the sound, feel, and smell of a fictional room occupied by fictional characters. Therefore, like music, lyrics also serve to convey cognitive and affective concepts. Furthermore, these concepts are conveyed through language and, as such, include semantic meaning. As will be shown, however, music and language demonstrate the power not only to communicate but, in doing so, to exert various emotional, cognitive, and behavioural effects on listeners.

Potential Effects of Music

Music not only conveys but also induces emotions in listeners, with or without lyrics (e.g. Baltes, Avram, Miclea, & Miu, 2011; Bigand, Vieillard, et al., 2005; Hevner, 1937; Juslin & Laukka, 2004; Kreutz et al., 2008; Lundqvist et al., 2009; Rickard, 2004). In fact,

composers use specific features of music for this purpose (Hunter, 1974).   For example, certain patterns of intervals between the notes in musical scales, referred to as musical modes, communicate and induce happy and sad emotions. That is, the minor mode induces sadness and the major mode induces happiness (e.g. Crowder, 1984; Kastner & Crowder, 1990). In fact, by the age of 3 years, children begin to associate happiness with the major mode and sadness with the minor mode (Kastner & Crowder, 1990). Therefore, the power of music to affect emotions is inherent in specific musical structures used by composers for this purpose.

Another way to induce emotion is through the tempo of the music, that is, the number of beats played per minute. Fast tempi (approximately 102 to 152 beats per minute) tend to induce happiness, restlessness, and excitement, whereas slow tempi (approximately 63 to 80 beats per minute) tend to induce tenderness and sadness (Hevner, 1937).   In fact, even across vastly different types of music pieces and songs, people report very similar emotional responses to music with similar features, such as tempo, melody construction, and rhythm (Flores-Gutierrez & Diaz, 2009). Furthermore, emotional responses induced by music can occur within 1 second of listening, and are similar to the emotional responses induced by longer excerpts of the same music (Bigand, Filipic, & Lalitte, 2005). As such, music demonstrates the power to predictably induce affective responses in people immediately upon listening to a song.

Potential Effects of Lyrics

Although music is sufficient to exert effects on listeners, the effects of songs are not limited to their musical component. Rather, lyrics in song also demonstrate the power to

influence affective states. For example, compared to songs with neutral lyrics, listening to songs with pro-social lyrics tends to induce empathy in listeners (Greitemeyer, 2009a, 2009b) and reduce aggression (Greitemeyer, 2011), whereas songs with anti-social lyrics tend to induce anger and hostility (Anderson, Camagey, & Eubanks, 2003). Moreover, certain types of lyrics also exert cognitive effects. For example, listening to songs with antisocial lyrics tends to increase aggressive thoughts (Anderson et al., 2003), whereas listening to songs with prosocial lyrics tends to increase prosocial thoughts (Greitemeyer, 2009a, 2009b). Hence, listening to the lyrics of songs can influence both affective and cognitive states.

Research suggests that lyrics also have the power to influence how people behave. For example, compared to listening to songs with neutral lyrics, people who listen to songs with prosocial lyrics engage in more helpful behaviour (Greitemeyer, 2009a, 2009b). Similarly, romantic lyrics result in greater compliance with romantic requests than neutral lyrics (Gueguen, Jacob, & Lamy, 2010), and initial evidence suggests that listening to prosocial lyrics reduces aggressive behaviour by decreasing state hostility (Greitemeyer, 2011) whereas, for example, listening to misogynous lyrics increases aggression toward women (Barongan & Hall, 1995; Fischer & Greitemeyer, 2006). Furthermore, the effects of lyrics seem to extend to real-world settings. Jacob, Gueguen, and Boulbry (2010) investigated the effects of songs with prosocial lyrics on tipping behaviour in a restaurant, and found that waitresses received significantly more tips during periods when prosocial background music was played compared to periods of neutral music. Furthermore, listening to degrading sexual lyrics has been positively associated with levels of sexual activity (Primack, Douglas, Fine, & Dalton, 2009), and, in children between 9 and 10 years of age,

evidence suggests that longer term exposure and engagement with songs from another culture can change ethnic attitudes toward that culture (Sousa, Neto, & Mullet, 2005). Thus, the effects of songs on feelings, thoughts, and behaviour, may be reasonably predicted by the type of lyrics in those songs.

Lyrics can also serve as a form of persuasive communication. Whether or not the composer intends to persuade, repeated statements can persuade listeners or readers regardless of the truth of those statements (Bacon, 1979; Begg & Armour, 1991). This persuasive effect seems to relate to familiarity. With each repetition, repeated statements become more familiar and fluent to the listener (Begg, Anas, & Farinacci, 1992) which, in turn, increases the listener's understanding of the meaning and value of such statements (Howard, 1997). As a result, the statements become more believable.

Another aspect of the potentially persuasive power of lyrics is the use of rhyming. This use of rhyming is often coupled with advice on human concerns, such as love and happiness. Research shows that statements on human concerns are perceived as more accurate when containing words that rhyme (McGlone & Tofighbakhsh, 2000). Therefore, in addition to operating within the rules of language, lyrics commonly include elements of persuasive communication. This persuasive aspect of lyrics can potentially influence how songs are perceived.

Universal Effects and Culture

The emotional effects of western music, at least, appear to be universal. Research suggests that the emotions induced are consistent not only within people but also between people (Bigand, Vieillard, et al., 2005). Furthermore, studies conducted in America,

France, Australia, Japan, and Mexico show that western music affects emotions in listeners from different cultures, and that similar aspects of music, such as different musical modes and tempi elicit similar emotional responses in people (Ali & Peynircioglu, 2006; Bigand, Vieillard, et al., 2005; Flores-Gutierrez & Diaz, 2009; Hoshino, 1996; Schubert, 1996). For example, one study used music excerpts from classical, new age, and Indian music and asked people from either an Indian or classical music background to select affective adjectives that describe the excerpts (Gregory & Varney, 1996). The findings showed that the level of agreement between western and Indian listeners was significant for western classical music, however, the Indian participants were also British and may have been culturally familiar with both forms of music. Furthermore, a different study (Flores-Gutierrez & Diaz, 2009) found that classical and heavy metal music elicited mores distinctive and robust emotional responses in participants living in Mexico compared to Japanese and Arab music. Similarly, Hoshino (Hoshino, 1996) found that western minor and major musical modes resulted in stronger emotional reactions than the Japanese musical modes. However, whether participants were familiar with the music is unclear. In contrast, another study investigated the effects of western classical music on emotion in participants who were unfamiliar with the music (Fritz et al., 2009). In that study, people from the Mafa culture recognized the happy, sad, and scared/fearful expressions of western classical music. Thus, the emotions conveyed in Western music appear to be inherently recognizable to humans.

Because of the potential power of both music and lyrics to affect listeners, the interpretation of narratives and messages, and the perception people form of songs, may be

influenced not only by the semantic content of songs, but also by the altered emotions and thoughts these songs induce.

Music versus Lyrics

The complex ability of humans to perceive and process music and language, and the power of music and lyrics to communicate and affect has been illustrated with the findings of various studies. Other lines of research also investigate whether music and lyrics are processed in the brain as separate components, or, are integrated as one; whether the psychological effects of one component is superior to the other; and the power of each in song as a communicative medium.

Separate or Integrated Processing

Research aimed at determining whether music and lyrics are processed as separate or integrated components seems to support both propositions. In one study, participants were presented with excerpts from French operas performed a cappella (sung without instruments). Each excerpt differed in that the final word was presented as either semantically congruent or incongruent with the melody, or sung in or out of key (Besson, Faïta, Peretz, Bonnel, & Requin, 1998). Results showed that the semantic processing of the sentences was not affected by the musical structure of the excerpts, and the processing of the harmonics of the excerpts was not affected by the semantics of the sentences, suggesting that each was processed independently. In contrast, a different study presented participants with an auditory stimulus that consisted of the same sounds with both pitch and vowel deviations, either pitch or vowel deviations, or without pitch or vowel deviations

(Lidji, Jolicœur, Moreau, Kolinsky, & Peretz, 2009). No differences in processing were found regardless of whether the vowel and pitch stimuli were presented together as a single stimulus or separately. These findings contribute to evidence that music and language are processed in an integrated manner. More recently, however, evidence suggests simultaneous independent and integrated processing to varying degrees. Sammler et al. (2010) varied six songs, unfamiliar to participants, to include the same melodies and lyrics, the same melodies with different lyrics, different melodies with the same lyrics, and different melodies with different lyrics. Findings from functional magnetic resonance imaging (fMRI) showed that the lyrics and melodies were processed at different degrees of integration in the superior temporal lobe and left precentral gyrus areas of the brain. The aforementioned researchers concluded that different weightings of integration and separation occur at different stages of processing. Therefore, evidence suggests that both independent and integrated processing occurs, but may be determined by the location of that processing.

Superior Effects

As previously illustrated, songs appear potentially powerful in exerting effects on listeners across various psychological dimensions. However, which component of songs is more powerful in exerting such effects is less clear. Research aimed at investigating separate effects is sparse and tends to focus on affective states. Furthermore, some findings suggest lyrics are more powerful and others suggest music is more powerful. For example, early research suggests that lyrics create a stronger emotional state when accompanied by music (Galizio & Hendrick, 1972). More recently, a study examined the impact of lyrics

versus music on mood through three experiments using the lyrics, or music, or lyrics and music of a sad song (Stratton & Zalanowski, 1994). In the first experiment findings showed that the music alone increased positive affect and decreased depression, whereas the lyrics and music together decreased positive affect and increased depression. In the second experiment the music was played in an upbeat style. Findings again showed that the music and lyrics together increased depression and decreased positive affect. In the third experiment, participants rated the music as less pleasant one week after listening to both the lyrics and music paired. The authors concluded that music alone is less powerful in exerting affects on mood than music and lyrics together. However, the music in the song used in Stratton and Zalanowski's (1994) study was not composed in a minor key, typically associated with sadness, which may explain why the music only increased positive affect and decreased depression. Thus, although the aforementioned authors argue that the sad lyrics demonstrated the power to transform the potentially happier music, a comparison matching the type of music and lyrics may have yielded different results. Stratton and Zalanowski's (1994) also suggested that when music and lyrics are incongruent, lyrics are more powerful than music in directing mood changes.

In a similar study, Sousou (1997) compared the influence of music versus lyrics on mood. Classical music in major and minor keys, with varied tempi, was accordingly classified as happy or sad and presented to participants with both happy and sad lyrics. Participants in the music condition listened to music whilst reading the lyrics and participants in the no music condition read the lyrics without listening to music. Sousou (1997) predicted that participant mood would match the type of music played rather than the type of lyrics read. Although the presentation of congruent and incongruent music and

lyrics is unclear, the findings suggest music was more powerful than lyrics in influencing mood. Regardless of the type of lyrics read, participants in the sad music condition scored higher on the sad mood scale than participants in the happy music and no music conditions, and vice versa. As such, the aforementioned findings contrast with Stratton and Zalanowski's (1994) findings.

More recently, Ali and Peynircioglu (2006) found a more complex relationship between music and lyrics. They conducted a series of experiments using congruent and incongruent prosocial and antisocial melodies and lyrics. Ali and Peynircioglu (2006) found that although music that conveys positive emotions is considered less intense when coupled with lyrics, sad and angry music is rated as more intense when melodies are paired with lyrics. The aforementioned authors concluded that prosocial lyrics detract from the emotional intensity of happy and calm melodies, but antisocial lyrics enhance the emotional intensity of sad or angry melodies. Furthermore, under conditions of incongruence, the study also found that music, rather than lyrics, was more dominant in eliciting intended emotions. Therefore, a closer examination of the power relationship between music and lyrics may reveal more complex interactions than previously thought.

Communication

As described previously, both the musical and lyrical component of songs serve to communicate in various ways. In song composition, however, both are necessarily coordinated in order to function together. For example, stress points in musical rhythm can emphasize accompanying syllables or words in lyrics. However, in order for the lyrics to function musically, consideration must be given to whether syllables or words are

appropriately emphasized by the music (Pattison, n.d.). Typically then, some degree of fit between the music and lyrics of songs is necessary to achieve musicality. Moreover, music and lyrics also operate together to convey various concepts and emotions in the content of the message or narrative of the lyrics. For example, sad lyrics may be best conveyed through the use of the minor key, given that music in the minor mode conveys sadness, whereas happy lyrics may be best conveyed through the use of the major key, given that music in the major mode conveys happiness. Congruence occurs, then, when a sad narrative expressed in the lyrics of a song is accompanied by sad music, rather than happy music, or, as another example, when romantic lyrics are accompanied by music in a slow tempo rather than a fast tempo. Given this partnership that occurs in song, of question is whether music and lyrics act independently or in unison, and whether one component is superior to the other as a form of communication.   Efforts to answer this question include the formulation of various philosophical views on music and lyrics as a separate or integrated medium in songs, research into the independent effects of music and lyrics in songs, and the effects of congruence and incongruence between music and lyrics in songs.

Several views exist on the function of lyrics and music as a synchronized medium. These views generally consider music and language as separate systems, but debate the separation or integration of these systems as a communications medium in song. An earlier view argues that lyrics are a component of music (Langer, 1957). In this view, both music and language are symbolic systems used by humanity to comprehend life experiences, however, language is discursive. As such, individual words are directly associated with items that people understand by experiencing life. Music, on the other hand, is non-discursive because units in music lack fixed meaning. Rather than conveying meaning

through words, music is an aesthetic system with emotional content that conveys meaning by expressing life experiences that words cannot convey. As such, music consumes words in song.

In a similar way, the independence view argues that because language has fixed meaning, and music does not, the two are independent systems and uneven partners in song (Benveniste, 1985). Units in music are not comparable to the signs found in language, and musical combinations of notes are not equivalent in language. Although this view recognizes that music can be considered a language, music is a syntactic system of elements arranged and connected systematically rather than a semiotic system of signs. As such, music and language have no identifiable relationship and cannot succeed as an integrated medium. In fact, music fails to convey meaning or depict any particular aspect of life.

In contrast, the interactionist view acknowledges that music and language are separate systems of signs (Gorlée, 1997) but takes into account the overlap in the structural elements of the two systems. Similarities in structure were presented earlier, and include expectancy and closure, prosody and melody, rhythm and grouping, and emotional meaning. That is, music and speech both contain rhythm, stress points, variations in pitch, and the power to convey emotions. The language system, or lyrics, is placed in the music system, and the two coexist and interact in a meaningful manner. This interactionist view also considers the potential of music and lyrics as separate systems that overlap to influence the interpretation of each other.

Sellnow and Sellnow (2001) take this concept of influence further, and argue that music and lyrics work together to offer messages with both conceptual and emotional

content. In this view, messages are offered through the function of virtual experience in the lyrics, and virtual time in music. However, the congruence or incongruence of music and lyrics affects how messages are received. When both are congruent, the meaning of messages is more poignant, whereas incongruence offers separate messages from both the music and lyrics. Such incongruence results in messages that are more than what is conveyed by the lyrics. Possibly then, different messages may also result from the incongruence between the music and lyrics.

Thompson and Russo (2004) also recognize the potential influence of music on meaning. They argue that music influences the meaning of lyrics through its non-fixed, implied meaning that stems from the temporal, structural and syntactic nature of music. This implied, non-referential meaning is free to attach to the accompanying lyrics and influence the meaning of those lyrics. Such influence is stronger with repeated exposure to, and familiarity with, songs. According to Thompson and Russo (2004), this stronger influence with familiar songs suggests that the perception of music and lyrics in familiar songs is integrated, which enables a greater transference of implied meaning from the music to the lyrics.

The views presented above vary in emphasis on the importance of music in relation to lyrics in song as a communications medium. What seems clear, however, is that both can potentially influence the semantic meaning of the lyrics in song.

Song Interpretation and Perception

The reader has thus far been introduced to songs in terms of their music and language components, definitions, elements and structure; component processing in the brain;

potential effects of certain types of music and lyrics; efforts to identify the superiority of one or another in exerting effects; and songs as a form of communication. All of these aforementioned lines of research are relevant to the interpretation and perception people form of songs, because each aspect can potentially influence those interpretations and perceptions. However, studies that investigate song interpretation and perception suggest more specific social and cognitive influences.

Interpreting Lyrics

Like other variations of text, as previously mentioned, lyrics commonly describe stories or convey messages in the context of particular situations, events, and characters. The processes involved in understanding text could differ when listening to lyrics in song, rather than reading the lyrics in text. However, similar to other narratives, lyrics convey meaning through language, and contain words and sentences connected in a meaningful way, so the processes involved in understanding narratives from text may apply, at least in part, not only to the interpretation of lyrics in text but also to the interpretation of lyrics performed in songs.

In a similar way that stories take meaning from the sentences used to construct them, sentences take meaning from individual words and groupings of words. Readers determine meaning from individual words and sentences (Graesser, 2008) and relationships between sentences which serve to create coherence (Goldstein, 2008). However, words and sentences are not necessarily sufficient to provide meaning. Rather, readers infer information not present in the text (Kaakinen & Hyona, 2005), which further adds to the coherence of the text (Goldstein, 2008). Similarly, when listening to lyrics in song,

individual knowledge and life experience influence the perceived meaning of various terms and phrases (Greenfield et al., 1987). Moreover, the understanding of text is further influenced by the mental representation the reader forms of the people, objects, locations, events and actions described in the content (Zwaan, 1999).   In this way, the events described in the narrative are vicariously experienced from the perspective of the main character (Zwaan, 1999). Thus, the interpretation of lyrics is likely facilitated by both the content of the lyrics, and individual inference and life experience.

Previous Research

Several studies contribute to knowledge on the possible influences in song interpretation, some of which have been introduced. However, previous research specific to actual song interpretation is limited, with only a few studies available since the 1970's. Those studies have investigated the effects of music on the personal relevance of lyrics (Iversen, 1989) and emotional valence (Thompson & Russo, 2004), the schematic processing of heavy metal lyrics (Hansen & Hansen, 1991), understanding the meaning and messages of songs (Denisoff & Levine, 1971; Greenfield et al., 1987; Konecni, 1984), visual aids in the comprehension of lyrics (Jesse & Massaro, 2010) and the influence of past experience on the interpretation of ambiguous lyrics (Maxwell, 2001). Moreover, terms relating to the interpretation of song lyrics remain non-defined in the literature, and are entangled with the comprehension of lyrics, the understanding of the meaning of songs, and the comprehension, interpretation, and understanding of messages in songs. Nonetheless, previous research does provide insight into factors that influence the interpretation of lyrics in song, and the perception of songs.

A common finding of research is individual differences in the interpretation of lyrics and messages, both in children and adults. For example, Greenfield et al. (1987) asked children, adolescents, and college students to listen to the songs Born In The USA, and, Like A Virgin, and answer questions relating to the lyrics. Nearly 60% of the participants were unable to answer all the questions relating to Born In The USA, and less than 50% of the adult students understood the overall meaning of the song. However, 80% of college students correctly interpreted the overall meaning of the song Like A Virgin. Similarly, Greenfield et al. (1987) asked one group of college students to listen to four popular 1980's songs, and another group to watch music videos of those songs. Although participants in the video group held similar views on the content of the lyrics, participants who only listened to the songs were dissimilar and vague. Similarly, Jesse and Massaro (2010) used word recognition tests to determine whether seeing a singer sing a song aids in the comprehension of the lyrics. Participants recognized more words from the lyrics after watching a video of the singer singing compared to listening to the song without seeing the video, which seems to have resulted in individual differences.

Individual differences in interpretation were also found in an earlier study by Denisoff and Levine (1971). They presented 400 college students with a then-popular protest song, Eve of Destruction, to test whether the song was effective in delivering a socio-political message. Only 14% of participants understood the socio-political propaganda theme of the song. Furthermore, the majority of respondents did not interpret the meaning of the song correctly. Similarly, Konecni (1984) asked members of the general public in San Deigo and Los Angeles to correctly identify the message or purpose, as intended by the composers, of various popular songs from different genres of music (Konecni, 1984). The

correct response was selected from the choices presented only 28% of the time, and an almost-correct response was selected 24% of the time. Thus, people demonstrate differences in the comprehension of lyrics and the perception of messages in songs.

One influence on the interpretation of lyrics relates to the amount of information listeners need to process during listening, and the inferences people generally make in understanding narratives. As previously mentioned, several cognitive resources are involved in the complex processing of music and lyrics. When songs convey information that results in a high cognitive demand, the ability to process that information is negatively affected. For instance, music played at faster tempi requires listeners to draw on more cognitive resources to process the music, because faster music contains more information than slower music (Holbrook & Anand, 1990). Furthermore, Hansen and Hansen (1991) found that the intensity of the music in songs can distract listeners from processing the lyrics. In the aforementioned study, participants placed in a low cognitive load condition were provided with written lyrics whilst listening to heavy metal songs, whereas, participants placed in a high cognitive load condition were not provided with lyrics. Participants in the low cognitive load group were significantly stronger than participants in the high cognitive load group on measures of comprehension and details in the lyrics. The authors concluded that the intense music in heavy metal songs impinges on the listener's ability to process the lyrics at a deep level (Hansen & Hansen, 1991). Moreover, the aforementioned study also found that people rely more on schematic information of previous events to interpret lyrics in high cognitive load conditions, resulting in errors in information processing. In this way, people infer information not present in the lyrics in

order to interpret those lyrics. Therefore, music can influence the interpretation of lyrics in song by interfering with, or distracting from, information processing.

The use of inference is also seen in other studies. For example, in the Greenfield et al. (1987) study, which found dissimilarity and vagueness in song meanings amongst participants who listened to a song, proposed that individual knowledge and life experience influence the perceived meaning of various terms and phrases in lyrics. In another study, Maxwell (2001) investigated the relationship between the interpretation of lyrics and personal experiences with abuse. Participants were provided with written lyrics of an ambiguous nature and asked to listen to the song of those lyrics and respond to statements about those lyrics. The study found a significant correlation between participants who had experienced relationship violence and participants who interpreted the lyrics as a song about relationship violence. Taken together, these studies suggest that people do infer information based on prior knowledge and experience when interpreting song lyrics.

Other research has investigated the effects of music on the perception of lyrics. An earlier study investigated the effects of music on the personal relevance of lyrics (Iversen, 1989). Participants listened to excerpts of relatively unfamiliar songs and rated the lyrics, with and without music, in terms of whether they were worthy of consideration. Results were similar for the music and non-music conditions, however, males rated lyrics presented in text format as more relevant than lyrics accompanied by music, whereas females rated lyrics accompanied by music as more relevant than lyrics presented in written form. The authors concluded that, possibly, when lyrics are presented in song, males attend more to the music which serves as a distraction, whereas females may be more sensitive to the mood conveyed by both the music and lyrics.

More recently, Thompson and Russo (2004) conducted three experiments to determine, firstly, whether the emotions conveyed in music influence interpretations of the emotional meaning of accompanying verbal information; secondly, whether music influences the perceived meaningfulness of accompanying verbal information; and thirdly, whether the perceived meaningfulness of lyrics increases with increased exposure to those songs. Participants in the spoken group rated written poetry and spoken lyrics as conveying either a negative or positive message and, in the music group, rated written poetry and lyrics sung with music in the same manner. In the first experiment, music increased the perception of a positive message for some songs and for others increased the perception of a negative message, depending on the song. Lyrics accompanying sad music were perceived as negative whereas lyrics accompanying happy music were perceived as positive. In the second experiment, music enhanced the perceived meaningfulness of lyrics for familiar songs but not for unfamiliar songs. The third experiment aimed to test whether the findings of the second experiment were due to prior associations with familiar songs. Findings from the third experiment showed that repeated exposure to unfamiliar songs increased the perceived meaningfulness of the lyrics to those songs. The aforementioned authors concluded that music influences the attribution of meaning and emotion in lyrics, and that repeated exposure to songs may result in a more integrated perception of music and lyrics, thereby increasing the possible influence of one on the other.

Research also shows that incidental cues, such as opinions or feelings toward the performers of songs may influence perceptions of those songs. Because people are more easily persuaded by persons they like (Burger, Messian, Patel, del Prado, & Anderson, 2004), liking a performer may trigger positive associations with a song that results in a

favourable view of that song. As such, people may be less inclined to critically evaluate the lyrics and message of songs by their preferred performers.

The genre of songs can also influence how those songs are perceived, particularly when listeners hold preconceived ideas and expectations about a particular genre. For example, Ballard, Dodson, and Bazzini (1999) investigated whether people have different expectations about the effect of songs with certain types of lyrics. Participants rated the influence of prosocial and antisocial lyrics, labelled as heavy metal, rap, pop, and country, on behaviour. Lyrics labelled as heavy metal and rap were perceived as more likely to influence antisocial behaviour than lyrics labelled as pop or country. Similarly, Fried (1996, 1999) investigated bias in the reaction to lyrics labelled as rap. Fried (1996) presented the lyrics of an American folk song to white members of the American public. Participants read the first verse of the lyrics presented as folk, country, or rap, and answered questions regarding how offensive, objectionable, and dangerous to society the lyrics were. The song was judged more negatively when labelled as rap compared to country and folk labels. Similarly, in a second study (Fried, 1999), violent lyrics were labelled as rap and presented to participants. Lyrics labelled as rap were again rated more negatively than lyrics labelled with other genres of music despite the violent content of the lyrics. Therefore, song perception can be influenced by factors unrelated to the lyrics and music.

The Present Study

The present study aimed to explore whether people change their perception of songs as promoting or opposing domestic violence when listening to the song compared to reading the lyrics without music. Primarily, however, the present study aimed to explore self-

reported reasons for changes in song interpretation and perception between the two presentations. The explorative nature of the study precludes predicted outcomes, however, the individual influences of music and lyrics on song interpretation and perception give rise to possible differences.

The present study differs to previous studies in several areas. Firstly, participants were provided with a complete set of lyrics for each song whereas previous research has typically used excerpts. For example, Greenfield et al. (1987) presented participants with words, terms, or single sentences deemed pertinent to the message of the songs. Iverson (1989) used excerpts from lyrics, Fried (1996) used the first paragraph of lyrics, and Denisoff and Levine (1971) were unclear in whether their study used partial or complete lyrics and, in fact, whether participants listened to a song or relied solely on previous exposure to that song. The use of partial lyrics could limit the ability of participants to fully comprehend the narratives or messages of songs. Secondly, the present study asked participants to listen to the songs and read the lyrics as separate conditions. Other studies have presented participants with lyrics that were available whilst listening to the songs (Hansen & Hansen, 1991; Maxwell, 2001). Furthermore, no studies seem to exist on whether people change their interpretation or perception of songs with domestic violence content when listening to the song compared to reading the lyrics and, in particular, the self-reported reasons for the change. Given the prevalence of songs in society, and the popularity of songs despite their antisocial content, the present study may provide interesting insight into whether differences in interpretation and perception occur for songs with domestic violence content.

Method

Participants

Twenty-seven individuals (18 females and 9 males) participated in this study, aged between 18 and 65 years. Because some participants declined to state their age, the mean age could not be calculated. Participants were recruited from both the community and a university in Auckland, New Zealand.   An online advert was placed on a research participant recruitment website inviting members of the community to participate, and paper adverts were placed in various locations at a university campus. In addition, some psychology students were addressed at lectures, and participants and potential participants were invited to inform family and friends of the opportunity to participate in the study.

All persons aged 18 years and older, who used English to read, write, and speak on a daily basis were eligible to participate.   Participants were entered into a prize draw to win vouchers to the total value of $200 from Paper Plus and/or Real Groovy stores, with extra entries for those who referred other participants. Ethical approval for the study was obtained from the Massey University Human Ethics Committee, and all participants were provided with information about the study (Appendix A), and signed a consent form (Appendix C) prior to participation.

Measures

Questionnaire. Guided by the aims of the present study, a questionnaire was designed for data collection. Mixed methods of both qualitative and quantitative questions were employed on the questionnaire to obtain data from participants. The questionnaire

contained five questions and was identical for each song (Appendix B1 and B2). Questions one, two, and five were qualitative open-ended questions that sought each participant's interpretation of the message and narrative of the song. Questions three and four were quantitative questions that sought each participant's perception of the category the song belonged in. Questions three and four were presented as a semantic differential scale with four categories and a total of ten response alternatives. The four categories were: promotes domestic violence, neither promotes nor opposes domestic violence, opposes domestic violence, can't decide. The promotes domestic violence and opposes domestic violence categories each contained four response alternatives of maybe, slightly, moderately, and completely. Out of the 10 response alternatives, can't decide was presented to participants as an alternate to the remaining 9 response alternatives. This option was used in order to prevent a forced choice of the remaining alternatives that were of interest to the study.

Questions. Question one relates to the semantic content of a song and was intended, firstly, to draw participants' attention to the content of the song; secondly, to demonstrate whether participants' had attended to the content of the song; and, thirdly, to obtain participants' interpretation of the song content which further informed responses to question five. Question two was similar in design and intention to question one, but related to the message of the song. Questions three and four aimed to determine whether participants' considered the song or lyrics as promoting or opposing domestic violence before and after listening to the song or reading the lyrics, depending on the presentation order. Question five aimed to explore the reason participants' changed their categorization of a song between questions three and four if, indeed, they had.

Design

A survey research design was used to obtain data from participants in relation to each of eight songs. Research sessions were held in a room at a university campus. At each session participants were assigned to one of two study conditions, the song first condition or the lyrics first condition. The first participant to arrive at a research session was coded as participant 1, and the second participant was coded at participant 2. Thereafter, upon arrival, each participant was assigned the next sequential number. Participants with odd numbers were assigned to the song first condition, and participants with even numbers were assigned to the lyrics first condition. The allocation of odd numbers to the song first condition and even numbers to the lyrics first condition was randomly decided by a coin toss prior to the first research session. Approximately half the participants were assigned to each condition with one less participant in the song first condition (n=13) compared to the lyrics first condition (n=14). However, during data collection one participant in the lyrics first group failed to follow the research procedure and was excluded from the study, resulting in even numbers in each group ($n_1=n_2=13$, n=26).

Materials

Songs. Thirteen songs were originally selected for the study, 12 of which were deemed to refer to domestic violence or abuse, and one of which served as a positive mood inducement at the conclusion of the research session. The following inclusion criteria were chosen for the selection of songs. Firstly, the content of the song was to either overtly refer to domestic violence or abuse, or was to be listed on one of various song websites as a song about, or potentially about, domestic violence. For example, the song No Son Of Mine, by

Genesis, fails to refer to physical acts of abuse, and could be interpreted as a song unrelated to abuse. Secondly, songs deemed by the researcher as too vague, too ambiguous, overtly referring to child sexual abuse, extremely offensive, or difficult to hear the words were excluded from the selection. Approximately 100 songs were assessed based on the above criteria, regardless of genre, by scanning the lyrics to the song and then listening to the song via the internet.

A total of 12 songs were selected, as follows: (1) And Then You Kissed Me - The Cardigans; (2) Can You Control Yo Hoe – Snoop Dogg and Supafly; (3) Crazy In Love – Eminem; (4) Love The Way You Lie – Eminem and Rihanna; (5) Luka – Suzanne Vega; (6) Never Again – Nickelback; (7) Remember That – Jessica Simpson; (8) Run – Leona Lewis; (9) Run For Your Life – The Beatles; (10) Russian Roulette – Rihanna; (11) Stand Up – Adema; (12) Two Beds And A Coffee Machine – Savage Garden. Because the content of some of the songs was considered potentially upsetting to participants, a prosocial song was chosen to be played as the 13th and final song. The song Heal The World, by Michael Jackson, was chosen because it has been shown in previous research (Greitemeyer, 2009) to elicit prosocial emotions, thoughts, and behaviour in listeners. This enabled the research session to end on a positive note. The total playtime of the 13 songs was 52 minutes and 25 seconds.

Pilot Testing.

Prior to data collection, a research session was conducted to test equipment and procedures, and time the session using all 13 songs. The test session took more than two and a half hours for the volunteer to complete. Even though the duration of each session

was expected to differ based on individual participant differences, the use of all 13 songs was deemed excessive in duration by the volunteer and the researcher. The researcher decided to remove 4 of the 13 songs to reduce participant fatigue.

To determine which of the 12 domestic violence songs should be removed from the selection, an informal pre-test of the 13 songs was conducted with 10 persons. The aim of the pre-test was to further eliminate songs based on the original selection criteria. Songs deemed too vague or too difficult to hear the words were removed. As a result, four songs were removed from the selection. Song eight, Run, was removed because the pre-test indicated that most people were unclear on what the song was about. That particular version by Leona Lewis lacked a final verse which more strongly related the song to domestic violence. Song eleven, Stand Up, was removed because some people found the lyrics difficult to hear.

Despite the removal of the above songs, the duration of the research sessions remained excessive, thus two further songs were removed to make the session more manageable for participants. The criterion to remove two more songs was based on genre, with a more even spread of songs across genre desired. As a result, song three, Crazy In Love, and song twelve, Two Beds And A Coffee Machine, were randomly chosen for removal from songs of the same genre. Therefore, of the 12 domestic violence songs originally selected, 8 remained and were renumbered as (1) Remember That, (2) Run For Your Life, (3) Luka, (4) Love The Way You Lie, (5) And Then He Kissed Me, (6) Can You Control Yo Hoe, (7) Never Again, and, (8) Russian Roulette. These songs were spread across genres of pop, rock, rap, and country (refer to Table 1 for a breakdown). The final song was an excerpt

from (9) Heal The World. The total playing time of the nine songs was 32 minutes and 17 seconds.

Table 1

Final Song Selection

Song no.	Song title	Year	Performer	Genre	Song duration mm:ss
1	Remember that	2008	Jessica Simpson	Country	3:41
2	Run for your life	1965	The Beatles	Rock	2:41
3	Luka	1987	Suzanne Vega	Pop	3:52
4	Love the way you lie	2010	Eminem & Rihanna	Hip Hop/rap	4:23
5	And then you kissed me	2003	The Cardigans	Pop	6:03
6	Can you control yo hoe	2004	Snoop Dogg & Supafly	Hip hop/rap	3:09
7	Never again	2002	Nickelback	Rock	4:21
8	Russian roulette	2009	Rihanna	Pop	3:48
9	Heal the world	1991	Michael Jackson	Pop	1:39[a]
					Total 32:17

[a] Excerpt taken from the full song.

Technology. Depending on availability, one of three possible computers was used to play the songs and facilitate data input from participants.   All three computers were sufficiently similar in specification to the following: computer hardware - AMD Athlon™ 5000 dual-core processor, 2.21 Ghz, 1.75GB of RAM, CD drive, keyboard, mouse, and stereo headphone jack; computer system - Intel/AMD base platform, Microsoft Windows

XP Professional, version 2002, Service Pack 3, Microsoft Office Word 2007, and Media

Player. Panasonic RP-HT161 stereo headphones were used which were placed over the

ears, and an extra two sets were kept for redundancy purposes. One computer disk (CD)

was used per participant, and extra CD's were available for redundancy purposes.

Procedures

Initial Preparation. Participants who responded to the recruitment campaign were

sent the participant information sheet (Appendix A) and asked to advise their availability

for the research. Based on their availability, a session was then scheduled for attendance at

a designated room on the university campus.

In preparation for the sessions, a folder on a directory on the computer was set up for

each participant and named by participant number. For example, the folder for participant

one was named P1, and for participant two was named P2, and so forth. A set of eight

questionnaires named by participant number and song were placed in each participant

folder. The participant folders named with odd numbers, such as P1, P3, and so forth,

contained questionnaires written for the song first condition, and those with even numbers

were written for the lyrics first condition. Questionnaires across each condition were

identical in all respects except that those for the song first condition contained the word

song in questions one, two, and three, and the word lyrics in question four. Those in the

lyrics condition contained the word lyrics in questions one, two, and three, and the word

song in question four (refer to Appendices B1 and B2 for the song first and lyrics first

questionnaires respectively).

The CDs of songs were set up in the Windows Media Player application on each of the three computers to display the actual names of the songs in the order they would play, rather than a list of song one, song two, and so forth. This step aimed to reduce confusion for participants who would be required to stop play after listening to each song and start play for each next song.

Preparation for each session. Prior to each participant's arrival, the researcher worked through a predetermined checklist of tasks. In no necessary order, the consent form (Appendix C) was placed together with a pen and set of research instructions on a desk beside a designated research computer (refer to Appendices D1 and D2 for the research instructions). A CD was placed in the CD drive and Windows Media Player was opened. To eliminate possible distractions from activity on the computer screen, the 'Allow screensaver during playback' option was deselected from Windows Media Player. The headphones were connected to the computer and tested for stereo, and the volume was set to a moderate level to prevent a potentially harmful burst of noise in the ear of the participant, prior to the participant having the opportunity to adjust the volume to a preferred level. The first song in the ordered list was then selected and paused for play. The eight questionnaires were opened in Microsoft Word in the established order of the song list, and the Microsoft Windows Explore directory was closed. The songs, lyrics, and questionnaires were presented to all participants in the same sequential order. No other programs or screens were opened which left only the questionnaires for each song open in Microsoft Word, and the CD playlist open in Windows Media Player. The lyrics to the eight songs were each folded separately and placed in an ordered pile next to the computer

in the same order as the song list and questionnaires. The lights in the room were always

turned on, the door was kept closed, and the windows were kept closed to reduce any

interference from noise outside the room.

    The research session. Upon arriving at the research session, participants were

welcomed into the room and asked to take a seat in front of a designated computer.

Participants were then asked to sign the consent form and read the research instructions.

The researcher then showed the participants how to access and type into the questionnaires

in the correct order of the songs, and how to play and pause the songs in Windows Media

Player. Participants were asked to adjust the volume of the headphones to a comfortable

level and to not read the lyrics whilst listening to a song. That is, reading the lyrics of a

song was to be a separate activity to listening to the song regardless of the research

condition participants were assigned to. Participants were invited to take small breaks

between songs if necessary, and to notify the researcher with any queries or concerns

during the research session.   Participants then proceeded with the research in the

succeeding manner.

    For the song first condition, using the headphones, individual participants listened to

the first song and then, with the Media Player paused, answered questions one, two, and

three on the questionnaire for that song. Then, the participants read the printed lyrics to

that song, and answered questions four and five on the questionnaire for that song. Next,

participants listened to the second song and repeated the same procedure just described.

This cycle of events continued for each song until the questionnaires for all eight songs

were completed. Participants then listened to the extract from the song Heal the World by Michael Jackson.

The procedure for the lyrics first condition was identical to that described above, except that the presentation order of listening to the song and reading the lyrics was reversed. That is, participants first read the lyrics to a song, answered questions one, two, and three, and then listened to the song, and answered questions four and five. A separate set of instructions and questionnaires were designed for each research condition to reflect the appropriate order of tasks.

At the conclusion of the research session, participants were invited to comment on the session and ask questions about the research. Participants were then thanked for their participation and handed a piece of paper with the name and number of a domestic violence support line in case they later experienced distress as a result of their participation.

Without reading the data, the researcher then saved the questionnaires for individual participants against their assigned participant number. After approximately every five participants, the answers from all five participants would be copied and pooled into a single computer file for ongoing analysis of the qualitative data. The aforementioned step aimed to keep each participant's data anonymous from the researcher.

All participants elected to type the answers to the questions into the Microsoft Word questionnaires on the computer rather than handwrite their answers on a hardcopy of the questionnaire. The hardcopy option was available to all participants.

Results

Quantitative Data

This study primarily focuses on qualitative data, however, quantitative analyses were performed on participant responses to question three and question four to determine whether differences in the perception of songs were significant statistically. Questions three and four related to ten categorical response alternatives presented as a semantic differential scale.

Data Preparation

SPSS Statistics software, version 17, was used for the quantitative analysis. In order to analyse differences on responses to the semantic differential scale, each of 9 of the 10 response alternatives was assigned a number from one to nine (as illustrated in Table 2) and treated as interval data for songs one to eight. Data for song nine was not of interest to the study and was not collected. The 10th response alternative on the scale, Can't Decide, was treated as missing data.

Skewness and Kurtosis

At the start, data normality checks were performed by comparing the kurtosis statistic and standard error for each song. In cases where the standard error was greater than twice the value of the kurtosis statistic, the data was deemed non-normal. This method is a common rule for determining whether the data distribution departs from normal (Coolican, 2009).

Table 2

Conversion of Categorical Data to Interval Data

Categorical response alternatives	Interval data equivalent
Opposes completely	9.00
Opposes moderately	8.00
Opposes slightly	7.00
Opposes maybe	6.00
Neither opposes nor promotes	5.00
Promotes maybe	4.00
Promotes slightly	3.00
Promotes moderately	2.00
Promotes completely	1.00

Kurtosis ranged from -.487 to +19.936 for data from question three and from -.276 to 15.666 for data from question four, with a standard error of .887. Skewness ranged from -2.147 to +4.333 for data from question three and from -.528 to +2.55 for data from question four, with a standard error of .456. The means and standard deviations for data from questions three and four are shown in Table 3 and Table 4 respectively. The distributions were, therefore, non-normal and non-parametric tests were used accordingly for the analyses.

Table 3

Mean and Standard Deviation by Song for Question Three

Song no. and title	Mean	Standard deviation
1 Remember that	7.96	1.37
2 Run for your life	3.23	2.88
3 Luka	3.15	2.47
4 Love the way you lie	6.27	2.34
5 And then you kissed me	3.08	2.20
6 Can you control yo hoe	1.23	.81
7 Never again	7.27	2.14
8 Russian roulette	3.08	2.78

Table 4

Mean and Standard Deviation by Song for Question Four

Song no. and title	Mean	Standard deviation
1 Remember that	8.31	1.43
2 Run for your life	2.38	2.06
3 Luka	6.04	2.28
4 Love the way you lie	3	2.53
5 And then you kissed me	3.31	2.42
6 Can you control yo hoe	1.12	.32
7 Never again	6.81	2.98
8 Russian roulette	3.04	2.47

Data Analysis

Individual differences between questions three and four. For question three, participants rated the first presentation of a song or lyrics as opposing, promoting, or neither opposing nor promoting domestic violence. For question four, the same participants rated the second and alternate presentation of lyrics or song. The presentation order of song and then lyrics were reversed for the lyrics first group.   A Wilcoxon (*T*) matched pairs signed ranks test was performed to test for median differences in the rankings of individual participant responses to questions three and four. That is, to determine the statistical significance of the changes made to song categories after reading the lyrics and then listening to the song, or listening to the song and then reading the lyrics. No statistically significant differences were found for any song (p > .05) (ranks provided in Appendix E1), which suggests that individual participants did not significantly differ in their perception of the songs after reading the lyrics and listening to the song or, vice versa. However, all 26 participants provided different responses to the two questions for at least one out of eight songs. Song two, Run For Your Life, and song five, And Then You Kissed Me, received the highest number of changed responses (n=15). These results suggest that the greatest amount of perceptual change between the two different presentations of the lyrics occurred with those two songs.

Song ratings in response to questions three and four. Across all participant responses to question three, song one, Remember That, received the highest number of responses in the opposes domestic violence category (n=25), and song six, Can You Control Yo Hoe, received the highest number of responses in the promotes domestic violence category

(n=25). This was similar in response to question four, where song one received the highest number of responses in the opposes domestic violence category (n=25), and song six received the highest number of responses (n=26) in the promotes domestic violence category. Overall then, song one, Remember That, was predominantly classed as opposes domestic violence, and song six, Can you Control Yo Hoe, was predominantly classed as promoting domestic violence (refer Appendix E2). The song with the most variability was song eight, Russian Roulette.

Group differences in response to questions three and four. For each song, separate Mann-Whitney *U* tests were performed to analyze median differences between the song first and lyrics first groups' responses to questions three and four. No statistically significant differences were found between the two groups for question three (p > .05), and for seven out of eight songs for question four (p > .05) (results provided in Appendix D5). However, the difference between the two groups in response to question four was statistically significant for song two, Run For Your Life, (n_1=n_2=13, U=43.000, p = .020, Z = -2.322, r = .46) with an effect size of 0.45 (results provided in Appendices E3 and E4 respectively). This result suggests a moderately large difference in the final perception of the song between the song first and lyrics first group.

For question three, the opposes domestic violence categories and the promotes domestic violence categories were collapsed into one overall opposes category and one overall promotes category. A cross tabulation was performed to determine whether the presentation order of listening to the song before reading the lyrics, or reading the lyrics before listening to the song, resulted in different responses to the same song by each group.

The same two songs received the highest and lowest number of responses in the same overall category from both participant groups (refer Appendix E2 for all songs). That is, no statistically significant differences were found between the two groups. Song one, Remember That, received the highest number of ratings in the opposes domestic violence categories across both groups ($n_1=12$, $n_2=13$), regardless of whether people listened to the song or read the lyrics, and song six, Can You Control Yo Hoe, received the highest number of ratings in the promotes domestic violence categories across both groups ($n_1=13$, $n_2=12$).

Group differences in number of changed responses. Analysis was performed on the total number of times each group changed the category of each song in response to question four compared to question three (refer to Appendix E5 for all songs). For the lyrics first group, song four, Love The Way You Lie, received the highest number of category changes ($n=9$) whereas for the song first group, song five, And Then You Kissed Me, received the highest number of category changes ($n=9$). In contrast, song six, Can You Control Yo Hoe, received the lowest number of category changes ($n_1=1$, $n_2=1$) across both groups. These results suggest the greatest change in perception between the two groups was for two different songs, whereas the groups predominantly did not differ in their perception of song six.

Qualitative Analysis

Data coding and analysis. The present study aimed to explore possible changes in the perception people form of songs when listening to the song compared to reading the lyrics

without music. Of primary interest, however, was the self-reported reasons people changed the rating of a song if, indeed, they did. As such, participants were asked to comment on the reason they had changed the rating of a song. Participants provided these reasons in response to question five: "If your answers to question 3 and 4 are **different**, please comment on what made you change your mind.". Using an inductive approach, thematic analysis was conducted on responses to question five that offered a reason for changing the rating of a song. Because this aspect of the data was of primary interest, unrelated responses offered for question five were not included in the present analysis. For example, one participant did not change the rating of song three Luka, but, in response to question five, commented that "I know the lyrics to this song off by heart anyway because it's on one of the mix tapes is listen to in the car all the time, so reading the lyrics didn't make a difference.". In a different example, the response to question five was "Although I still feel the song promotes the worst type of jealousy-induced violence, the catchy, toe-tapping beat of the music goes a long way to negating the impact of the actual lyrics – the music camouflages the message.". The aforementioned response was not used because the participant had not changed the rating of the song.   Conversely, data responses provided for questions one and two were included in the analysis if that data was deemed relevant to question five and the participant had changed the rating of the song. However, these instances were few.

An inductive, data-driven approach to developing themes was adapted from Boyatzis (1998), Braun and Clarke (2006), and Buetow (2010). Like Boyatzis (1998), thematic analysis is employed here as a process to analyze qualitative information, rather

than as a qualitative methodology, and is positioned within a positivist empiricist paradigm. Data were analyzed at a semantic level.

The process. The approach of identifying themes and then creating codes, as suggested by Boyatzis (1998), although initially attempted, seemed inappropriate for the data, and was abandoned in favour of Braun and Clarke's (2006) guidelines of formulating codes, linking them, and then identifying themes. That is, initial attempts at identifying themes in a sub-sample of data prior to establishing codes resulted in confusion and seemed premature. This may have been because participant comments were often short (one or two sentences), and so themes were merely reworded comments. Regardless, the researcher was more comfortable with Braun and Clarke's (2006) guidelines which resulted in a clearer approach to the analysis. However, the validation of codes recommended by Boyatzis (1998) was employed, and saliency (importance) and prevalence (recurrence) of codes and themes was considered, as recommended by Buetow (2010).

The process undertaken to develop codes and themes is briefly described here. Firstly, relevant participant responses to question five were individually extracted and copied from the participant response sheets into a Microsoft Word document. These responses were listed in no particular order, and were then analyzed for similarity of reasons. In terms of the reasons for changing the category of a song, similar responses were grouped together and dissimilar responses were left separate.

Secondly, codes were defined, described, and labelled across all songs for the song first group and the lyrics first group (refer to Appendices F1 and F2 for a comprehensive list of codes and associated data extracts for each group). This process of defining, describing,

and labelling codes was revisited several times in an effort to more faithfully capture and reflect the reasons provided by participants, and remain true to a data-driven approach. Seven codes were identified for the song first group and seven codes for the lyrics first group. The equal number of codes for each group was incidental, and during the process of development some codes were discarded or replaced, and others were retained. Some codes were also similar across both groups.

Thirdly, codes were sorted into four possible categories of important/recurrent, important/not recurrent, not important/recurrent, and not important/not recurrent. The codes were then examined for importance and recurrence. Three or more responses within a code were considered recurrent. Codes that were not recurrent and perceived as not important were not analyzed for themes.

Fourthly, FreeMind mind mapping software was used to display the codes, and conceivable connections between codes were identified across both groups (refer to Appendix F3 for a map of codes and themes.).

Finally, themes were then developed from the mind map of codes. In some instances, combinations of related codes formed themes and, in other instances, single, disconnected codes were considered themes. This process of developing themes was revisited several times in order to achieve a deeper level of understanding of the data and possible connections between codes. Finally, the analysis and revised themes in response to question five were concluded.

Themes for data from question five. Four main themes were developed from the codes. These themes were i) additional information, ii) incongruence, iii) character

differences, and iv) realization. Within the i) additional information theme, two sub-themes were identified as i.a) missed words, and, i.b) more than words; and within the ii) incongruence theme, two sub-themes were identified as ii.a) music tempers lyrics, and, ii.b) song impression (refer Figure 1). These themes are presented here with some of the associated data extracts.
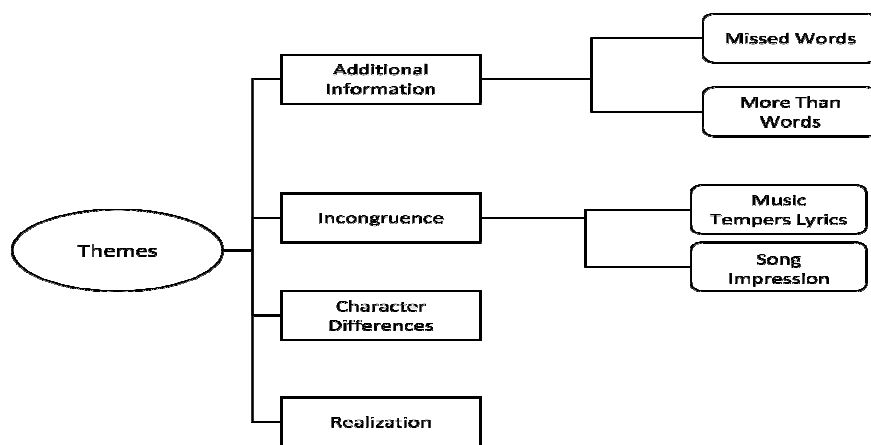
Figure 1. Themes and sub-themes for responses to question five.

Theme one – additional information. Participants attributed a change in their perception of a song to additional information derived from either the music or lyrics that was not previously available. This information altered the interpretation of the song narrative or message.

Missed Words. Participants attributed a change in their perception of a song to the availability of words in the printed lyrics that were not heard when those participants listened to the song.   Reading the complete set of lyrics altered the interpretation because

of the availability of additional words. Missed words were apparent in data from six

participants in the song first group.

Song first group, Extract 1, Participant 1, Song 1: *"…I did not hear the words "it ain't*

worth it , take your heart and run", after reading that I see this song is fully opposed to

domestic violence". In an earlier response (to questions one and two), this participant first

interpreted the song as a story about a woman reminding another person to learn from past

experiences of abuse. After reading the lyrics, the participant changed the rating of the

song from opposes slightly to opposes completely.

Song first group, Extract 2, Participant 3, Song 5: *"Reading the lyrics shows words*

that I missed during listening to the song … that suggests that the woman isn't as into the

violence as she appeared to be at first listening." This participant first interpreted the song

as a woman experiencing physical abuse from her partner, and who enjoys and encourages

the abuse and sees violence as a form of love.   After reading the lyrics, the participant

changed the rating of the song from promotes completely to promotes slightly.

Song first group, Extract 3, Participant 11, Song 6: *"I didn't catch the parts where he*

says he didn't want to do it, he was sick and tired …". This participant first interpreted this

song as a song about guys who believe women should be under the control of men, and a

way of life where the control of women through violence is actively encouraged. After

reading the lyrics, the participant changed the rating of the song from promotes completely

to promotes moderately.

More than words. Participants attributed a change in their perception of the category a

song belonged in to the information gained from the music or singing, which altered the

interpretation of the lyrics. The music or singing portrayed a more in-depth story than the printed lyrics and listening to the song more fully informed participants of the meaning of that song. This theme was apparent in data from nine participants in the lyrics first group.

Lyrics first group, Extract 8, Participant 2, Song 4: *" Rihanna seems to have passion in her voice when she sings I love the way, that to me she is saying because I love you I will put up with that <u>behaviour</u>. Almost stating to others this is a demonstration of my love for my man. The way they change the type of music he sings to, compared to what she sings to, it sounds like she is educated, middle class, whereas he is low income, almost stereo types who fills each of those roles".* After reading the lyrics, this participant first interpreted the song as being about a volatile relationship with extreme good and bad times, and the man not taking responsibility for his actions. After listening to the song, the participant changed the rating from promotes maybe to promotes slightly.

Lyrics first group, Extract 9, Participant 4, Song 4: *"The male part is quite aggressive whereas the female part is very passive and makes it seem as though the abuse is ok because she likes it.".* This participant first found the song confusing, and interpreted the lyrics as about a harmful relationship or sexual sadism. After listening to the song, the participant changed rating from 'promotes moderately' to 'promotes completely'.

Lyrics first group, Extract 10, Participant 6, Song 3: *"With the music Luka's story is stronger and becomes like a testament 'this is what is happening to me is it ok'?".* This participant first interpreted the lyrics as that of denial and the abused person trying to make sense of the situation. After listening to the song, the participant changed the rating from neither opposes nor promotes to opposes slightly.

Theme two – incongruence. Incongruence describes a perceived incompatibility between the overall sound of the song and the actual message or story interpreted from the printed lyrics. This perceived incompatibility caused participants to reconsider which category a song belonged in.   The extracts below are presented within the two sub-themes: music tempers lyrics, and, song impression.

Music tempers lyrics. Participants attributed a change in their perception of the category a song belonged in to the positive or pleasing sound of the music, which distracts from, or tempers, the violence of the lyrics, thereby altering the interpretation of the lyrics. The content of the lyrics is incongruent with the sound of the music. This incongruence was apparent in data from 11 participants, across both groups.

Lyrics first group, Extract 17, Participant 2, Song 8: *"The music makes it sound very sexy, like it is some kind of sexy initiation into a relationship … almost sounds like a love song".* This participant first interpreted the lyrics as a demonstration of a terrified woman's love for her partner. After listening to the song, the participant changed the rating from promotes maybe to promotes slightly.

Lyrics first group, Extract 18, Participant 10, Song 2: *"I changed my mind because the melody of the song sounds light-hearted; like the threat is playful rather than serious.".* This participant first interpreted the lyrics as conveying a frightening threat from a man to a woman. After listening to the song, the participant changed the rating from promotes moderately to promotes maybe.

Song first group, Extract 19, Participant 19, Song 2: *"I thought it was a catchy song with funky rhythms. If you didn't listen to the lyrics then you wouldn't really know that it's about violence.".* This participant first perceived the song as a girl who should not let her

guy see her with another man. After reading the lyrics, the participant changed the rating of the song from promotes moderately to promotes completely.

Song impression. When listening to a song, participants gain an overall impression of a song that is not gained from reading the lyrics. This overall impression influences the perception of a song, and was apparent in data from three participants, across both the song first and lyrics first groups.

Song first group, Extract 23, Participant 1, Song 1: *"During listening to the song I got the feeling the song was someone story but not a warning ...".* This participant first interpreted the song as a story about a woman reminding another person to learn from past experiences of abuse. After reading the lyrics, the participant changed the rating of the song from opposes slightly to opposes completely.

Lyrics first group, Extract 24, Participant 4, Song 5: *"This comes across as a love song where the underlying message of violence towards the woman beginning after the marriage is offered as an act of love.".* The participant first interpreted the lyrics as about emotional pain but wondered if the song may be referring to physical assaults with the message that love is not always sweet and gentle. After listening to the song, the participant changed the rating from promotes maybe to promotes completely.

Theme three - character differences. Reading the lyrics after listening to the song, or listening to the song after reading the lyrics, changed the perspective of the participant in relation to the character/s in the story. That is, the person perceived the character/s in the narrative differently when listening to the song compared to reading the lyrics. This change

in perspective was apparent in data from 20 participants across both the song first and lyrics first groups.

Song first group, Extract 11, Participant 1, Song 3: *"It sounds like she knows what is happening is not right and would like to get out of the situation but does not want anyone else to help"*. This participant first perceived the character in the story as someone who does not want the abuse she experiences vocalized. After reading the lyrics, the participant perceived the character as someone who knows the abuse is wrong and wants the abuse to end. The participant changed the rating of the song from promotes moderately to neither opposes nor promotes.

Song first group, Extract 12, Participant 3, Song 7: *"After reading the lyrics, it doesn't seem as though the singer is quite so proactive in stopping the violence. … aside from the title of the song (which suggests that he thinks the violence is unacceptable), he's telling a story rather than coming out and saying that domestic violence is completely wrong."* . This participant first perceived the character as a person telling a friend that men should not physically abuse women. After reading the lyrics, the participant perceived the character as less opposed to the violence. The participant changed the rating of the song from opposes slightly to opposes maybe.

Song first group, Extract 13, Participant 13, Song 4: *"The ending lyrics show how he gets pleasure out of her pain, how he doesn't want to be contested in strength."*. This participant first perceived the characters in the song as a young couple who make mistakes in life and the man as someone who regrets his occasional abuse but realizes it could happen again. After reading the lyrics, the participant perceived the man more negatively and changed the rating of the song from promotes slightly to promotes moderately.

Lyrics first group, Extract 14, Participant 2, Song 2: *"… the way they sung gave the guy an almost James Dean image, they kind of glorified the bad boy image. To me they almost made the guy who is going to hit his girlfriend, if he catches her with another guy, seem cool.".* This participant first perceived the male character in the song as a man who is excessively jealous and does not accept responsibility for his actions. After listening to the song, the participant was tempted to perceive the character more favourably. The participant changed the rating of the song from neither opposes nor promotes to promotes maybe.

Lyrics first group, Extract 15, Participant 10, Song 7: *" I hadn't noticed the first time round that some of the lyrics (e.g. "go back to bed") seem to suggest that the lyrics are being sung by the child of a women suffering from domestic abuse …".* This participant first perceived the character telling the story as an onlooker. After listening to the song the participant perceived the character as the child of the abuser and victim. The participant changed the rating of the song from opposes maybe to opposes slightly.

Lyrics first group, Extract 16, Participant 14, Song 4: *"The song is about two people who really love one another but have no idea how to appropriately express that love and how to act.".* This participant first perceived the characters as a couple sexually stimulated by violence in their relationship. After listening to the song the participant perceived the characters as two people who really love each other but do not know how to appropriately express that love. The participant changed the rating of the song from 'promotes moderately' to 'neither opposes nor promotes'.

Theme four – Realization. Reading the lyrics led to a realization or clarity about the song narrative that was not apparent to the participant when listening to the song, even though the participant heard the words to the song. This realization was apparent in data from 12 participants in the song first group.

Song first group, Extract 5, Participant 1, Song 2: *"After reading the lyrics, I see the song is more about the guy warning the girl that she can never leave him, as he would rather see her dead than see her with another man.".* This participant first interpreted the narrative as a man warning his partner against infidelity, however, after reading the lyrics the participant interpreted the lyrics as a man warning his partner to remain in the relationship. The focus of the warning changed from fidelity in the relationship to a refusal to accept any future relationships the woman may pursue, even if the current relationship is terminated.   The participant changed their rating of the song from promotes moderately to promotes completely.

Song first group, Extract 6, Participant 5, Song 5: *" … it is amazing what reading the words do versus hearing them … I do still see some bondage aspects …. however, I do see strong undertones of DV even though she plays it down, referring to it as a sport.".* This participant first interpreted this e narrative as sexual masochism or sexual sadism, with the word 'hitting' as a possible metaphor in reference to the emotional pain of love. After reading the lyrics, however, the participant noticed possible connotations of domestic violence. The participant changed the rating of the song from neither opposes nor promotes to opposes completely.

Song first group, Extract 7, Participant 23, Song 4: *"On the first hearing it sounds like violence is the main theme. Seeing the lyrics you get the sense of regret and the wish to*

change the behaviour into something better.". This participant first interpreted the narrative as boundless passion and all-consuming uncontrolled love, where the woman enjoys pain, but the relationship is out of control. After reading the lyrics, the participant interpreted the lyrics as a sense of regret and a desire to address the violent behaviour, rather than violence being the theme of the lyrics. The participant changed the rating of the song from neither opposes nor promotes to opposes moderately.

Discussion

The present study aimed to explore whether people change their perception of songs with domestic violence content, based on two different presentations: i) listening to the song, and, ii) reading the lyrics without music. The study also aimed to explore the self-reported reasons for changes in interpretation and perception between the two presentations. Changes in perception were identified as differences in the individual participant ratings of songs and lyrics between questions three and four. Question three was the first rating of whether, and to what extent, a song or lyrics opposed or promoted domestic violence, and question four was the second rating of the alternate presentation for that song. Changes in interpretation were derived from participant comments in response to question five.

The lack of statistical significance for changes in perception across the two presentations is not surprising given that people rely on individual knowledge and personal experience to derive meaning from songs (Greenfield et al., 1987). In fact, previous research shows that participants who have experienced domestic violence are more likely to interpret ambiguous song narratives as stories about domestic violence (Maxwell, 2001).

Although the domestic violence attitudes and experience of participants in the present study is not known, the study may have attracted some participants with strong views who may have been less willing to change their perception across the presentation of songs and lyrics.

The lack of statistically significant changes in perception is also in line with previous research. Iverson (1989) found that the presence of music failed to effect whether lyrics were perceived by participants as personally relevant or credible. Similarly, Thompson and Russo (2004) found that although the lyrics for some songs were perceived as more positive or more negative when accompanied by music, significant differences only occurred when specific features of music were present. Nonetheless, in the present study, all participants did change the rating of at least one song, resulting in 41% of changed ratings across various songs. Thus, all participants showed some willingness to alter their perception of the lyrics and songs.

Given that statistically non-significant differences in changed perceptions are not surprising, the qualitative data is important in understanding why some participants did change their perceptions, particularly on a serious topic that can potentially foster strong views. The qualitative data is also important in showing whether participants identified the music or lyrics in their articulations of reasons for changes in perception. Finally, the qualitative data offers insight into changes in the interpretation of song narratives and messages across the two presentations.

Findings from Themes

An interesting finding from the qualitative data relates to the source of information participants drew on to understand the song narratives and messages. Participants

articulated that the music and/or singing portrayed a more in-depth story than the lyrics in text. It appears that participants derived affective and cognitive concepts from the music that were either not conveyed by the lyrics, or lacked appropriate expression or emphasis in the lyrics. For example, one participant reported that *"There's more feeling when you hear a person singing those words. Luka is showing us his/her pain, and the song opposes domestic violence."* As such, the emotion conveyed by the music was perceived as greater than that conveyed by the lyrics. Another participant reported that *"The way they change the type of music he sings to, compared to what she sings to, it sounds like she is educated, middle class, whereas he is low income, almost stereo types who fills each of those roles".* Thus, music serves as a source of information in song interpretation.

The notion that music serves as a source of information supports previous research findings that demonstrate the power of music to convey affective and cognitive concepts (e.g. Curtis & Bharucha, 2010; Juslin & Västfjäll, 2008), and influence meaning (Koelsch et al., 2004; Sellnow & Sellnow, 2001; Thompson & Russo, 2004). The more than words theme shows that when participants listened to the song after reading the lyrics, they perceived information not conveyed by the lyrics. This new information resulted in the reinterpretation of song narratives and messages which changed the overall perception of the song. Thus, the musical component of songs can be a strong addition to the semantic meaning of the lyrics.

The other source of information that informed the interpretation of narratives and messages was, of course, the lyrics themselves. One aspect of the text lyrics that participants commented on was the availability of words in text that were missed in song. For example, one participant commented that *"...I did not hear the words "it ain't worth it*

, take your heart and run", after reading that I see this song is fully opposed to domestic violence". Previous research shows that individual words provide meaning in the interpretation of narratives (Graesser, 2008). Thus, participants articulated the importance of a few key words that altered their interpretation of the narratives and messages, and changed their perception of the song.

One possible reason for the importance of key words relates to inference. Research shows that people infer information not present in narratives (Kaakinen & Hyönä, 2008). It is possible that missed words resulted in greater inference than might have occurred if those words were not missed. It may be that, when reading the lyrics, participants perceived inaccuracies in their inferences and adjusted their interpretations accordingly. Of course, it is possible that participants who did not change the rating of a song also missed words when listening to that song. However, those participants may have inferred information closer to that conveyed in the text, or missed words that were not key to their interpretation of the narrative.

Another interesting aspect of the lyrics related to clarity. Participants articulated a sense of clarity from reading the lyrics that was not gained when listening to the song. This sense of clarity is reflected in the realization theme and, importantly, excludes participant reports of missed words. For example, one participant reported that *"After reading the lyrics, I see the song is more about the guy warning the girl that she can never leave him, as he would rather see her dead than see her with another man.".* Another participant reported that *"On the first hearing it sounds like violence is the main theme. Seeing the lyrics you get the sense of regret and the wish to change the behaviour into something better.".* This finding shows, therefore, that listening to songs resulted in what was later

perceived by participants as an erroneous interpretation. This erroneous interpretation was identified and corrected when reading the lyrics to that song without music.

The reasons for this realization are not clear. Perhaps participants gained clarity from reading the lyrics more than once, thus taking extra time to more fully comprehend them. The research procedures did not exclude this possibility, whereas listening to each song was a single occurrence for participants. Alternatively, the order of first listening to songs and then reading the lyrics may have created an expectation that the lyrics would provide clarity. Indeed, the order of the two presentations was not counter-balanced within the list of songs presented to each participant. Therefore, if an expectation effect was present, participants may not have fully attended to the lyrics in song.

In addition to the finding that both music and lyrics were perceived as sources of information, participants also sometimes perceived these two sources as contradictory. That is, participants commented on the incongruence between the music and lyrics of some songs. This was particularly the case for song two, Run For Your Life, and song four, Love The Way You Lie. For these songs, the music was perceived as cheerful, or upbeat, which contradicted the antisocial nature of the lyrics. For example, one participant commented that *"I changed my mind because the melody of the song sounds light-hearted; like the threat is playful rather than serious."*. This finding supports the view that incongruence results in potentially different messages from music and lyrics (Sellnow & Sellnow, 2001). When this occurs, rather than music adding to the information in lyrics, the music appears to detract from the lyrics. This finding also shows that serious threats and actions relating to domestic violence can be perceived as less serious when accompanied by pleasant music. When the music was positive and the lyrics were antisocial, the music seemed to soften the

message of the antisocial lyrics. Thus, some participants were willing to view those songs less harshly.

The incongruence theme is in line with previous research. Under conditions of incongruence, research has shown that music rather than lyrics is more powerful in inducing emotions in listeners (Ali & Peynircioglu, 2006; Sousou, 1997). Although the present study did not measure emotions, the possibility exists that pleasant music induced pleasant emotions which, in turn, influenced the interpretation of the lyrics. However, it remains unclear whether music really is more powerful in influencing the interpretation of the lyrics and, thus, changing perceptions. Whilst it may be that participants were influenced more by the music than the lyrics, it is equally possible that participants who did not change their perceptions were influenced more by the lyrics than the music. Moreover, it is not known whether music perceived as antisocial would change the interpretation of prosocial lyrics in songs. Nonetheless, participants did articulate the positive sounding music as a reason for a change in perception.

The incongruence theme also includes a more general form of incongruence. Some participants gained a general impression about a song that was incongruent with the overall narrative or message of those songs. However, participants did not attribute this impression to the sound of the music. The reasons for this general impression are not clear, however, it may be that an aspect of the music, or the overall sound of the music, captures the attention of the listener and filters out information from the lyrics. In this way, perhaps listeners become biased toward a particular perception in relation to the song. Alternatively, various incidental cues may serve to bias some participants toward a particular impression. Bias in song interpretation has previously been found to relate to incidental cues such as genre of

music (Ballard et al., 1999; Fried, 1996, 1999) and individual performers (Burger et al., 2004). It is possible that participants were not aware of, or failed to report, incidental cues for a particular song.

The final theme seen in the participant comments shows a discrepancy between the song and lyrics presentations in the perspective participants held in relation to the character/s in song narratives. That is, participants changed their view of the character/s in the narrative when listening to the song compared to reading the lyrics. This theme of character differences was highly prevalent for both participant groups, and occurred across all songs. For example, one participant reported that *"After reading the lyrics, it doesn't seem as though the singer is quite so proactive in stopping the violence. … aside from the title of the song (which suggests that he thinks the violence is unacceptable), he's telling a story rather than coming out and saying that domestic violence is completely wrong."*. Another participant reported that *"Listening to the song makes me say the lyrics completely promotes domestic violence … Luka says it's ok to get the beatings."* The reason for the changed perspectives is unclear, but may relate to the way in which narratives are comprehended. The eight songs contained narratives centred on the experiences and perspectives of characters in relation to situations and events, rather than the events themselves. Previous research shows that people vicariously experience the events described in stories from the perspective of the main characters (Zwaan, 1999). Perhaps when listening to the songs the presence of music interfered with, or altered, the perspective-taking ability of participants, thus resulting in different perspectives across the two presentations.

Differences in Group Perceptions

The order of the song and lyrics presentations was counter-balanced between participants, resulting in the two participant groups. To further investigate changes in perception, for each song, the song ratings from the song first group, who listened to the song before reading the lyrics, were compared with the lyrics ratings from the lyrics first group who read the lyrics before listening to the song. That is, the first ratings of each group were compared. Group differences at the first rating were not statistically significant for any song, which suggests that the presence or absence of music did not change how the lyrics of songs were first perceived either in song or in text. In contrast, however, comparisons between the groups at the second rating showed a significant difference for song two, Run For Your Life, but not for the remaining seven songs. This finding is similar to Thompson and Russo (2004), who found that although the lyrics for some songs were perceived as more positive or more negative when accompanied by music, significant differences only occurred when positive features of music were present. As previously discussed, participants in the present study did report incongruence between the music and lyrics of song two, Run For Your Life. It may be that the incongruence between the music and lyrics in song two was stronger than that of other songs, which caused the groups to perceive the song differently at the final rating. The incongruence between the music and lyrics for song two may not have been noticed at the first rating because the groups had not yet had the opportunity to compare the two presentations for that song. This may explain why differences between the groups for question three were not significant for that song.

Overall Song Classifications

Across all participants, song one, Remember That, was predominantly classed as opposing domestic violence, and song six, Can You Control Yo Hoe, was predominantly classed as promoting domestic violence (refer Appendix E2). The song with the most variability was song eight, Russian Roulette.

The reason for the predominance of these songs over other songs is not entirely apparent in the data. However, previous research shows that songs labelled as rap are perceived more negatively than songs of another genre (Ballard et al., 1999; Fried, 1996, 1999). Song six, Can You Control Yo Hoe, is classified as rap and the lyrics are strongly misogynous, which is commonly associated with rap music. Although song four, Love The Way You Lie, is also classified as rap, the song is a duet with a female part that contradicts the typical sound of rap songs. In fact, as previously mentioned, some participants reported incongruence in this song. Thus, it may be that the typical rap sound and lyrics of song six, Can You Control Yo Hoe, more strongly influenced perceptions about that song, whereas the incongruence in song four, Love The Way You Lie, resulted in less severe perceptions. In a similar way, song one, Remember That is classified as a country song, a genre which is perceived as more acceptable than rap (Fried, 1999). However, it is likely that the lyrics of song one were more clearly prosocial, resulting in less variation in perceptions across participants for this song. Furthermore, the music in songs one and six appear not to have contradicted the messages of those songs.

The variability in song eight, Russian Roulette, may relate to a greater need for participant inference in the comprehension of the lyrics of song eight. That is, for some

participants, the lyrics to Russian Roulette were perceived as more ambiguous compared to the lyrics of other songs, thus contributing to greatest variation in perceptions.

Conclusion

The data from the present study showed few statistically significant differences in perceptions between the presentations of song versus lyrics in relation to the potentially prosocial and antisocial domestic violence content of the songs. One reason may be that the individual knowledge and experience participants used to formulate their interpretations of narratives and messages remained stable across both presentations. Another reason may be that some participants held strong attitudes in relation to domestic violence, and were not receptive to new information presented in the music or lyrics. Furthermore, the scale of measurement employed and the small participant sample size may not have been sensitive to statistical differences. Nonetheless, the primary aim of the study was to qualitatively explore the reasons for changed perceptions of songs with domestic violence content, presented in song or as text lyrics.

One interesting finding from the qualitative data is that the comprehension and interpretation of the narratives and messages of songs involves the perception of information from both the music and lyrics. In fact, it appears that music can communicate details in relation to domestic violence living that are not reflected in the semantics of language. A second interesting finding is that incongruence between the music and lyrics can result in softer perceptions of antisocial lyrics as promoting domestic violence. Given the increased prevalence and practice of listening to songs in today's society, the importance of this finding is in the implication that people may not find antisocial messages

in songs objectionable when the music of those songs is pleasant. Thus, composers who hope to convey narratives and messages on serious topics should aim for congruence between the music and lyrics. Although, some composers may intentionally create incongruence for artistic purposes, the impact of messages in those songs may be lost in the artistry of the music. Finally, the changed perspective in relation to the characters in song narratives is unexplained. However, the finding does indicate that perceptions of the characters in song narratives differ with the presence or absence of music.

The present study contained several limitations. Firstly, it is not known whether participants who first heard the song, and then read the lyrics, read the lyrics without memory of the music, or silently sung the lyrics whilst reading. Thus, a strict presentation of song versus lyrics may not have been achieved. Secondly, the study did not employ an experimental research design, so any effects of music or lyrics on perception and interpretation cannot be definitively stated.   However, the comments and articulations of the participants indicate that music did have an effect on interpretation and perception, at least for some songs. Fourthly, the study employed self-report measures which relied on the honesty of participants. Given the reasonably lengthy research sessions, some participants may have experienced fatigue and chosen not to record a change in perception in order to avoid commenting on the reason for that change. This strategy would have reduced participation time but also affected the results. Fifthly, the small sample size may have reduced statistical power in the quantitative analyses, and may limit whether the results can be generalised to the wider adult population of New Zealand.

Finally, it should be noted that the qualitative nature of the study, and the thematic analysis used to analyse the data is subjective on the part of the researcher. A different

researcher may have approached and interpreted the data differently, and formulated different codes and themes which could have resulted in different findings. This is not to say that the present findings are invalid, but only that alternate qualitative methods and interpretations of the qualitative data are possible. Thus, whilst the present study provides insight into the interpretation and perception of songs versus lyrics, alternative interpretations are possible.

The findings from the present study offer suggestions for future research. Future research could further investigate the power of music to convey information. Perhaps think-aloud protocols could be used to investigate the potential thoughts and images that inform interpretations of narratives in song compared to text, and the differences between these. Such studies may also provide insight into the generation of overall song impressions. Future research could also investigate the time course of song impressions formed by listeners during song listening. Furthermore, future studies could investigate whether music has the power to affect the perspective-taking abilities of listeners in relation to song narratives, and whether incongruence between antisocial music and prosocial lyrics results in changes in the interpretation of those lyrics. Finally, the role of music induced emotions in the interpretation of lyrics and the perception of songs could also be investigated. Thus, the present study offers potential areas for future research that could further knowledge on the power of music to communicate and the potential effects of music on listeners.

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Appendices

Appendix A: Participant Information Sheet.

The Interpretation of Domestic Violence Songs

INFORMATION SHEET

My name is Mellany Boulle and I am completing a Master of Arts (Psychology) at _____ University. My supervisor for this research is Dr Heather Buttle.

People within the wider community are invited to participate in a study which explores how people interpret domestic violence songs. The study is advertised on the internet (getparticipants.com) and people are welcome to mention this study to others who may be interested. Please read the information below to decide if you would like to participate.

Who can participate?

Persons aged 18 years or older who speak, read, write, and listen to English on a daily basis can participate. This study involves filling in questionnaires written in English, and listening to music sung in English.

What will I have to do?

The research will be conducted at the _____ campus in _____ from December 2010 to April 2011. Your participation will take approximately 1hour and 15 minutes. Please contact me (contact details provided overleaf) to set up a time. You will be asked to sign a participant consent form, listen to several songs, read the lyrics to the songs, and answer some questions about the songs. Your name will NOT be linked to any of the questionnaires, so all your answers will remain anonymous.

What are the risks?

This study involves listening to songs about domestic violence. The songs may contain offensive language and content that could be personally disturbing for some people.

How will I be thanked for participating?

You will go into a draw to win vouchers to the total value of $200 from your choice of either Paper Plus or Real Groovy stores, or both.   Extra entries available for those who refer friends/family.

How will the information I provide be stored?

The signed consent forms will be stored in a locked cabinet in the research supervisor's office at _____ University, and your participation will be kept confidential. The answers you provide in this study will not be linked to your name or consent form and cannot be traced back to you or any other participant. Your answers are anonymous, and only the researcher and research supervisor will have access to the information. At the conclusion of the study, the information will be securely stored at _____ University in the research supervisor's office for five years, and safely destroyed thereafter.

What are my rights?

You are not obligated to participate in this study.   If you decide to participate, you have the right to:

- decline to answer any particular question;
- decline to listen to or read the lyrics to any particular song;
- withdraw from the study at any time prior to or during your participation;
- ask any questions about the study at any time prior to or during your participation;
- provide information on the understanding that your name will not be used;
- receive a summary of the project findings once the study has concluded.

Project Contacts

If you have any further questions, please contact me or my research supervisor:

Mellany Boulle   e-mail: mellanyboulle@yahoo.co.nz

Dr Heather Buttle   e-mail: h.buttle@_____.ac.nz

This project has been reviewed and approved by the _____ University Human Ethics Committee: Northern, Application MUHECN 10/089. If you have any concerns about the conduct of this

research, please contact Dr Ralph Bathurst, Chair, _____ University Human Ethics Committee:

Northern, telephone 09 414 0800 x 9570, email humanethicsnorth@_____.ac.nz.

Appendix B1: Questionnaire for the Song First Condition.

P# - QUESTIONNAIRE #: **SONG NAME**

Q1. What do **you** think this song is about?

Q2. What message did **you** get from this song?

Q3. Based on how you interpret the song, below please highlight the category you think the song belongs in. How much does the song oppose or promote domestic violence?

OPPOSES				NEITHER OPPOSES NOR PROMOTES				PROMOTES	CAN'T DECIDE
Completely	Moderately	Slightly	Maybe		Maybe	Slightly	Moderately	Completely	

PLEASE READ THE LYRICS TO THE SONG

Q4. Now that you've read the lyrics, and **without** changing your answers above, please indicate how much the lyrics oppose or promote   domestic violence?

OPPOSES				NEITHER OPPOSES NOR PROMOTES				PROMOTES	CAN'T DECIDE
Completely	Moderately	Slightly	Maybe		Maybe	Slightly	Moderately	Completely	

Q5. **If** your answers to questions 3 and 4 are **different**, please comment on what made you change your mind.

Appendix B2: Questionnaire for the Lyrics First Condition.

P# - QUESTIONNAIRE #: **SONG NAME**

Q1.   What do **you** think the lyrics to this song are about?

Q2.   What message did **you** get from the lyrics?

Q3.   Based on how you interpret the lyrics, below please highlight the category you think the song belongs in. How much do the lyrics oppose or promote domestic violence?

OPPOSES				NEITHER OPPOSES NOR PROMOTES				PROMOTES	CAN'T DECIDE
Completely	Moderately	Slightly	Maybe		Maybe	Slightly	Moderately	Completely	

NOW PLEASE LISTEN TO THE SONG

Q4. Now that you've listened to the song, and **without** changing your answers above, please indicate how much the song opposes or promotes domestic violence?

OPPOSES				NEITHER OPPOSES NOR PROMOTES				PROMOTES	CAN'T DECIDE
Completely	Moderately	Slightly	Maybe		Maybe	Slightly	Moderately	Completely	

Q5. **If** your answers to questions 3 and 4 are **different**, please comment on what made you change your mind.

The Interpretation of Domestic Violence Songs

PARTICIPANT CONSENT FORM - INDIVIDUAL

This consent form will be held at _____ University for 5 years

I have read the Information Sheet and have had the details of the study explained to me. My questions have been answered to my satisfaction, and I understand that I may ask further questions at any time.

I agree to participate in this study under the conditions set out in the Information Sheet.

Signature: ....   **Date:** ....

Full Name - printed ....

I would like to receive a summary of the results of the study   Yes / No

If 'Yes', please write your e-mail OR postal address below.

E-mail address: _____ (please write clearly)

Postal address:
_____

Appendix D1: Instructions for Participants in the Song First Condition

THE INTERPRETATION OF DOMESTIC VIOLENCE SONGS

_____

INSTRUCTIONS (1)

_____

You have been given 8 questionnaires relating to 8 songs. Each questionnaire is the same but relates to a different song. Answer the questions based on **your interpretation** of each song. There are no right or wrong answers, please say what you really think. Your answers are anonymous and will not be linked to your name. Please do **not** write your name anywhere.

Take breaks if you need to.

Steps to follow:

1. Using the headphones provided, listen to the first song (Song 1: Remember That).
2. Answer questions 1, 2, and 3 on the questionnaire for the song you just listened to.
3. Read the lyrics to the song.
4. Answer questions 4 and 5 on the same questionnaire.
5. Take a break if you need to.
6. Listen to the next song on the list and continue from step 2 above. Make sure you use the correct questionnaire for each song.
7. Once all 8 songs are completed, listen to song no. 9 (Heal The World). There are no questions for this song.
8. Once you have finished, please place your questionnaires in the box provided or if you are typing your answers into the computer then remember to click on the save button.
8. Please tell the researcher when you have finished all 9 songs.

THANK YOU FOR YOUR PARTICIPATION!

Appendix D2: Instructions for Participants in the Lyrics First Condition

THE INTERPRETATION OF DOMESTIC VIOLENCE SONGS

_____

INSTRUCTIONS (2)
_____

You have been given 8 questionnaires relating to 8 songs. Each questionnaire is the same but relates to a different song. Answer the questions based on **your interpretation** of each song. There are no right or wrong answers, please say what you really think. Your answers are anonymous and will not be linked to your name. Please do **not** write your name anywhere.

Take breaks if you need to.

Steps to follow:

9.   Read the lyrics to the first song (Song 1: Remember That).

10. Answer questions 1, 2, and 3 on the questionnaire for the song lyrics you just read.

11. Now, using the headphones provided, listen to the song.

12. Answer questions 4 and 5 on the same questionnaire.

13. Take a break if you need to.

14. Read the lyrics to the next song on the list and continue from step 2 above. Make sure you use the correct questionnaire for each song.

15. Once all 8 songs are completed, listen to song no. 9 (Heal The World). There are no questions for this song.

16. Once you have finished, please place your questionnaires in the box provided or if you are typing your answers into the computer then remember to click on the save button.

8. Please tell the researcher when you have finished all 9 songs.

THANK YOU FOR YOUR PARTICIPATION!

Appendix E1: Song Rankings of Individual Responses to Questions Three and Four

Song no.	Ranks	Number	Mean rank	Sum of ranks
1	Negative	2	4.50	9.00
	Positive	6	4.50	27.00
	Ties	18		
2	Negative	10	8.35	83.50
	Positive	5	7.30	36.50
	Ties	11		
3	Negative	8	7.69	61.50
	Positive	6	7.25	43.50
	Ties	12		
4	Negative	9	6.83	61.50
	Positive	5	8.70	43.50
	Ties	12		
5	Negative	7	7.21	50.50
	Positive	8	8.69	69.50
	Ties	11		
6	Negative	1	2.00	2.00
	Positive	1	1.00	1.00
	Ties	26		
7	Negative	6	6.25	37.50
	Positive	4	4.38	17.50
	Ties	16		
8	Negative	4	3.63	14.50
	Positive	3	4.50	13.50
	Ties	19		

Appendix E2: Overall Response Categories by Group and Song for Question Three

		Question 3 Song 1				
		Promotes	Neither	Opposes	Undecided	Total
Group	Lyrics first	0	0	13	0	13
	Song first	1	0	12	0	13
Total		1	0	25	0	26
		Question 3 Song 2				
		Promotes	Neither	Opposes	Undecided	Total
Group	Lyrics first	9	2	2	0	13
	Song first	9	0	4	0	13
Total		18	2	6	0	26
		Question 3 Song 3				
		Promotes	Neither	Opposes	Undecided	Total
Group	Lyrics first	2	3	8	0	13
	Song first	3	3	7	0	13
Total		5	6	15	0	26
		Question 3 Song 4				
		Promotes	Neither	Opposes	Undecided	Total
Group	Lyrics first	9	3	0	1	13
	Song first	8	2	3	0	13
Total		17	5	3	1	26
		Question 3 Song 5				
		Promotes	Neither	Opposes	Undecided	Total
Group	Lyrics first	9	4	0	0	13
	Song first	8	1	3	1	13
Total		17	5	3	1	26

		Question 3 Song 6				
		Promotes	Neither	Opposes	Undecided	Total
Group	Lyrics first	12	1	0	0	13
	Song first	13	0	0	0	13
Total		25	1	0	0	26

		Question 3 Song 7				
		Promotes	Neither	Opposes	Undecided	Total
Group	Lyrics first	1	3	9	0	13
	Song first	1	1	11	0	13
Total		2	4	20	0	26

		Question 3 Song 8				
		Promotes	Neither	Opposes	Undecided	Total
Group	Lyrics first	7	2	1	3	13
	Song first	3	4	3	3	13
Total		10	6	4	6	26

Appendix E3: Differences between group responses to question three

Rankings for responses to question three by song and participant group.

Song no.	Participant group	Mean ranks	Sum of ranks	Mann-Whitney U	Z scores
1	Song first	12.50	162.50	71.50	-.710
	Lyrics first	14.50	188.50		
2	Song first	14.92	194.00	66.00	-.995
	Lyrics first	12.08	157.00		
3	Song first	12.96	168.50	77.50	-.365
	Lyrics first	14.04	182.50		
4	Song first	14.58	189.50	70.50	-.734
	Lyrics first	12.42	161.50		
5	Song first	12.85	167.00	76.00	-.445
	Lyrics first	14.15	184.00		
6	Song first	12.96	168.50	77.50	-.647
	Lyrics first	14.04	182.50		
7	Song first	14.62	190.00	70.00	-.778
	Lyrics first	12.38	161.00		
8	Song first	14.88	193.50	66.50	-.938
	Lyrics first	12.12	157.50		

Appendix E4: Differences between group responses to question four

Rankings for responses to question four by song and participant group.

Song no.	Participant group	Mean ranks	Sum of ranks	Mann-Whitney U	Z scores
1	Song first	13.27	172.50	81.50	-.178
	Lyrics first	13.73	178.50		
2	Song first	10.31	134.00	43.00	-2.322
	Lyrics first	16.69	217.00		
3	Song first	12.12	157.50	66.50	-.936
	Lyrics first	14.88	193.50		
4	Song first	14.88	193.50	66.50	-.989
	Lyrics first	12.12	157.00		
5	Song first	14.31	186.00	74.00	-.550
	Lyrics first	12.69	165.00		
6	Song first	14.00	182.00	78.00	-.602
	Lyrics first	13.00	169.00		
7	Song first	14.46	188.00	72.00	-.670
	Lyrics first	12.54	163.00		
8	Song first	13.35	173.50	82.50	-.104
	Lyrics first	13.65	177.50		

Appendix E5: Number of changed/unchanged responses by song

		Song 1		
		Did not change	Changed	Total
Group	Lyrics first	10	3	13
	Song first	8	5	13
Total		18	8	26

		Song 2		
		Did not change	Changed	Total
Group	Lyrics first	5	8	13
	Song first	6	7	13
Total		11	15	26

		Song 3		
		Did not change	Changed	Total
Group	Lyrics first	5	8	13
	Song first	7	6	13
Total		12	14	26

		Song 4		
		Did not change	Changed	Total
Group	Lyrics first	4	9	13
	Song first	8	5	13
Total		12	14	26

		Song 5		
		Did not change	Changed	Total
Group	Lyrics first	7	6	13
	Song first	4	9	13
Total		11	15	26

		Song 6		
		Did not change	Changed	Total
Group	Lyrics first	12	1	13

	Song first	12	1	13
Total		24	2	26

		Song 7		
		Did not change	Changed	Total
Group	Lyrics first	7	6	13
	Song first	9	4	13
Total		16	10	26

		Song 8		
		Did not change	Changed	Total
Group	Lyrics first	10	3	13
	Song first	9	4	13
Total		19	7	26

Appendix F1: Codes and Data Extracts for the Song First Group

Code No.	Label	Definition	Description	Participant no., song no., extracts
1	Words were missed when listening to the song	A person attributes a change in their interpretation of a song, or message, to words in the lyrics that they did not hear in the song.	When a person read the complete set of lyrics the words they had originally missed helped inform a new interpretation of the song.	P1, 1: "…I did not hear the words "it ain't worth it , take your heart and run", after reading that I see this song is fully opposed to domestic violence" P1, 8: "Listening to the song I did not pick up on most the words, only it was a test and she are terrified" P3, 5: "Reading the lyrics shows words that I missed during listening to the song … that suggests that the woman isn't as into the violence as she appeared to be at first listening." P11, 6: "I didn't catch the parts where he says he didn't want to do it, he was sick and tired …" P15, 2: "I couldn't make out all the lyrics … He is warning her heavily too heavily that if she is not loyal to him he will kill her." P17, 2: " Hardly catch the words he's singing." P25, 4: "I couldn't hear the lyrics properly."
2	Reading the lyrics led to a realization about the song	The lyrics led to a realization about the story or message of the song that was not apparent when listening to the song even though the person could hear the words.	Reading the lyrics results in a renewed understanding of what the song is about.	P1, 2: "After reading the lyrics, I see the song is more about the guy warning the girl that she can never leave him as he would rather see her dead than see her with another man." P3, 1: "Although the lyrics ask the listener to remember the violence of the ex-boyfriend, they don't actually say that it's not acceptable." P5, 5: " … it is amazing what reading the words do versus hearing them … I do still see some bondage aspects …. however, I do see strong undertones of DV even though she plays it down,

Code No.	Label	Definition	Description	Participant no., song no., extracts
				referring to it as a sport."
				P7, 2: "Reading the lyrics makes it clear this is a manifesto for a violent relationship; it clearly sets out the woman's responsibility to 'toe the line'."
				P7, 5: "The lyrics clearly link love to violence, … and violence is seen as a component of love"
				P13, 5: "The lyrics state a number of physical acts of violence i.e signed a halo around my eye indicating a black eye."
				P21, 5: "Reading the lyrics depicts the true horror of abuse and the frightening outcomes."
				P23, 4: "On the first hearing it sounds like violence is the main theme. Seeing the lyrics you get the sense of regret and the wish to change the behavior into something better."
				P25, 5: "On reading … their angle is that love is a game… true love is cruel love. It's sad and I'm wondering whether the words read more of a warning, making it a song that is a warning to others rather than a song that promotes violence."
3	The pleasant music tempered the lyrics	A person attributes a change in their interpretation of a song or message to the message incongruent sound of the music.	The positive or pleasing way the music sounds distracts from the violence of words.	P17, 4: "The quick tone wouldn't make me realize that is about domestic violence."
				P19, 1: "I thought the song had a nice relaxing beat. I didn't really concentrate enough on the lyrics. So I didn't realize the song mentioned about the guy hurting the girl."
				P19, 2: "I thought it was a catchy song with funky rhythms. If you didn't listen to the lyrics then you wouldn't really know that it's about violence."
				P25, 4: "The music is really nice, but

Code No.	Label	Definition	Description	Participant no., song no., extracts
				the underlying violence makes this song quite sickening."
4	The song conveyed a general impression	A person gets a general impression about the essence of the song.	The song generally comes across as a story or love song regardless of the lyrics.	P1, 1: "During listening to the song I got the feeling the song was someone story but not a warning …"
5	Reading the lyrics created uncertainty about the song	A person attributes a change in their interpretation of a song or message, to a lack of clarity, or ambiguity, in the lyrics.	After reading the lyrics, a person is decidedly unclear on what the lyrics really mean.	P7, 3: "The lyrics are ambiguous and therefore capable of several interpretations!"
				P13, 8: "The lyrics are confusing, there is a deeper meaning but I can't decipher it."
				P15, 8: "After reading the lyrics I am not sure if it is to do with domestic violence or not."
				P23, 3: "The song has a message that doesn't exactly promote or oppose YET it does in my mind so I can see although it has a strong message without saying EXACTLY what it means yet you can draw your own conclusion based on your own observations of life and see it for what it is!"
6	Reading the lyrics changed how the characters were perceived	Reading the lyrics changes the perspective of the listener in relation to the character/s in the story	After reading the lyrics, a person sees the character/s in the song differently.	P1,3: "It sounds like she know what is happening is not right and would like to get out of the situation but does not want anyone else to help"
				P1, 7: "Listening to the song I did not catch that the person telling the story in the song was the victim's child"
				P3, 2: "Reading the words without the distraction of the tune … show that there's no room for alternative interpretations – the singer is intent on doing what he says he will do, which involves extreme domestic violence."
				P3, 4: "Reading the lyrics, the song escalates from the beginning. … In the beginning the man seems to be ashamed of what he's doing to the woman, so

Code No.	Label	Definition	Description	Participant no., song no., extracts
				initially at least, the song is not totally promoting domestic violence. However, by the time it end he's saying that if the woman ever leaves again he's going to tie her to the bed and set the house on fire. "
				P3, 6: "Also, on reading, I think the like about being ready for more refers to the man being ready to beat her some more."
				P3, 7 "After reading the lyrics, it doesn't seem as though the singer is quite so proactive in stopping the violence. … aside from the title of the song (which suggests that he thinks the violence is unacceptable), he's telling a story rather than coming out and saying that domestic violence is completely wrong."
				P3, 8: "Now that I've read the lyrics it seems to be about a man and a woman both taking a gun and shooting each other, and seeing who is the winner … The song doesn't seem to be actively promoting domestic violence (more promoting extremely deadly games)."
				P7, 1: "Actually being able to read the lyrics and understanding this is, in fact, an abused woman's experience being told."
				P9, 3: "On revising the lyrics I can see that this song is showing how the person is being brainwashed into thinking it is okay."
				P13, 2: "The lyrics suggest that the author would kill her than to see her with another man"
				P13, 4: "The ending lyrics show how he gets pleasure out of her pain, how he doesn't want to be contested in strength."
				P13, 7: "Can't decide since she kills him, it is also violence."

Code No.	Label	Definition	Description	Participant no., song no., extracts
				P15, 3: "She knows it's not right but wants to be left alone …"
				P15, 5: "Lyrics say she goads him which increases the violent situation."
				P17, 1: "The wordings on the paper give me stronger feeling."
				P19, 3: "Because I didn't realize she mentioned she doesn't fight back with his hits or his anger. That makes me think it promotes domestic violence."
				P21, 3: "The person has reached the extent that he/she is agreeing to the fact that violence is ok in society."
				P21, 7: "The mindset of the man in this song is made up that she is just a woman and she cannot do anything so he abuses her."
				P23, 5: "It is a subtle change at the end of the song where the singer is asking to be hit.The questiong tone and the provoking tone from the beginning of the song now has turned into an acceptance that this
				Is the norm and she is asking now to be hit."
				P25, 4: "Now I have read them – the Eminmen character seems to know he's broken all the rules, promises he's given her, and even though he knows he is hurting her he still can't see he has a problem, but the final line is death-threatening."
				P25, 7: "From the little boys point of view – it's like he's in shock – each incident gets worse and worse until the tables are turned and it is his mother who kills her father, when it is the father who is the monster. Once again, this song is opposing violence through it's lyrics."

Code No.	Label	Definition	Description	Participant no., song no., extracts
7	Repeated lyrics convey importance	A person attributes a change in their interpretation of the song, or message, to the repetition of lyrics.	The repetition of certain words or lines in the printed lyrics cause people to interpret the song based more on the repeated lyrics than the lyrics as a whole.	P3, 2: "Also, the repetition of the lines "I'd rather see you dead" and "that's the end a little girl" show the intent of the singer to do exactly that" P15, 5: "Repeat of 'come & hit me & like no war no one came be blamed' maybe she feels its ok!"

Appendix F2: Codes and Data Extracts for the Lyrics First Group

Code no.	Label	Definition	Description	Participant no., song no., extracts
1	Listening to the song stimulates reflection	A person attributes a change in their interpretation or message of a song to a greater reflection on the topic of the lyrics	Listening to the song causes a person to draw on their understanding of domestic violence to further consider the extent to which a song promotes or opposes such violence	P2,1: "The way the woman sings the song makes you think about the tpoic a bit more." P6, 7: "A lesson in how abuse affects the next generation" P6, 8: "Metaphor to illustrate the convoluted layers that domestic violence contain"
2	The singing informed the lyrics	A person attributes a change in their interpretation of the song or message the way the singing communicates information about the situation portrayed in the lyrics	The singing provides a more in-depth story than the lyrics themselves do	P2, 1: "… when she sings about what the guy does to his partner she sings it softly, to me this is almost like singing it as a secret – which to me domestic violence sort of gets treated as." P2, 4: Rihanna seems to have passion in her voice when she sings I love the way, that to me she is saying because I love you I will put up with that behavior. Almost stating to others this is a demonstration of my love for my man." P2, 5: When she sings the part about being hit again, it almost sounds like she is waking up to realization that this is what domestic violence relationships are about, and how violent they are and how hard they hard they are to get out of." P2, 5: The way she sings "Love is game" sounds like she is keen to keep playing the game, there is passion almost excitement in her voice, but when she sings "you hit me" there is so much pain in her voice – it sounds as though she is torn again between love and hate. P2, 7: "I feel that the song and the passion and the force which it is sung at strongly states how much the son

Code no.	Label	Definition	Description	Participant no., song no., extracts
				hates his father for doing it …"
				P2, 8: "… and the way she sings what words he says to her, sounds like he cares!!!"
				P10, 1: "… but also the pleading (emotional expression) in the singer's voice."
				P12, 3: "There's more feeling when you hear a person singing those words. Luka is showing us his/her pain, and the song opposes domestic violence."
				P14, 6: "… The voices sound softer and more convincing."
				P24, 1: "The way the singer sings the lyrics."
				P26, 3: "There is an added melancholy and innocence in the style of music and singing that is not inherent in the lyrics and this adds an even greater contrast to the situation the abuse sufferer is in."
				P26, 4: "The ambiguity and denial in the lyrics aren't so evident in the song, and the duet style, with a plaintive cry of "loving the way it hurts" from the female singer give a sense of complicity, as if this really is a big love story and not common or garden variety abuse."
				P28, 5: "Hearing the lyrics made a stronger impact (feelings) and didn't seem to be just, rhyming words."
3	The pleasant music tempered the lyrics	A person attributes a change in their interpretation of a song or message to the pleasant sound of the music	The positive or pleasing sound of the music softens the meaning of lyrics	P2, 2: "The tempo in the song is quite quick so I found it quite cherry to listen to."
				P2, 8: "The music makes it sound very sexy, like it is some kind of sexy initiation into a relationship … almost sounds like a love song"
				P10, 2: "I changed my mind because

Code no.	Label	Definition	Description	Participant no., song no., extracts
				the melody of the song sounds light-hearted; like the threat is playful rather than serious."
				P12, 2: "The rhythm of the song is actually kind of uplifting and fast-paced. It doesn't sound like a death threat to me."
				P14, 2: "The meaning of the words is less defined due to the catchy rhythm of the music."
				P16,2: "…the catchy jingly music lightens the seriousness of the mans threat to kill his girlfriend."
				P20, 4: "While the song clearly lays out the bad things that could happen it makes them sound romantic and gives the woman a reason to stay"
				P24, 2: "The kind of music, which made it fun and good for dance."
				P26, 2: "The music that accompanies the lyrics is quite upbeat and 'playful' and it is difficult to take the lyrics as anything but a melodramatic sort of beseeching, rather than a serious threat."
4	The music informed the lyrics	A person attributes a change in their interpretation of the song or message to information communicated through the music about the situation portrayed in the lyrics	The music provides a more in-depth story than the lyrics themselves do	P2, 4: "The way they change the type of music he sings to, compared to what she sings to, it sounds like she is educated, middle class, whereas he is low income, almost stereo types who fills each of those roles"
				P2, 7: "… the guy almost is shouting the words never again, and there is heaps of drums to make this bit really loud, almost saying this is the important part."
				P4, 4: "The male part is quite aggressive whereas the female part is very passive and makes it seem as though the abuse is ok because she likes it."
				P6, 3: "With the music Luka's story is stronger and becomes like a testament 'this is what is happening to me is it

Code no.	Label	Definition	Description	Participant no., song no., extracts
				ok'?"
				P10, 4: "… and the song lyrics seem even more violent, especially the last verse."
				P24, 1: "… and the kind of disappointing [disappointment expressed through the] music."
				P26, 3: "There is an added melancholy and innocence in the style of music and singing that is not inherent in the lyrics and this adds an even greater contrast to the situation the abuse sufferer is in."
				P26, 3: "The final stanza of the male where he kind of gives in to his knowledge he will hurt her again, and in fact kill her, is chilling when heard against the female chorus."
				P28, 4: "Hearing the tempo of the song and the voices expressing made the lyrics stronger."
5	The song conveyed a general impression	A person gets a general impression about the essence of the song	The song generally comes across as a story or love song regardless of the lyrics	P4, 5: "This comes across as a love song where the underlying message of violence towards the woman beginning after the marriage is offered as an act of love."
				P14, 3: "It sounds like a personal story being related rather than a social comment."
6	The singer or band changed how the song was perceived	A person attributes a change in their interpretation of the song or message to a characteristic of the singer or band	A person demonstrates bias by focusing on an aspect of the singer or band, rather than an aspect of the actual singing, song, or music	P18, 5: "Because it is a woman singer. I wouldn't think a woman singer, as the victim, would be promoting. Probably trying to send a message opposing."
7	The song portrayed the characters differently	Listening to the song changes the perspective of the listener in relation to the character/s in the story	After listening to a song, a person sees the character/s in the song differently	P2,2: "… the way they sung gave the guy an almost James Dean image, they kind of glorified the bad boy image. To me they almost made the guy who is going to hit his girlfriend, if he catches her with another guy, seem cool."
				P6,4: "In this song it seems that both

Code no.	Label	Definition	Description	Participant no., song no., extracts
				parties have an unconscious agreement on how their relationship is. The emphasis is on how abuse affects the two of them not just the infliction of harm onto one"
				P10, 3: "… it sounds like the lady is just saying "let it happen… don't try to stop domestic violence.. just accept it"
				P10, 4: "… it sounds very much like the guy … is just telling her that she's not going to hurt but knows that he'll hurt her again"
				P10, 7: " I hadn't noticed the first time round that some of the lyrics (e.g. "go back to bed") seem to suggest that the lyrics are being sung by the child of a women suffering from domestic abuse …"
				P14, 4: "The song is about two people who really love one another but have no idea how to appropriately express that love and how to act."
				P14, 5: "The woman sounds like she has a longing for violence and creates situations in which it happens."
				P16, 3: "Listening to the song makes me say the lyrics completely promotes domestic violence … Luka says it's ok to get the beatings."
				P16, 7: "Listening to the song, it promotes domestic violence, the women probably did something wrong and thus deserved her beating, she promotes violence by killing with a gun."
				P18, 4: "Because when he sings its sometimes sounds like a 'third person' looking in and saying this is bad, this not good."
				P20, 7: "Until I listened to the song I did not realize how the woman was made to seem powerless even thou she shot the gun …"

Code no.	Label	Definition	Description	Participant no., song no., extracts
				P26, 5: "On listening to the song, it is clearer that the violent words are more metaphorical than literal, describing an intensity of relationship rather than physical violence per se"
				P28, 3: "Yes, it is a call for help. But it also asks you not to take notice of what is really happening. There is no one being accused of harming Luka."

Appendix F3: Mind Map of Codes and Themes from Question Five