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**Stereotype Threat and Adolescent Males in Choirs: A Reflection of Gender
Beliefs?**

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**A thesis submitted in partial fulfilment of the requirements for the degree of
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Abstract

Peer beliefs and expectations about gender identity, gender role and gender-role conformity can limit participation in school activities and reduce performance potential. Adolescent males in choirs often seem to be reluctant to perform in front of their peers. On the other hand, adolescent females who sing in choirs have quite a contrasting experience. The first of three studies comprising this thesis investigated whether gender stereotype threat contributed to adolescent male choristers' performance decrement, and whether salience of stereotype threat could affect awareness of it. The findings of a second study triangulated those of the first, and revealed common attributes which enabled adolescent male choristers to remain engaged in choral music. This study revealed however, that these traits did not protect the adolescent male choristers from the effects of stereotype threat. Whereas previous extant research on stereotype threat had concentrated on helping the targets of stereotype threat alleviate its effects, the third of the present studies aimed to reveal the perceptions of gender held by non-targets of stereotype threat as well as by the targets, preparing the way to challenge deep-seated beliefs which lead to gender stereotyping and prejudice. The findings of the studies identified how beliefs and expectations about gender identity related to attitudes towards gender role and gender-role conformity within different school cultures, and ultimately limited choice of school-based activities for adolescents. This evidence revealed implications for change to practices which may currently augment gender-role conformity in schools and limit student outcomes. As well, it added to research conducted in the field of stereotype threat in a real-world setting and, importantly, exposed a link between stereotypical beliefs and wider held prejudices.

Dedication

For my father Stanley Raymond Worth, Waiwharariki, and all young men who
sing.

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Chapter 1: Introduction

Males have often been significantly outnumbered by females in high school choirs. There always seems to be a much larger number of adolescent females willing to sing, and a much larger number of adolescent female choirs, per se, at choral festivals like the New Zealand Choral Federation's "Big Sing". An examination by gender of the numbers of participants in this festival in recent years, supports this pattern (e.g., New Zealand Choral Federation Inc., 2007a, 2008). As well, adolescent males appear to sing with gusto and confidence in rehearsal or among their singing peers, but when they perform in front of peers from the wider school, their performance seems to be impaired (Ashley, 2006). Furthermore, some adolescent males, particularly younger ones, have reported bullying which sometimes prevents them from continuing as choristers (Gaul, 2006).

The "Missing Males" in the Arts

The subject of "missing males" in the arts in general has created considerable interest and concern for some time (Harrison, 2002; Koza, 1993). Related to this is the paucity in number of males who have elected to sing in choirs at secondary school (Demorest, 2000; Vaughan, 1999). This has been documented in Britain, Europe, North America and Australia. Gates (1989) noted that in the 1980s, females in American choirs exceeded males by a margin of 5:2, and Ashley (2006) acknowledged the decline in numbers of males in British choirs since the early 1900s. Freer (2010) has reported that the conundrum of the missing males in the choral domain continues to persist. In New Zealand, the trend over a similar period of time has been that secondary school choirs are the domain of females rather than males. The New Zealand Choral Federation's national choral festival, The Big Sing, has been

historically supported predominantly by female choirs, a slightly lesser number of mixed choirs, and a very small proportion of male choirs.

There are several factors which could explain this phenomenon. Firstly, difficulties surrounding the “changing voice” during adolescence, although it has been generally suggested by choral educators, that these problems are solvable (Cooksey, 1993), as well as being an issue for females (Friar, 1999; Kennedy, 2004; Phillips, 1995). Secondly, competing demands on time for adolescents (Mills, 2000) may also contribute to the phenomenon, but this has applied to both genders. Thirdly, it has been suggested that the pressure of gender stereotyping has affected male participation in the arts (Green, 1997; Hanley, 1998; Kessels, 2005; Koza, 1993). Most research, for example, Hanley (1998); Harrison (2002); and Koza (1993), has supported the idea that the latter reason is the principle cause of adolescent males avoiding engagement with choral singing.

An Overview of the Thesis

This introductory chapter argues, then, that the pressure of gender stereotyping may prevent adolescent males from participating in the arts, and notably choral music. The second chapter explores literature which suggests that the effects of gender stereotyping on adolescents’ choice of activities could be widely felt and hold implications for adolescent gender-identity development. Literature which presents ideas about gender and the maintenance of a gender hierarchy is also explored. Stereotype threat as a construct, and the cognitive mechanisms which mediate its effects, are explained. In addition, the interface between stereotyping and prejudice is clarified, including the particular implications this has for adolescents.

An hypothesis and a series of research questions addressed the nature and effects of beliefs about gender, and expectations of gender-role conformity, in three

linked studies comprising this thesis. These studies were set within high school communities in Auckland, New Zealand's largest city. New Zealand is located in the South Pacific, and Auckland is found in the north of the country. With a large and varied population base which includes a substantial representation of Pasifika (Pacific Island) peoples, the city offered a wide range of socioeconomic and cultural contexts in which to situate the studies. The studies aimed to extend stereotype threat research in a real-world setting, and then to broaden out to a wider investigation of the relationship between beliefs and expectations of gender, adolescent activity choice and gender identity formation.

Chapter 3 reports on the first study, which aimed to measure the effects of gender stereotype threat on the performance of adolescent males who choose to sing in secondary school choirs. The study examined the hypothesis that gender stereotype threat causes performance decrement for boys who sing in secondary school choirs. A secondary focus of this initial study was to examine whether the strength of salience of stereotype threat may affect choristers' awareness of it. The study employed both quantitative and qualitative methods, a new scale and a sufficiently large sample ($N = 737$).

The fourth chapter reports on a second study which explored common traits which enabled male choristers to remain engaged in choral music and investigated the specific experience of male choristers in this domain. Chapter 5 outlines the third study for the thesis. This study involved the use of quantitative and qualitative methods, a new scale, a large sample ($N = 1,215$), and a range of cultures and contexts. The study sought to determine if beliefs and expectations of gender identity, gender role and gender-role conformity revealed in the first two studies, informed concepts of gender self-definition and perceptions of wider school-based activity

choice in participant groups. As well, this study sought to explore the extent to which stereotypes of gender role conformity were endorsed and how aware participants were of such stereotypes.

The sixth and final chapter of the thesis discusses how the findings of the three studies contribute to stereotype threat research, how they reveal that gender stereotypes limit adolescents, and how they expose a link between stereotypes and prejudice. This chapter also discusses the educational implications of the findings of the three studies.

Chapter 2: Literature Review

Literature which addressed gender role and activity choice, gender stereotyping, stereotype threat, identity development in adolescence, and the relationship between stereotype and prejudice, was critiqued. This literature provided a background context for the three studies of this thesis, along with an understanding of methods and lenses which informed their design and implementation.

Gender Non-Congruence and Activity Choice

Gender non-congruence has existed where individuals do not conform to the gender roles expected of them by society. Adolescent males have been disinclined to participate in choirs because societal influences presented in the media, at school, by their peers, by parents and by teacher attitudes, and in texts, have encouraged them to participate only in activities endorsed as appropriate for males (Harrison, 2002; Meece, Glienke, & Burg, 2006; Roulston, 2001). Extending this idea, Metheny (1965) has noted in her exploration of deeper connotations of sport and dance, that pursuits which involve aggression, combat and power have been associated with masculinity, while those which emphasise aesthetically pleasing movements and bodily manoeuvrability which ensure that space is maintained between participants, have been typically classed as feminine.

Researchers (e.g., Klomsten, Marsh, & Skaalvik, 2005; Koivula, 2001; Kulik, 2000; Martin, 1990; Schmalz & Kerstetter, 2006) have endorsed the idea of a wide range of activities being thus gender-differentiated in the contemporary setting. Moreover, further research has revealed that physical education persists in placing emphasis and *status* on sporting skills which privilege hegemonic masculine ideals such as violence and aggression (Millington & Wilson, 2010). Fry (1985) outlined the subjects considered suitable for females historically in New Zealand, noting music

among them and citing physical activities as preferred for males. Furthermore, this pressure has been seen to occur in the very first year at school (Hall, 2005). Music, especially singing, has been seen to be a feminine pursuit and gender non-congruence could be punished by verbal and physical bullying (Harrison, 2002). The potential result could be loss of self esteem and social exclusion.

Gender Stereotyping and Its Implications for Boys and Music

Gender as socially constructed.

“Socialist feminist” discourse has supported the idea of gender as a social construct, and it is through this lens that Koza (1993) examined the problem of the missing males in the arts. Importantly, other researchers have suggested that gender is not only socially constructed but performed– that is, acted out (Butler, 1990; Giroux & McLaren, 1994). Closely aligned to the concept of gender as performative (Butler, 1990) was the assertion of Green (1997) that musical performance is a display which has come to be gendered feminine. She contrasted this, interestingly, with the All Black haka (a traditional Māori war dance performed by the New Zealand national rugby team before matches) as an archetypical example of the sort of aggressive display associated with masculinity.

The idea of gender as a performance and the gendering of singing as feminine has been suggested to have implications for a boy’s emerging identity: “A boy is a young male who experiments daily with different possible identities because he is learning who he is and how he relates to other people ... if he thinks that singing will give him the wrong sort of identity he will not sing”(Ashley, 2009, p. 8). In several studies, Ashley (2002, 2006, 2008a, 2008b) explored youth subjective identity, investigating specific components of identity such as gender, ethnicity, social class, regional identity, generation and religious and spiritual beliefs. Based for the main

part on qualitative data and grounded in the interpretive phenomenological tradition, these studies included participants from Key Stages 2 (Grades 2–5), 3 (Grades 6–8) and 4 (Grades 9–12) across a range of Welsh and English schools. Focusing on gender as one aspect of identity, Ashley (2006) suggested that the boy's unbroken voice, pure, ethereal, and traditionally described as beautiful, may not gel with a developing sense of self as a young man in adolescence. Where boys are making the transition to manhood, they may wish to remove themselves from activities associated with "beautiful".

Gender roles within the domain of music were seen to be specifically defined: Koza (1993) noted that references in the *Music Supervisors' Journal* 1914–1924 to males were more numerous, and the textual quality was superior to those references which alluded to females. She also noted that while music was offered to young women as a tool to augment and equip them as future mothers, moral guardians and wives, young men were seen to be the suitable candidates for glittering careers as performers, conductors and composers. Character development was seen to be a vital concern (Koza, 1993), and Green (1997) explored this idea further, asserting that the masculine role in music making was presented as a more agentic one while females were consigned to play the role of the enabler. This situation persisted in the modern day, according to Regueiro (2000), whose study of contemporary Spanish music text books revealed that images of men in dominant music-making roles still predominated.

Constructed gender disguised.

The dearth of young men involved in music, and notably singing, however, was attributed by Koza (1993) to music being associated with unmanliness. Music was seen as an effeminate pursuit, and undesirable for men because of its

connotations of feminine traits such as weakness and softness. Furthermore, she revealed that historically the issue of the missing males has been listed with several pressing problems which relate to music education, and that these are not exclusively contemporary issues but date back to the origins of the public school system.

Thus, in her exacting textual analysis of the *Music Supervisors' Journal* 1914–1924, Koza (1993) noted questions of sex-stereotype and music, the questioning of music as an appropriate masculine endeavour, and the observation that boys might be less inclined to engage in musical activities than girls. However, the questions were addressed by promoting men as superior musicians, rather than supporting femininity as desirable: “Rather than attempting to draw males into music programmes by questioning traditional definitions of what constituted masculinity and femininity, contributors zealously attempted to prove that music was not feminine” (Koza, 1993, p. 227). Furthermore, great concern was accorded to the phenomenon of the missing males in a music education system, in general, which offered as its mission statement “Music for every child, every child for music” (Koza, 1993, p215). Koza (1993) was interested that the cause for concern was not to question equality between the genders, but to involve the missing males in music education in order to legitimate it by their presence.

Nevertheless, the actual participation of males in musical activities seemed to be at odds with their potentially privileged place in the music educational limelight. A survey taken at the turn of the twentieth century indicated that music was the least favoured subject of young American males, and that singing in particular, was disliked (Koza, 1993). Koza (1993) explained this scenario by asserting that societal influences reinforce gender-role beliefs and expectations, and proposed that while

legitimizing forces might occlude its existence, subtly reinforced gender stereotyping rendered choral music a specifically feminine domain, to be avoided by young men.

Schools as sites for the playing out of gender.

The question of which specific processes and mechanisms might be at play to produce and maintain such a status quo then begged to be answered. Kessels (2005), suggested that school was a place where not only knowledge and competencies could be gained, but where young people could gain “an understanding that will shape their self-concept or identity” (Kessels, 2005, p. 309). Meece et al. (2006) noted the importance of parents and sociocultural influences, as well, in this reinforcing role, and Kennedy (2002) observed the crucial role of the teacher. Specifically, it has been suggested that schools play a vital role in facilitating cultural and ideological hegemony. Rigid definitions of what it is to be masculine and feminine could be perpetuated and disseminated through the scholastic system itself (Apple, 1979; Jagger, 1988) and, with particular reference to case studies of young Australian males Walker noted that “you may be born male, but you become a man” (Walker, 1988, p. 88). Mac an Ghail (1994) summed up these ideas describing schools as “microcultures of management [where] teachers and students are key infrastructural mechanisms through which masculinities and femininities are mediated and lived out” (Mac an Ghail, 1994, p. 4).

These concepts situate gender stereotyping within the context of critical social science, and can be aligned with the work of theorists like Bourdieu (1974), who suggested that schools employ subtle, concealed processes, fostering cultural reproduction, and performing a conservative role in society by encouraging the perpetuation of a dominant elite. Further to this idea, and with reference to Foucault’s theory of the maintenance of normativity by panopticonic surveillance, Martino and

Pallotta-Chiarolli (2003) have suggested that “it is within institutions such as the school, that mechanisms of power are operationalised through specific administrative structures and pedagogical, social and disciplinary practices which are governed by particular norms” (Martino & Pallotta-Chiarolli, 2003, p. 7).

A hierarchy of masculinities entwined with normalising practices.

Martino and Pallotta-Chiarolli (2003) proposed an explanatory framework within which they attempted to show how self-regulating and normalising practices contributed to a constructed idea of masculine gender, and indeed to a gendered power binary. They suggested that boys “learn to police their masculinities and to place themselves (and other boys) under a particular kind of surveillance” (Martino & Pallotta-Chiarolli, 2003, p. 3). These practices influenced how boys related to their peers, behaved, thought, and understood themselves as certain kinds of boys. Moreover, the practices contributed to a pecking order of masculinities, and thus interfaced with how power relations were played out in boys’ lives at school” (Martino & Pallotta-Chiarolli, 2003).

The findings of several qualitative studies (Ashley, 2008a, 2008b), reported that English adolescent males with changing voices were observed to self-police exclusion from singing in order not to risk displaying themselves as boys rather than men. As their voices changed with adolescence, males became vulnerable, as a demonstration of the adult masculinity to which they aspired was compromised by the uncertain quality of their vocal performance (Ashley, 2008b). Importantly, Ashley (2008a) noted that adolescent males who did choose to sing, accepted a sort of melancholic divorce from their peers as they opted to pursue their passion for the voice.

Other researchers, for example Roulston and Mills (1998) and Connell (1995), had suggested the existence of a range of different masculinities, and asserted that all but one type were marginalised. Roulston and Mills (1998) described four practices of masculinity which enabled men to interact in society: hegemonic (those which facilitated the dominance of men over women); subordinate (those which undermined the legitimacy of hegemonic masculinity, for example effeminate or gay masculinities); marginalised (those nuanced practices of masculinity which derived from class, race and ethnicity); and complicit (those masculinities which, while not overtly hegemonic, benefited from hegemonic masculinity). Importantly, Mac an Ghail (1994) credited Connell (1987) with bridging the gap in Foucault's concept of power (described critically by Hall (1988) as being held by a dominant group, but without the premise of hegemony) by providing a vital missing link. Mac an Ghail (1994) asserted that Connell (1987) posited a concept of hegemonic masculinity "which he argues is constructed in relation to and against femininity and subordinated forms of masculinity. The dominant masculine form is characterised by *heterosexuality, power, authority, aggression and technical competence*" [my emphasis](Mac an Ghail, 1994, p. 12).

Suggesting that the treble voice of the 8–14 year-old boy is socially as well as biologically constructed, Ashley (2006) explored how masculinity could be displayed through choral performance, comparing the vocal timbre of the "boy band" with their changed voices, to the unchanged treble associated with sacred music. The former ensemble displayed overt heterosexuality in the hegemonic male tradition, while the latter example, traditionally associated with sacred music and with implications of innocence, could be related to other "softer" forms of masculinity, rather than the hegemonic male type. As well, Ashley (2006) suggested that while hegemonic

masculinity could marginalise other types of masculinity, it was not necessarily representative of masculinity as a whole, and this pointed towards a cultural under-expectation of boys.

Practices of masculinity as restrictive: Implications for boys and music.

Following on from these ideas, Harrison (2009a) explored the relationship between the meanings and practices of masculinities, and male engagement in music in Australia, noting how historical influences have shaped the contemporary scenario. He asserted that from an historical perspective, survival for the early convict settlers of Australia in hard physical conditions, and within a predominantly male society, led to the development of specific behavioural patterns. Harrison (2009a) cited three masculine behaviours which still contribute to limiting the engagement of men in music in the Australian context: a contempt for authority stemming from a “survival frontier mentality”; mateship or camaraderie anchored in the “sharing of the rituals of masculine identity”(Harrison, 2009a, p. 7) as distinct from intimacy; and gender-role rigidity.

Martino and Pallotta-Chiarolli (2003) asserted that the notable distinction between mateship (entailing shared ideas of uniformity, conformity, and shared activities) and friendship (involving a closer level of shared intimacy) shed further light on the policing of social relationships. Referring to Foucault’s “technologies of the self” (Fornet-Betancourt, Gomez-Müller, & Gauthier, 1987) Martino and Pallotta-Chiarolli (2003) asserted that ways of understanding identity were linked to normalising practices. They suggested that “mates” band together to exclude anyone who is different for example “nerds” and those boys who exhibit other forms and practices of masculinity. Furthermore, they suggested that heteronormative policing and homophobic regulation appeared to be both functions and products of mateship.

In short, mateship was restrictive for boys. The creation and policing of a sociable and popular identity precluded self-expansion, self-awareness, understanding of one's self in terms of being multi-faceted, and enjoying a deep connection with one's peers (Martino & Pallotta-Chiarolli, 2003).

Harrison (2009a) endorsed these ideas, noting that the practice of mateship assumed a prescriptive obligation to conform to the hegemonic idea of masculinity and specifically enlisted homophobia and the avoidance of the feminine as tools to guard against change to the stereotypical masculine way of being. Mills (2001) suggested that "Homophobia and misogyny are two of the most important policing mechanisms of dominant masculinities"(Mills, 2001, p. 62), and other literature asserted that these mechanisms were not only tightly entwined (Epstein, 2001) but moreover that homosexuality and femininity were synonymous with incompetence (Harrison, 2009a). "Bagging" or "hanging shit" (Brownless, 2008), and "cussing" (Nayak & Kehily, 2001) where mates were required to defend or deflect negative accusations referring to homosexuality or femininity, were noted as specific examples of mateship behaviours.

Reporting the findings of qualitative research conducted in the Australian context, Roulston and Mills (1998) endorsed the idea that homophobia had a strong role to play in the policing of hegemonic masculinity, asserting that homophobia worked to "naturalise dominant gender performances and create fears of being different" (Roulston & Mills, 1998, p. 6). This research was supported by the observations of Gaul (2006) in his account of adolescent male choral music in the Hunter Valley, Australia. Revealing the effect of homophobic policing on males in the arts, he asserted that: "The homophobic stereotype that is associated with creative boys makes it very hard for them to stand up in front of their peers and be seen as a

dancer, *a singer or a musician that is not in a rock band*' [my emphasis] (Gaul, 2006, p. 25). Shedding further light on these ideas, Freer (2010) has suggested not only that choices of different selves were suggested as wider in range for adolescent females, but also that adolescent males' reticence to participate in choirs may be shaped by the perception that it is necessary to avoid "feared selves". In the light of a policed concept of masculinity (Martino & Pallotta-Chiarolli, 2003), one could suggest that a self which transgresses gender boundaries may be one to be feared for boys.

Harrison (2009a) asserted that the stereotypical Australian male was confined by clearly demarcated gender-role boundaries, and stated moreover that: "If unspoken limits of masculinity are transgressed or rules broken, then the full fury of male condemnation rapidly descends on the guilty party" (Harrison, 2009a, p. 9). The earlier findings of Vandello, Bosson, Cohen, Burnaford and Weaver (2008) provide an interesting adjunct to this work. These researchers revealed in five carefully structured quantitative studies that men felt especially threatened by challenges to their masculinity (an idea supported by the findings of Falomir-Pichastor and Mugny, 2009), noting that the witnessing of gender-atypical performance of other men produced anxiety in male audiences. As well, Vandello et al. (2008) pointed out that this was likely to result in culturally scripted behaviours such as aggression and the projection of assumptions of homosexuality on to those male targets who exhibited non-prototypical masculine behaviour.

Manhood has been suggested to be a precarious state which needs to be continually defined and validated by social proof in the form of displays involving risk, rather than the attainment of biological milestones alone (Vandello et al., 2008). While pointing out that mateship practices provide opportunities to continually perform and endorse 'appropriate' masculinity, Harrison (2009a) concluded that these

sorts of practices can function to limit the choice of behaviours and activities within which men will feel safe. He asserted that music lies among them and specifically that to sing is indeed to risk masculine status.

Practices of masculinity in the New Zealand context.

Being “staunch” was noted by Rout (1997) in his study of both a single sex male school, and a coeducational school in New Zealand, as a behavioural style with which certain male groups could assert dominance within a school. Being staunch involved control, toughness, competence and winning, and was a tool with which to enhance one’s masculine reputation and one’s self-respect (Rout, 1997).

Interestingly, the practice of being staunch had an effect on marginalised masculine groups in that the majority of the boys observed and interviewed by Rout (1997), adopted this behaviour even if they were not members of the group considered dominant.

Hassling, which seemed similar in function to the verbal practice of bagging described by Brownless (2008), extended to physical bullying, playfighting and fighting, seemingly presented as a game. Physical hassling was more common at the all male school but even in the coeducational context hitting was seen as a dependable way to stop teasing, and an acceptable masculine behaviour. Violence, then, was learned through hassling and “Hassling was the means by which violence was justified as ‘normal’ male behaviour because it was accepted and even expected by both the perpetrators and the victims” (Rout, 1997, p. 173).

The eschewing of all things feminine (endorsed as a practice of masculinity by Ashley, 2009; Falomir-Pichastor & Mugny, 2009; and Harrison, 2009a) was laid down by Rout (1997) as another way to demonstrate being staunch. He suggested that boys could, by assuming superiority to girls “not only put girls down but at the

same time boost their own personal and public status as males” (Rout, 1997, p. 174). He proposed that hassling girls, usually in the form of sexual harassment, thus became another learned behaviour resulting from the practice of being staunch. Furthermore Rout (1997) observed that masculinity could be affirmed by the denial of any hint of femininity in one’s self, and that accusations of femininity or homosexuality thus had the ability to strongly challenge a boy’s sense of masculine identity.

The school assembly as a site for gender performance.

Of particular interest was the observation of Martino and Pallotta-Chiarolli (2003) that gender relations associated with practices of masculinity could be played out in school assemblies. They asserted that assemblies became sites of performance of hegemonically dominant and marginalised masculinities, as well as the authority and dominating practices which framed them.

Deaux and Major (1987) have cautioned that context played a huge role in reinforcing, diminishing or strengthening gender issues. They foreshadowed the notion of the performativity of gender (Butler, 1990; Green, 1997) in stating that gender was played out on the public stage and, importantly in terms of peer audiences, that others played a crucial part in its evaluation. Indeed, threats to gender may not only have prompted concern when there was an audience present, but may have become internalised so that imagined responses elicited private worry (Vandello et al., 2008). A synthesis of this research might well prompt an enquiry as to how adolescent males in choirs might fare when a choral performance in front of their peers potentially became one of gender as well.

Of further relevance to scenarios where males chose to violate certain gender roles are the findings of Bosson, Taylor and Prewitt-Freilino (2006), who noted that male audiences were the most harsh and punishing critics of other males. They

asserted that threats to masculinity were most problematic when performed in front of other men. The suggestion that it was harder for boys to perform in domains considered feminine than for girls to perform in those gendered masculine (Ashley, 2008b; Martino & Pallotta-Chiarolli, 2003) stood to intensify this dilemma.

Intergroup interactions (and there is literature, such as Green, 1997, which has supported the idea that performance affords an interactive relationship between performer and audience) could be framed by a need to anticipate and control one's social standing with others (Vorauer & Sakamoto, 2008). In as much as Green (1997) asserted that the performer–audience relationship is not an equal one, Vorauer and Sakamoto (2008) pointed to the special role of the out-group as an evaluative audience where the in-group is viewed through the lens of a group stereotype (Vorauer & Sakamoto, 2008). In this scenario, Vorauer and Sakamoto (2008) posited that worries about loss of social standing and social outcomes were exacerbated, and suggested in addition that issues surrounding the legitimacy of differences in group status were raised. So, school assemblies as sites where normative constructs of masculinity could be reinscribed and “the domain of those boys who excelled in dominant masculine capacities” (Martino & Pallotta-Chiarolli, 2003, p. 230), might have stood to become problematic contexts for boys in choirs.

Adolescent culture and choral music.

There is literature which has suggested that the gap between adult and adolescent taste may be the reason participation in choirs for boys has been problematic: Harrison (2009b) found in his case studies of Australian boys that to be involved in music was not only a signifier of homosexuality but “uncool”, and that these attitudes came with adolescence: “Then came high school. It was no longer ‘cool’ to do music. From the moment I started high school to the year I finished,

came the taunting. The name-calling started. Poofter, Faggot, Queer. You name it, I copped it!” (Harrison, 2009b, p. 53). He noted however, citing a previous work (Harrison, 2001), that boys’ involvement in some musical groups or the performance of certain types of music, including music theatre and pop music, would not incur social exclusion but would instead earn kudos. Ashley (2002) noted with reference to boys up to the age of 13–14 years, that the market for recordings of boys’ voices was one which was built on adult tastes rather than youth preference. In a subsequent work he enlarged on this observation stating that “the peer group is seldom the audience for boys’ singing ... the values and tastes of adults are distinctly ‘uncool’ as far as the younger generation is concerned ... boys sing what adults want to hear, not what boys and girls want to hear” (Ashley, 2009, p. 16).

Other literature reported that to perform as a member of a rock group (Gaul, 2006), notably the genre of heavy metal (Walser, 1993), or to engage in pursuits involving music technology and electronic instruments (Dibben, 2002) was not deemed problematic for adolescent males, in terms of peer approval. Thus, the question emerged as to whether it was the pressure of expectations of adolescent culture, that is to say “cool” culture, as opposed to that which was considered uncool by adolescent peers, rather than the pressure of heteronormative expectations, that influenced boys’ involvement in choirs, and enjoyment of performing in them.

In explaining how conservative ideas about gender endure, researchers (e.g., Ashley, 2009; Millington & Wilson, 2010) have suggested that media images which reinforced a traditional concept of masculinity were geared to support existing gender power relationships within the context of a market-driven society and resulted in gender identity performances which equipped young people with status and subcultural capital. Ashley (2009) clarified the importance of the relationship

between music and adolescent culture, as distinct from adult culture by suggesting that adolescent peers may disapprove of activities associated with adult culture, and that choral singing might be one such activity. He explained that the Second World War marked the end of a “golden century” for boys’ singing in England. At this time the emergence of such youth subcultures as the establishment-threatening Teddy boys acted to cement the interface between market forces such as fashion and style, and youth identity, leading to the “loss of adult control of boys’ singing and the audiences for it” (Ashley, 2009, p. 34). He concluded that at this time “the greatest challenge was to the cultural rules that dictated the music and fashion through which young people negotiated, constructed and expressed an identity of their own rather than the identity desired for them by adults” (Ashley, 2009b, p. 35). Any attempt to adopt adult tastes in preference to those held forth by youth culture was seen as uncool, and thought undesirable by adolescents. However, while choral music was rendered problematic for males, in terms of transgressing the precepts of adolescent culture, *female* involvement seemed unaffected. As the well-documented dearth of males in choirs persists (Harrison, 2009; Koza, 1993), there is notably no such shortage of females.

Visual signals conveyed by schoolbag decorations, style of physical movement, iconic jewellery, images of idols, clothing logos and non-uniform items converted adolescent males to living texts (Butler, 1990; Green, 1997; Martino & Pallotta-Chiarolli, 2003) and enabled them to manifest their particular cultural affiliations visually and behaviourally. Linked to this observation, was the suggestion of North and Hargreaves (1999) that choice of musical style may be displayed like a badge, denoting the “crowd” to which an adolescent belongs, predicting other aspects of attitude and lifestyle, and having social consequences such as popularity or lack of

it. The “badge” displayed not only by adolescent male choristers’ choice of musical style, but their performance clothes and manner, might be suggested then to associate them with an adult crowd rather than an adolescent one. They may potentially become “living texts” at odds with the culture of their peers.

Martino and Pallotta-Chiarolli (2003) argued that reverse sexism could be demonstrated (e.g., boys dying their hair, which is normally considered feminine stylistic behaviour) as an anti-authoritarian act of defiance, where a clear transgression of gender-normativity in terms of body styling, was in this context, ranked as cool. There was a distinction drawn here between cool (popular) and uncool (unpopular), in terms of adolescent culture, as these authors suggested that *appropriate* transgression reinforced desirable masculinity, whereas *inappropriate* transgression indicated an association with femininity. In so far as choirs have been associated with adult culture (Ashley, 2009), it could be suggested that the sort of risk-taking involved in boys’ participation in choirs has not been that which would gain kudos by challenging authority. In this sort of situation, a boy would be unlikely to, as Mills (2001) put it, “receive much credit for ‘bravery’; instead he is likely to be punished by his peers in ways which seek to strip him of the mantle of masculinity” (Mills, 2001, p. 61).

These aspects of adolescent culture begin to present a picture which in many ways merges with that of the practices of masculinity outlined by Harrison (2009a). Contempt for authority and the policing of normative gender roles seemed to be features of both adolescent practices of masculinity and adolescent culture. It seemed then, to embrace popular adolescent culture as a boy, *was* to be hegemonically masculine: “Being valued in school depends upon running fast, acting cool, being

good at things as well as not being unathletic, uncool [and] inept” (Martino & Meyenn, 2001, p. 43).

To conclude, an understanding of the masculine self was entwined with hierarchies and practices which informed and shaped it:

Different forms of the subject cannot be separated from a regime of practices through which power is channelled and particular truths established. In short, the formation of subjectivity or identity is understood in terms of the cultural techniques for working on and fashioning the gendered self. (Martino & Pallotta-Chiarolli, 2003, p. 5)

Females who have sung in choirs, then, have done so within the context of gender congruence, but males have not (Fry, 1985; Harrison, 2002; Roulston, 2001). Given this scenario, it seemed that adolescent males who choose to sing might do so at the risk of being exposed to gender stereotype threat, particularly in situations where that threat was made blatantly salient. Thus, there was a need to examine the circumstances under which the salience of gender stereotype might be triggered, and how adolescent males’ choral performance might be affected.

Stereotype Threat

Stereotype threat as a social identity threat.

Stereotype threat occurs when a person is “at risk of confirming as self-characteristic, a negative stereotype about [their] group” (Steele & Aronson, 1995, p. 797). Steele, Spencer, and Aronson (2002) acknowledged stereotype threat as one of several social identity threats, and asserted that people have multiple social identities. Adams, Garcia, Purdie-Vaughns, and Steele (2006) distinguished clearly between stereotype threat and social identity threat, interpreting the definition of *social identity threat* put forth by Steele et al.

(2002) as “the broad set of concerns that arise when some aspect of the environment signals the danger that a person might be evaluated on the basis of a threatened social identity” (Adams, et al., 2006, p. 603). Adams et al. (2006) defined *stereotype threat*, again referring to the work of Steele et al. (2002), as “the concern that one’s performance will confirm or be interpreted in light of cultural stereotypes about inferiority in a specific performance domain” (Adams et al., 2006, p. 603). However, although social identity threat and stereotype threat have been described as distinguishable, they may not be discrete. In his recent work, Steele (2010) pointed out that threat will render dominant that aspect of a person’s social identity to which it is directed at a given time. In this case the feelings and thoughts generated by threat to a given identity overwhelm the target’s identity as a whole.

Steele et al. (2002) emphasised the importance of understanding how a potential target’s social identity in a particular setting could render him open to stereotype threat. The low or minority status of one’s group, its cultural or structural marginalisation and its reputation as being of less value than other groups, all had the potential to endow that group with an unfavourable identity (Steele, Spencer, & Aronson, 2002). Innocuous cues such as musical style and importantly, variable styles of being a person could give information on group centeredness and value in a setting (Steele, Spencer, & Aronson, 2002).

Steele et al. (2002) asserted that the knowledge of devaluation, or cues which supported the existence of a devalued group reputation, would be likely to result in extra vigilance and a lack of trust in the specific setting, on the target’s (recipient’s) part. They endorsed the validity of this assertion by drawing upon Goffman’s (1963) study which revealed that the great majority of members of

any heterogeneous society shared the knowledge that different groups within a society were accorded different value. This scenario was made more complex in that while targets would carefully watch for cues signifying devaluation, they would also be motivated not to confirm them. Thus a state of double consciousness ensued, which contributed to internal conflict and reduction of performance quality (Steele et al., 2002). Furthermore, Steele et al. (2002) revealed that cues received by groups in specific settings would give clear messages as to the meaning of that group's social identity in terms of rank or value, and could be explicit or implicit. Also, blatant and subtle cues could work together to compound the influence of stereotype threat (Stone & McWhinnie, 2008). Thus messages which a target received about the devalued nature of his social group promoted "an ongoing pressure against, at the very least, a full engagement in the setting and, at the most, the ability to endure it at all" (Steele et al., 2002, p. 419).

Other researchers have explored the way that stereotype threat interfaced with aspects of both social and personal identity and the possibility that these identities may be linked (Van Laar, Levin, & Sinclair, 2008; Wout, Danso, Jackson, & Spencer, 2008). Van Laar et al. (2008) reported that proponents of social identity theory (e.g., Tajfel & Turner, 1986) have distinguished between "personal identity" and "social identity". Social identity threat stems from a concern for the group – that is, that the group will suffer because of a stereotype, and that one may personally prove this stereotype in a way that will have an effect on the group. Personal identity threat is defined as that which rises from a concern for the self—that is, that one may personally be harmed by the group stereotype and that the stereotype will be seen to be proven in one's self with

detrimental self-effect. Expressing an alternative point of view, Deaux (1993) argued that it is possible that the distinction between personal and social identity may not be so clear cut.

In one of the comparatively few studies of stereotype threat conducted in a real-world setting, Van Laar et al. (2008) examined the effects of stereotype threat on both concerns for the self and concerns for the group in students who were part of an affirmative action plan which assisted entry to university for those in minority groups. Using hierarchical regression analysis, controlling for SAT scores, and thoroughly ruling out variables which could have otherwise explained their results, they examined the extent to which each type of threat affected the relationship between perceived affirmative action status and academic achievement. They found that while social identity threat negatively affected the performance of individuals professing high identification with the group being attacked by the stereotype (the racial group, in this instance), those with low group identification were also affected, but in this case by personal identity threat. So these authors proposed that the *type* of threat which would affect a performance conducted in the face of stereotype threat would be determined by how strongly one identified with one's group. These findings, then, suggested that there was evidence to support the idea that stereotype threat, as a social identity threat, had the potential to attack both group and personal identity.

Casting a nuanced light on this field of research, Wout et al. (2008) proposed a multi-threat approach, suggesting that group and self threat may have a simultaneous and cumulative effect. The findings of their study, which manipulated group and self threats on women taking a maths test, revealed that

those women who were strongly identified with the threatened group (in this case, defined by gender) underperformed. These results added support to the findings of other studies (Schmader, 2002; Van Laar et al., 2008) with regard to the relationship between group identification and performance decrement. However, the research of Wout et al. (2008) revealed a difference with these studies in that the performance of those women who were less identified with the gender group was not affected at all. Furthermore, gender identification appeared not to affect the relationship between self-threat and test performance differentially. In the presence of stereotype threat directed at the self, both high and low identified participants performed poorly.

Previous research, for example, Steele and Aronson (1995), and Marx, Brown and Steele (1999), had described stereotype threat as situational. In parallel with this concept, Wout et al. (2008) concluded that whether self or group threats were triggered separately or conjointly depended on context. Although there is extant previous research (e.g., Shapiro and Neuberg, 2007), and concurrent work (e.g., Van Laar et al., 2008) in this field, Wout et al. (2008) claimed that there has been a dearth of research on these specific threats, and that their multi-threat framework was unique. While this claim may be contestable, their study did strengthen the idea that group and personal threats may need to be faced simultaneously.

In adolescence, a time when there is a marked focus on identity formation (Erickson, 1968) and growing awareness of self-image and relationships with others is acute (Hall, 2009), it might be suggested that the registration of cues which indicate a negative stereotype about one's social identity could be heightened. Peer influence has been suggested to be much

more important at this stage of a person's development than that of a parent or teacher (Harris, 1998; Wigfield & Wagner, 2005), and indeed Collins (2009) found that peer opinion was the most influential force in life at school for adolescent boys. Following on from this idea, it could be suggested that the potential loss of peer acceptance could have important compounding implications. The need to belong to a group, motivated by a fundamental desire for security, has been linked to approval, and has been suggested to shape emotional patterns and cognitive processes (Baumeister & Leary, 1995). Furthermore, research has indicated that adolescents care about belonging above all else (Steele & Aronson, 2005). As well, Knowles, Lucas, Molden, Gardner and Dean (2010) have asserted that direct compensatory self-affirmation could not make up for the damage incurred by exclusion. Logically, it might then be suggested that to risk exclusion from one's peer group could affect self-esteem and social safety, and incur consequences which would negatively affect one's whole life at school.

Rydell, Beilock, and McConnell (2009) drew upon the concept of social identity theory developed by Tajfel and Turner (1986), asserting that people fulfilled a motivation to feel positively about themselves by identifying with social groups. They pointed out with reference to the work of Steele (1997) that not all social groups would offer the potential to positively enhance personal identity. The issue arose then, as to how people might cope with belonging to groups that did not contribute positively to self-esteem (Steele et al., 2002). A group at which a widely believed negative stereotype was levelled could be argued to be such a group.

A seminal study of stereotype threat.

The social-psychological predicament of stereotype threat could be experienced by the target as a self-evaluative threat, and negative stereotypes could be sufficiently self-threatening as to disrupt the target's performance or cause protective disidentification with the stigmatised domain (Steele & Aronson, 1995). Research has shown that in the presence of stereotype threat, those engaged in the threatened domain attempted to disprove the stereotype in order to prevent verifying for themselves or to others that the threat was self-characteristic (Aronson, Fried, & Good, 2002; Steele & Aronson, 1995). As the result of a disrupted performance, subjects were likely to choose tasks which they thought would ensure success, thus avoiding creative risk-taking. As well, these subjects had a propensity to experience profound anxiety and pressure, and under-perform in the face of a challenge. Performance decrement occurred as resources were diverted from the performance task to another concern, in this case, worry about confirming the stereotype (Steele & Aronson, 1995). Importantly, the stereotype did not need to be endorsed by the target: It was enough for the target of the stereotype to know that it existed in contexts where it could potentially be applied to his group (Steele & Aronson, 2005).

In their detailed seminal study of the effect of stereotype threat, Steele and Aronson (1995) focused on "immediate situational threat" generated by wide spread common perceptions about the lower intellectual ability of African Americans. They pointed out that there were gaps in achievement at school between African and White Americans and questioned whether this was not only a result of African Americans being socioeconomically disadvantaged, segregated, and discriminated against because of racial bias in standardised tests, but also because of the role of stereotype threat in underachievement. In four studies they showed that salient stereotype threat

had the effect of impairing intellectual performance in African Americans, and that its removal improved that performance.

In the first of the studies, Steele and Aronson (1995) compared test results of African American and White American college student from Stanford University across three conditions: a stereotype-threat condition where a test was presented as diagnostic of intellectual ability, and two non-stereotype-threat conditions (without and with a challenge) where the test was presented as non-diagnostic of ability. This experiment comprised a 2 x 3 factorial design to test the primary dependent measure (participants' test performance). A self-report questionnaire which aimed to glean data about thoughts of "academic competence", "personal worth" and "disruptive thoughts and feelings" was also administered. Chi-square analyses performed as a manipulation check on a question about the purpose of the study delivered after the experiment in each condition, indicated that the students registered the diagnostic test as one which measured their ability, and the non-diagnostic tests as not evaluative of ability. An ANCOVA on the number of test items achieved correctly by participants, with SAT scores used as the covariate, revealed that both racial groups performed better in the non-diagnostic than diagnostic condition, and as predicted, that African American students experienced comparatively greater performance decrement in the diagnostic condition, although this was only of marginal significance. A second study was conducted on a similar basis, but with a small sample of female participants, $n = 20$ (justified by the researchers in that no gender differences had been found in the previous study), and with small changes such as a reduction in time, items, and conducted on a computer. This second study confirmed the findings of the first study.

A third study in which a control condition was added to diagnostic and non-diagnostic conditions identical to those of the second study, revealed that racial

stereotype was triggered for the African American participants in the diagnostic test condition. Furthermore, these participants experienced high levels of self-doubt and were strongly motivated to avoid conforming to or being judged by the stereotype, in this condition. The fourth study revealed simply that the salience of stereotype threat had the power to decrease test performance in African Americans, even in the absence of a diagnostic condition. The participant groups were required to either state their race or not, as a priming tool, before completing tests in the two conditions, *neither* of which were ability-diagnostic. African Americans in the “race-prime” condition performed, as predicted, significantly worse than White Americans, but in the “no-race-prime” condition the performance of the two groups was equal. The authors pointed out that there were several mechanisms and combinations of these which could mediate stereotype threat (e.g., anxiety), arguing effectively against withdrawal of effort as a mediator. They suggested that “an inefficiency of processing much like that caused by other evaluative pressures” (Steele & Aronson, 1995, p. 809) best described the process involved, and cautioned that “token status” and “attributional ambiguity” (uncertainty of prejudicial treatment) while often occurring with stereotype threat, should not be confused with that construct. They summed up that stereotype threat could cause impaired intellectual test performance for African American students, and conversely, the removal of salient stereotype threat could improve that performance.

These findings hold wider implications. The authors stated that “stereotypes afoot in the larger society establish a predicament in the testing situation” (Steele & Aronson, 1995, p. 810), a situation that is not “group-neutral”. Furthermore, stereotypes have the ability to “contribute powerfully to the pattern of group differences that have characterised these tests since their inception” (Steele &

Aronson, 1995, p. 810); this scenario may well be applicable to other situations where “social context” interfaces with “group identity” to create a behavioural medium. However, Steele and Aronson (1995) rounded off this seminal work by asserting firmly that the manipulations demonstrated in their work boded well for the future, in indicating that such a scenario was able to be changed.

Critiques of stereotype threat as a construct.

The Steele and Aronson study is now considered a modern classic (Devine & Brodish, 2003). However, there have been popular and scholarly misconceptions about the findings of this seminal work. Sackett, Hardison and Cullen (2004) examined such misconceptions in the popular media, scientific journals and psychology textbooks. They found that a significant percentage of the literature interpreted the findings of Steele and Aronson (1995) in such a way as to suggest stereotype threat was the main cause of the academic achievement gap between African and White Americans. Sackett et al. (2004) cautioned strongly against such interpretations (as did Steele and Aronson, 2004, themselves), maintaining that Steele and Aronson’s (1995) study did not show that removal of stereotype threat equated with removal of African American-White test differences. In this and a subsequent critique (Sackett, Hardison, & Cullen, 2004, 2005), the authors clarified, defended and endorsed the Steele and Aronson (1995) study as valuable and robust, encouraging further research, particularly in real-world settings, to explore the role of stereotype, as an extant phenomenon which contributes to achievement imbalances.

In a later critique Danaher and Crandall (2008) re-examined the findings of Stricker and Ward (2004), establishing that this replication of Steele and Aronson’s (1995) seminal study endorsed the value of conducting real-world studies of stereotype threat pioneered in laboratory settings. Stricker and Ward (2004) reported

that, despite manipulating the placement of a statement of ethnicity and gender, no effects of stereotype threat were found in their two field studies. However, Danaher and Crandall (2008) considered the analyses of Stricker and Ward (2004) were too conservative, and thus their conclusions were flawed. After re-examining the meticulously recorded and presented findings of what they asserted was an essentially well-designed study, Danaher and Crandall (2008) found that the performance of the stereotype threatened group (females in this instance) improved when they were not asked about category membership before their test.

Of particular interest was the performance of the non-stereotype threatened group (in this case, males) which decreased *unless* their sense of category membership was activated prior to the test. This finding held relevance not only for studies of stereotype threat, but those of stereotype lift, which occurred when members of an in-group achieved a performance boost by comparing themselves favourably with a negatively labelled out-group (e.g., Walton and Cohen, 2003). As well, Danaher and Crandall (2008) commended Stricker and Ward (2004) in not adjusting their independent variables and thus presenting a clear basis upon which to study group differences. Danaher and Crandall (2008) asserted that Sackett et al. (2004) inferred, in their critique of Steele and Aronson (1995), “that stereotype threats may be limited to over and under prediction effects” (Danaher & Crandall, 2008, p. 1652). Stricker and Ward’s (2004) unadjusted data showed that no such limitations occurred.

Delgado and Prieto, (2008) have challenged the validity of stereotype threat, casting doubt upon its integrity as a construct per se. These authors aimed to explore the possible differential effects of stereotype threat on male and female mathematics performance. They recorded variable performance results in mathematics for males

and females, and between individuals high and low in anxiety, attributing their findings to variable levels of anxiety rather than stereotype threat itself. As well, they asserted that in their study, and in previous studies of stereotype threat, it was not possible to make a clear distinction between results caused by stereotype threat and those caused by stereotype lift. Delgado and Prieto's (2008) findings, while inconclusive in terms of predicting the effect of differential levels of male and female anxiety on performance in comparison to other literature (e.g., Abrams & Manstead, 1981; Cox, 1968; Hamman, 1982; LeBlanc, Jin, Obert, & Siivola, 1997), cast light on the bolstering effects of downward comparison found in stereotype lift (e.g., Walton & Cohen, 2003). Most particularly, Delgado and Prieto's (2008) work indicated that stereotype lift benefitted males where female ability was doubted, and exposed the need for further research in this area.

The choice of a self-report measure to assess threat-induced state anxiety may have been questionable since there has been debate surrounding the effectiveness of such measures (e.g., Quintana & McKown, 2008; Verkuyten & Thijs, 2001). Further research (Gawronski, LeBel, & Peters, 2007) has scrutinised assumptions that indirect measures allowed greater access to unconscious ideas than self-report measures, that responses to items in self-report measures could be motivated by socially desirable goals, and that self-report measures may not have allowed access to the stable implicit views which were the result of long-term socialisation. Gawronsky and colleagues found that there were no data which supported the idea that views accessed by indirect measures were implicit, and found, furthermore, that when aspects such as measurement error were taken into consideration, indirect and self-reported measures appeared to be reasonably strongly correlated. As well, the authors found that motivational factors such as social desirability were not always responsible for

affecting the relationship between indirect and self-report measures, and that in addition, responses to indirect measures were not impervious to elements of proactive and retroactive control. Furthermore, Gawronski et al. (2007) revealed that indirect measures could show a high degree of context sensitivity and may not successfully evaluate stable long-held views, calling for further research to strengthen understanding of the multiple processes which underlie indirect measures.

Such arguments were largely based on the assertion that self-report measures did not accurately assess traits or access implicit information. However, the use of a self-report measure in Steele and Aronson's (1995) seminal study seemed appropriate since the study involved the assessment of a situational state: anxiety. This researcher would suggest, nevertheless, that the value of self-report data may be augmented in future research design by the conjoint use of other measures and implementation in real world rather than laboratory settings.

Processes causing performance decrement in response to situational threat.

Steele and Aronson (1995) referred to the work of Baumeister (1984) who argued that situations which increased the importance of performing to an optimal level could impair performance. Baumeister (1984) explained that in these circumstances, vital attention needed for performing well was redirected to another concern. The mechanics of this process were such that conscious self-monitoring of performance skills disrupted automatic performance behaviour. This research seemed relevant to the present study, in that if a young person placed importance on disproving, in the face of salient stereotype threat, that he or she conformed to the stereotype, vital attention would be diverted to worries about proving the stereotype, rather than to giving an optimal performance. In six experiments with 120 subjects,

Baumeister (1984) found that increased attention to one's own performance process during performance resulted in performance decrement. In three further studies he introduced situational manipulations of pressure, for example the offer of a cash reward and the presence of an audience; he found that further decrements of performance quality occurred. In addition to this, he found that individuals with low dispositional self-consciousness were more susceptible to performance decrement under pressure than those with high dispositional self-consciousness.

Baumeister (1984) built on the findings of previous studies such as that of Wegner and Giuliano (1980), who had found that arousal caused an increase of attention to self. Their work existed alongside research which had explored the relationship between evaluation threat and anxiety in specifically musical contexts. Abrams and Manstead (1981) tested 80 college students (half female and half male) for anxiety under four different conditions of musical performance: alone; with the knowledge of two people in an adjacent room; alone in front of a mirror; and taping their performance for evaluation by a professional evaluator. They found that anxiety increased with awareness of being evaluated by others. Interestingly, they also discovered that there were gender differences in the amount of anxiety experienced, with females perceiving more anxiety and experiencing higher pulse rates than their male counterparts.

In a similar study involving enhanced and reduced anxiety situations, Hamann (1982) discovered that performance in front of an audience of peers made a great difference to the amount of anxiety felt by the performer. He combined self-reports of performance anxiety with measurements of heart beat, in a test conducted with male and female college students over three musical performance conditions: alone; with a researcher present; and in front of an audience of peers with the researcher

present. He found that self-reported performance anxiety increased in each successive condition. This study appealed as being particularly thorough, as it used stringent methods such as a repeated measures analysis of variance, and engaged all subjects in a thorough exit interview as a qualitative follow up. As well, regression analysis was applied for variables predicting heart rate; for example, gender, grade and selection of music. The work of Hamann (1982) thus built upon that of Abrams and Manstead (1981), revealing the importance of peers in mediating the level of anxiety caused by audience evaluation.

Following on from these studies, LeBlanc, Jin, Obert and Siivola (1997) investigated the effects of elements in the performing environment that can influence performance anxiety. They noted the presence of a peer group audience as important. A second goal of their study was to explore gender differences in performance anxiety. These rigorous studies revealed evidence which suggested that there were gender differences in performance anxiety, as had previous research (e.g., Abrams & Manstead, 1981). Females tended to have greater levels of performance anxiety across most situations, and of particular interest was the reference to earlier research (Cox, 1968) which suggested that highly test-anxious boys suffer marked performance decrement in front of a male audience. LeBlanc and colleagues (1997) advanced a formal theory (LeBlanc, 1994) that attempted to define the interaction of variables which affected the levels of performance anxiety influencing the preparation and presentation of an “important” performance. They asserted that their study improved research in this field by offering more generalisable findings through the use of a wide cross section of females and males.

Much other research has been conducted which explored how motivation and goal choice mediated stereotype threat (Brodish & Devine, 2009; Ryan & Ryan, 2005;

Smith, 2004; Smith, Sansone, & White, 2007). The first study for this thesis, however, was based in the field of disruptive cognitive mechanisms, since this was the avenue of research in which the seminal work of Steele and Aronson (1995) was embedded. This choice did not discount, however, that there is literature to support the idea that motivational forces and cognitive processes may interact to cause performance decrement as a product of stereotype threat (Schmader, Johns, & Forbes, 2008). Neither did it discount the idea that motivational mechanisms such as performance avoidance goals may mediate stereotype threat with very similar effects to cognitive processes (Steele & Aronson, 2005).

The effects of stereotype threat on working memory: A process model.

Steele and Aronson (1995) proposed a scenario where the salience of stereotype threat was suggested to cause behavioural responses such as increased self-monitoring and anxiety, and associated performance decrement. Schmader et al. (2008) aimed to address an incomplete understanding of the processes which affected these behavioural responses. They developed a process model which further explored how negative stereotypes impaired performance, looking at the specific contexts of “stress arousal, vigilance, working memory, and self regulation...” (Schmader et al., 2008, p. 336). They claimed that while previous researchers (e.g., Baumeister, 1984) had concentrated on single disruptive mechanisms, their process model would explain how stereotype threat disrupted performance through three mechanisms which, while they were distinct, were interrelated. These were: a physiological stress response (which impairs prefrontal processing), a tendency to actively monitor one’s own performance, and attempts to suppress negative thoughts and emotions as one self-regulated. The authors proposed that self-integrity threat, derived from “a state of cognitive imbalance in which one’s concept of self and expectation for success

conflict with primed social stereotypes suggesting poor performance” (Schmader et al., 2008, p. 337), triggered the three interrelated disruptive mechanisms.

Several authors have emphasised that the importance of the *working memory* hinged on the central role it plays in the maintenance of goal-relevant information and thus the facilitation of complex cognition (Baddley & Hitch, 1974; Conway, Cowan, & Bunting, 2001; Miyake & Shah, 1999). Conway, Cowan, and Bunting (2001) endorsed a widely held view that *working memory capacity* was limited in nature, and asserted that cognitive performance was thus logically constrained by finite bounds. They asserted as well that skills which blocked out or selected information were linked to working memory, and they considered working memory the foremost factor in general fluid intelligence. It has been unclear whether working memory has driven inhibitory ability or whether the converse process occurs, and furthermore, definitions of the working memory have varied. Conway and Engle (1994) suggested that it is a resource which feeds a *central executive* in charge of maintaining activation to relevant information, and suppressing information which is distracting. Another definition has described working memory capacity as the *contents of working memory* and proposed that inhibitory ability regulated the contents, and therefore the capacity of working memory (Hasher & Zacks, 1988). Conway et al. (2001) found evidence to support both views, but most importantly found that working memory was a reliable predictor of general fluid intelligence in young adults.

This finding was supported by later research which revealed that fluid cognition (gF) was also found to be readily affected by environmental influences, and used in reasoning and problem solving (Blair, 2006). In contrast, Blair (2006) defined cognitive functioning (gC) as that which was associated with “previously acquired” information stored in the long-term memory. While gF and gC are largely distinct in

function, there is evidence to support the idea that there is some functional overlap (Braver et al., 2001; Miyake et al., 2000; Ranganath, Johnson, & D'Esposito, 2003). Higher order cognitive tasks, such as those associated with fluid intelligence (and interestingly, intergroup interactions), require controlled attention, effortful processing and active self-regulation and these are the sorts of mechanisms which involve the working memory (Blair, 2006).

Earlier research cited that controlled attention was an important bridge between working memory capacity and fluid intelligence and asserted that it was achieved by the *central executive* (Engle, Tuholski, Laughlin, & Conway, 1999): As a component of the working memory, the central executive directed attention to goal-relevant information and blocked or inhibited that information which was goal-irrelevant. Importantly, “If a task can be performed on the basis of automatised routines ... the central executive component of working memory will not be taxed ...” (Conway, Cowan, Bunting, Theriault, & Minkoff, 2002, p. 179). Thus, this earlier research (e.g., Engle, et al. 1999) paved the way for further studies to investigate the implications for optimal performance in a situation where the *working memory* was impaired.

Schmader et al. (2008) described three mechanisms which worked together to diminish the available “executive resources”. These “executive resources” were termed by the authors as working memory, and deemed necessary to provide an optimal performance. The authors explained that stereotype threat would cause the release of cortisol (a steroid hormone produced in the adrenal gland, and which enhances blood sugar levels) into the target’s system as a result of the first of the mechanisms, physiological arousal, being activated. Schmader et al. (2008) suggested that the pre-frontal cortex, which contains high numbers of receptors sensitive to

cortisol, also mediated the executive function, attentional focus and working memory. As arousal, and the associated levels of cortisol rose, working memory became less efficient.

There is evidence to suggest that this process holds implications for the sort of tasks upon which the effects of stereotype threat might be most felt (Baumeister, Twenge, & Nuss, 2002). Further to this, there is literature which has asserted that the manufacture of melody, fine-tuning of intonation, pitch and volume, processing of emotional responses to music, and recognition of consonant sounds take place in the frontal cortex (Gilrain, 2006). It might be suggested then, that since musical processing and working memory are both mediated by a region of the brain which is highly susceptible to the effects of cortisol, there could be particularly marked implications for the effects of stereotype threat on specifically musical tasks.

The second of the mechanisms had to do with the monitoring of the self-relevance of the given performance. Schmader et al. (2008) asserted that the individual would seek self-feedback, and cues from others in an attempt to clarify uncertainty triggered by stereotype threat. Their vigilance with regard to cues which might indicate failure was increased and their awareness of themselves and their performance was made more conscious. Importantly, as automated behaviours were over-ridden by conscious behaviours, this process then affected both conscious and automated behaviours, and furthermore, Schmader et al. (2008) asserted that intuitive functions may be inhibited too. As well, and unique to stereotype threat, thoughts relating to both group consciousness and personal consciousness were suggested to come into play at the same time, as threatened individuals become concerned about doing well and doing badly, concurrently. Self-monitoring was suggested by Schmader et al. (2008) to access the same limited resources (vigilance and monitoring

emotionally arousing cues) as task completion, and thus contributed to taxing the working memory.

Thought suppression, the third of Schmader et al.'s (2008) proposed mechanisms, also contributed to taxing working memory. Thus, suppressive forces, aimed at regulating thoughts and feelings, were suggested to deal with negative emotions and ideas stemming from the experience of stereotype threat. Individuals experiencing stereotype threat could have feelings of self-doubt (Steele & Aronson, 1995), dejection (Keller & Dauenheimer, 2003; Marx & Staple, 2006), negative expectancies (Stangor, Carr, & Kiang, 1998) and task-related worries (Beilock, Rydell, & McConnell, 2007). Targets would employ denial as a coping mechanism (von Hippel et al., 2005) and this placed stress on the individual's already limited executive resources. Interestingly, it could be suggested that the idea of denial as a coping mechanism may cast additional doubt upon the reliability of self-reports, as can be seen in the findings of Bosson, Haymovitz and Pinel (2004), whose observations of childcare workers' anxiety in the face of stereotype threat differed from the workers' own self-reported anxiety. As well, this work pointed to the possibility of stereotype threat being experienced implicitly, even if the target was unaware of its presence. Further implications for the link between thought suppression and working memory were put forward by Carr and Steele (2009) who pointed out that future research could be useful in determining the meditational relationship between depleted working memory, and inflexibility of mindset as a result of suppressing stereotype threat.

So, all three of the mechanisms were proposed by Schmader et al. (2008) to interact in taxing, and ultimately degrading the working memory by diverting resources to tasks and concerns unrelated to optimal performance. The working

memory has been found to be of limited capacity and sensitive to changes in information processing demands (Conway, Jarrold, Kane, Miyake, & Towse, 2007), but it must continue to function to complete tasks despite task-irrelevant information and responses competing for attention. Thus, Schmader et al. (2008) would argue that a degraded working memory will produce a compromised performance.

Schmader et al. (2008) stringently scrutinised their proposed process model for possible areas of weakness or lack of clarity. They examined whether variations in working memory would moderate stereotype susceptibility, concluding, after thorough examination of previous literature (e.g., Gimmig, Huguet, Caverni & Cury, 2006) that it was more likely to be variations in task engagement which would induce this. They also clarified that while cognitive functioning may be impaired, motivation may be maintained at a high level under stereotype threat. Thus they distinguished carefully between increasing “mere effort” and taxing working memory. As well, they suggested that their process model moved beyond a simplistic view in which stereotype threat was confined to being either a cognitive or motivational issue, proposing that they “consider how motivated processes and activated cognitions interact to elicit physiological responses and active forms of processing that impair task performance” (Schmader et al., 2008, p. 348).

Much of the inherent value of their study lay in their systematic revealing of moderating and mediating factors which changed the strength of stereotype threat on the one hand, and interfaced between it and performance on the other. Schmader et al. (2008) pointed out that with a fuller understanding of these specific factors and processes, we could more effectively tailor interventions to reduce the effect of stereotype threat. They stated that, “ By demystifying the process by which

stereotypes affect behaviour, we are better equipped to alter those processes for the better” (Schmader et al., 2008, p. 352).

Stereotype threat beyond the experience of the target.

The way *targets* experienced stereotype threat, and interventions which affected the mediation and moderation of its effects have been the focus of the vast majority of studies in this field of research (e.g., Logel, Iserman, Davies, Quinn, & Spencer, 2009; Schmader et al., 2008; Huguet & Régner, 2007; Shih, Pittinsky, & Ambady, 1999; Spencer, Steele, & Quinn, 1999; Steele & Aronson, 1995). Steele et al. (2002) pointed out clearly that their study gave precedence to the lot of the target, stating that it was to the internal processes of the target that they allotted the limelight, “while allowing the environment to drift into a subsidiary role of prompting and priming the action on centre stage.” (Steele et al., 2002, p. 435). Interestingly, they further stated that the role of the trigger of salience of stereotype threat was finite: “Once it has done its job, it isn’t seen as having much of an ongoing role in constituting behaviour.” (Steele et al., 2002, p. 435). Although suggesting several solutions to moderate the effects of situational stereotype threat, Steele et al. (2002) cautioned that there was no guarantee that these would be carried beyond the classroom, or be stable in the long term.

Opinions have differed as to the practical possibilities of venturing beyond equipping targets with ameliorating strategies, and working instead to change stereotypical and prejudicial beliefs held by others. With regard to stereotype threat as a social identity threat, Steele stated: “To build a setting in which diverse groups can flourish and trust, it may be more important to reduce the social identity threats that people feel in the setting than to work on reducing prejudice and stereotyping” (Steele, 2003, p. 317). In a subsequent study (Davies, Spencer, & Steele, 2005),

Steele and colleagues indicated a shift from this stance, enlarging on the catalytic role which a move towards identity-safe environments might play and proposing that: “Identity-safe environments challenge the validity, relevance, or acceptance of negative stereotypes linked to stigmatised social identities” (Davies et al., 2005, p. 278). Such challenges may offer positive hope for threat reduction, but tempered by the suggestion of Wolfe and Spencer (1996) that while overt stereotyping and prejudice is declining and subtle stereotypic forces persist in a most pervasive fashion, challenge may not be enough. In a recent caution against an exclusively narrow approach to threat reduction, Steele (2010) has emphasised that changing situational cues and identity contingencies should not replace changes which would diminish disadvantage *per se*.

Thus, it may not be sufficient to limit research on stereotype threat to that which attempts to equip the *target* of threat with tools to lessen or remove its effects. Rather than extend this type of work, an aim of this thesis was to look further than the lot of the target of threat, in addressing the problem of stereotype threat. Mendoza-Denton, Park and O’Connor (2008) pointed out that changing beliefs and expectations may be central to changing stereotypes. “Specifically, rather than showing people exemplars of counter-stereotypic *behaviour*, one may need to challenge perceivers’ false beliefs more directly and deeply at the level of implicit underlying theory” (Mendoza-Denton et al., 2008, p. 981). There is research which has asserted that “lay theories”, which are wide spread in social settings, strongly influence attitudes and behaviours between groups (Quintana & McKown, 2008), and support traditionally gendered role definitions (Williams & Best, 1990). An understanding of how and why these popular beliefs are formed would therefore seem necessary as a prelude to examining possible change.

Prejudice, Stereotypes and the Consequences of Discrimination.

It is useful to return to aspects of Tajfel and Turner's work on social identity in order to gain an understanding of how and why stereotypic beliefs and attitudes about social groups are formed, and how they might relate to the adolescent perceiver's world. Tajfel aimed to explain why people discriminated against other groups in favour of their own, in his work on social identity theory (Tajfel, 1978). He defined social identity as "that part of an individual's self-concept which derives from his knowledge of his membership of a social group (or groups) together with the value and emotional significance attached to that membership" (Tajfel, 1978, p. 63).

Collaborative study which has built on this research (Tajfel & Turner, 1979; 1986) revealed that one's social identity served both cognitive and motivational purposes: A need to understand one's place in the social setting was fulfilled, and, the need to achieve positive self-esteem could be gained by seeing one's in-group as comparatively better than other groups. Turner and colleagues (1987) sought to identify the conditions under which social identities rather than personal identities would be made salient, and to bridge a gap in Tajfel's social identity theory, with their self-categorisation theory. Turner (1985) proposed that it was in situations where social identity was made salient that group characteristics became particularly meaningful and stereotyping occurred.

Barrett and Davis (2008) cautioned that the theories of Tajfel and Turner needed modification to be successfully applied in a developmental context, but stated that the theories drew attention to the complex relationship between the status of in-groups and the societal structure in which children grew up. Although their argument was centred on the application of Tajfel and Turner's theories to racial, ethnic, national, and state identification and attitudes, rather than a study of gender, the

importance of Barrett and Davis's (2008) critical appraisal for this present research lay in its recognition of a link between social identity and developmental stages. Parallel to this concept, Aboud (2008) drew upon preceding research on age-related changes in prejudice (e.g., Allport, 1954; Katz & Zalk, 1978; Kohlberg, 1969; Piaget & Weil, 1951) to support her argument that prejudicial attitudes were strongly linked to psychological processes specific to particular age groups. Thus, the work of Aboud (2008) further opened the way for research to investigate how prejudicial and stereotypic beliefs might be formed and manifest in adolescence.

Research exists which has explored the link between age, stereotype development and its consequences (McKown & Strambler, 2009; McKown & Weinstein, 2003). Such research revealed that the majority of American 10-year-olds understood that belief in social stereotypes would lead to discriminatory behaviour (McKown & Weinstein, 2003). These findings were supported and extended by a later study which indicated that, in general, knowledge of stereotypes led to an assumption of associated discriminatory behaviour in children in middle school (McKown & Strambler, 2009). Notably, earlier research conducted across a range of cultures in an international context, had revealed that children between the ages of 5 and 8 years had a good awareness of stereotypes, and that New Zealand children were among the top scorers (Williams & Best, 1990). In addition, there is research which has supported the idea that knowledge of gender stereotype strengthens with age (Martinot & Desert, 2007) and that while the acquisition of prejudice occurs at a younger age, automatically activated prejudice occurs notably with adolescence (Degner & Wentura, 2010). Williams and Best (1990) found that exaggeration of beliefs facilitated the learning of those beliefs from early childhood and could result in the early allocation of gender stereotypes and differential treatment of boys and

girls. This idea held particularly important implications for boys, who were expected to “give up childlike behaviours, for example, dependency and emotionality, and act like ‘little men’ at early ages” (Williams & Best, 1990, p. 307).

Cross and Cross (2008) pointed out how both positive and negative stereotypes may be differently absorbed at progressive stages of a young person’s life: parents played a mediating role in the stereotype absorption of pre-adolescents, but in adolescence a need to contest and clarify identity became central for young people and the role of peer influence came to the fore. There is research which has asserted that discrimination could be manifest in social exclusion (Brown & Bigler, 2005), that social status and acceptance was of more importance than friendship (Harter, 1999), that inclusion and exclusion by peers could be reflected in the amount of self-esteem a young person possessed (Leary, Tambor, Terdal, & Downs, 1995) and that exclusion could have a far greater effect on adolescent self-esteem than inclusion (Leary & Baumeister, 2000). Such research supports the idea that stereotypic beliefs may not only be mediated by adolescent peers, but may hold important consequences for peer acceptance, approval, and self-esteem in adolescence.

Prejudice (positive or negative evaluations of groups and their members) and stereotypes (knowledge, beliefs and expectation related to those groups) have usually been studied in isolation, but there is research which has suggested that they are related in important ways (Sherman, Stroessner, Conrey, & Azam, 2005). Such research has suggested that previous social psychological theory has promoted the idea that stereotyping has enhanced prejudice, that prejudice reduction has been reliant upon stereotype change, that prejudice has moderated stereotype endorsement, and that stereotypes have been promoted by prejudice and have functioned as a means by which social inequality has been justified. However, there has been little research

conducted to explore the important relationship between prejudice and stereotyping (Sherman et al., 2005) and that which has been carried out has been limited to the mechanisms of stereotype inhibition (e.g., Montieth, Sherman & Devine, 1998).

Sherman et al. (2005) pointed out that while inhibitory mechanisms may have regulated the expression of stereotypic beliefs, it is prejudice which has directly affected their content. These researchers found in three linked experiments that high levels of prejudice seemed to be related to biased encoding methods and that such judgemental processes functioned to perpetuate stereotypes. Interestingly, they asserted that beliefs about homosexuality were particularly “volatile” and likely to arouse strongly spontaneous judgemental responses. Sherman et al. (2005) pointed out the importance of understanding how perceivers viewed and processed information about targets: “In considering the relationship between attention and judgement it is necessary to know not only what information perceivers are attending to, but also why they are attending to that information and how they are encoding it” (Sherman et al., 2005, pp. 620–621).

Linked to these ideas are the findings of five studies conducted to explore how men’s attitudes developed as a defensive response to threats against their masculinity (Falomir-Pichastor & Mugny, 2009). These studies revealed that men who strongly endorsed hegemonic stereotypes of masculinity not only held strong negative attitudes towards gender transgression, but negative attitudes towards minority groups as well (Falomir-Pichastor & Mugny, 2009). Research which has revealed that perceivers in a position of social power demonstrated stronger negative implicit prejudice towards a minority out-group adds a further dimension to the perceiver’s experience (Guinote, Willis, & Martellotta, 2010).

In contrast, other research has probed the relationship between stereotype threat and prejudice, finding evidence that suggested that stereotype threat may have been formed as a reaction to self-threat, and that awareness of this may have facilitated understanding between different individuals when contact was framed as offering the opportunity to learn about each other (Goff, Steele, & Davies, 2008). Such research has suggested that stereotype threat, rather than being a tool or cause of prejudice is instead an unfortunate concomitant, produced as a reactive form of self-protection. This debate aside, the suggestion that the relationship between prejudice and stereotyping appears to be a complex one consisting of multiple processes which maintain negative attitudes (Sherman et al., 2005) seems deserving of investigation, particularly with a view to understanding the perceiver's perspective.

Prejudicial beliefs and expectations, then, may have mediated stereotype threat with detrimental effects. This idea prompted the question as to how this might affect school communities, and whether remedial action which extended beyond the target was possible. In the seminal work of Rosenthal and Jacobson (1968), teacher beliefs and expectations were revealed to shape pupil outcomes. In other research, teacher expectations have been related to social stereotyping (Jussim, Eccles, & Madon, 1996). As well, research has been conducted in the New Zealand context on teacher expectations about collective groups of students (Rubie-Davies, 2006), and the power of self-fulfilling prophecies on various ethnic groups of students in New Zealand (Rubie-Davies, Hattie, & Hamilton, 2006). Steele and Aronson's (2005) assertion that stereotypic beliefs could prompt the differential treatment of students by teachers, parents and peers has linked these studies to the field of stereotype threat.

Despite the assertion of some authors (e.g., Sherman et al., 2005) that prejudicial beliefs are resistant to challenge or change, there is research which has

reported findings which have offered hope for change in stereotypical beliefs, attitudes and expectations. In her exploration of stereotype suppression in high and low prejudiced people, Devine (1989) found evidence which indicated that changes in beliefs and attitudes were possible with sustained intent and attention over time. She maintained that during the process of change, people would need to inhibit automatically activated information and consciously replace prejudicial ideas and responses with unprejudiced ones. Devine (1989) acknowledged that the effecting of change in responses to stereotyped groups represented a difficult challenge, and that such change could result in an inconsistency between expressed attitudes and behaviour. Lamb, Bigler, Liben, and Green (2009) cautioned, in their work on improving school climate by challenging sexist remarks in younger American children, that it was easier to change behaviour than beliefs and attitudes. The idea of personal beliefs being more difficult to change than behaviour was also borne out in a Rwandan study (Paluck, 2009) conducted to explore prejudice and conflict reduction in a racial context.

However, there is research which has strongly supported the idea that implicit prejudicial attitudes of perceivers are malleable and thus change is possible (Blair, 2002; Devine, 1989). In research which explored breaking down group boundaries as a precursor to such change, Page-Gould, Mendoza-Denton, and Tropp (2008) revealed how cross-group friendships reduced inter-group anxiety among people who were high in race-based rejection sensitivity and implicit prejudice, and Hall, Crisp, and Suen (2009) further explored the effects on implicit prejudice of “blurring intergroup boundaries”. Importantly, Johns, Schmader, and Martens (2005) made a pivotal comment that in order for change to take place, awareness was a necessary first step.

This current thesis aimed overall to expose the nature and effect of gender beliefs and expectations held by both targets and non-targets of stereotype threat. Thus a platform would be created upon which an increased awareness of gender beliefs and expectations could be built. This platform would provide a basis with which to instigate a challenge to the validity of gender beliefs and expectations, and with which change to gender beliefs and expectations could ultimately be effected. The next chapter, then, reports on the first study for the thesis, which examined the hypothesis that gender stereotype threat causes performance decrement for boys who sing in choirs. As well, this study explores whether the level of salience of stereotype threat altered awareness of threat.

Chapter 3: Study 1

This study tested the hypothesis that gender stereotype threat causes performance decrement for adolescent males who sing in secondary school choirs and examined whether strength of salience may alter awareness of stereotype threat.

Method

Participants.

A stratified, purposefully selected sample of Auckland secondary school choral students ($N = 737$) resulting in a final number of 16 choirs (comprising 12 groups of male choristers and 12 groups of female choristers), was drawn from schools with a strong choral background. The choirs reflected a mixture of deciles (socioeconomic categories), ethnic and cultural backgrounds, gender mixes, private, independent, religious, state secular, urban and rural schools (see Table 1).

Procedure.

Permission to undertake the study was obtained firstly from the University of Auckland Human Participants Ethics Committee, reference 2007/446, and then the schools and the participants (examples of Participant Information Sheets and Consent Forms are included as Appendices A 1 and A 2). The study took the form of a quasi experiment with a 2 x 2 factorial design. The factors were the genders of the participants (male and female) and performance quality description factors after two performances: these performances were (a) to the whole school (task condition, where stereotype threat was made salient to the males, but not the females) and (b) to an audience of arts peers (fun condition, where stereotype threat was salient for neither group).

Before the performance to the whole school (task condition), the male choristers (the intervention group) were told by their choir directors that the researcher would like to see if boys have a different experience of singing in choirs to females, and that they should sing to their best ability. This comment was designed to trigger the salience of gender stereotype threat. The female choristers (the control group) also performed to the whole school (task condition). They were also told by their choir directors that they should sing to their best ability, but with the confidence that they could enjoy the support traditionally bestowed upon them as young women who sing in the choir. There was no triggering of salient gender stereotype threat in this case, nor was any expected to be present.

In both the task and fun conditions, each choir entered the stage, performed two items, and was awarded a mark for their group's performance quality. The choir then left the stage, and the individual choristers filled out a self-report questionnaire immediately after each performance, in a quiet room. It should be noted that for three of the choirs (Choirs 15, 16 and 17), the fun condition preceded the task condition, and for all the other choirs, the task condition preceded the fun condition. No effect of time as a confounding variable was suggested in these results. As well, the males in Choir 2 were unable to be marked in the fun condition as they had all left the choir when that performance took place. Thus, data from Choir 2 were not included in any final analyses, although this choir and the incident are discussed as a case study.

Data collection occurred between March and November of 2008 and all statistical analyses were carried out using SPSS v 16.0 (2007).

Table 1

Participating Choirs by School Type, Decile, Gender, Age Level and Ethnicity

Choir	Type	Decile	Male	Female	Total	12–15 Years	16–18 Years	European	Māori	Pacific Island	Asian	Other
1	State Coeducational	2	25	23	48	24	24	0	6	41	0	1
2	State Coeducational	5	8	8	16	8	8	8	3	2	1	2
3	State Coeducational	9	13	13	26	14	12	16	3	0	6	1
4	Private Single sex male	4	50		50	20	29	12	10	25	0	1
5	Private Single sex female	10		58	58	45	13	31	0	3	18	5
6	State	10	20	25	45	13	32	25	0	0	19	0
12	Coeducational		55		55	27	28	32	2	0	23	0
13				44	44	11	33	21	0	1	18	2
7	State Single sex male	9	76		76	22	53	22	1	2	44	4
17	State Single sex female	9		67	67	50	17	9	0	0	53	3
9	State Single sex male/female	9	28	28	56	12	44	23	2	4	25	2

Choir	Type	Decile	Male	Female	Total	12–15 Years	16–18 Years	European	Māori	Pacific Island	Asian	Other
8	State Coeducational (Rural)	8	15	21	36	16	19	31	0	0	0	5
10	State Single sex male	10	40		40	13	27	18	3	2	12	5
11	State Single sex female	9		44	44	18	26	12	2	1	20	9
14	State Coeducational	4	12	12	24	5	19	8	0	11	4	1
15	Independent Coeducational	9	16	16	32	12	20	23	6	0	2	0
16	State Coeducational	9	10	10	20	10	10	14	2	0	1	2
Totals			368	369	737	320	414	305	40	92	246	43

Note. Choirs 6, 12, and 13 were drawn from the same school. Choir 9 was drawn from two single sex schools.

Instruments.***Marking schedule for performance quality.***

Marks of performance quality (MPQ¹ for the task condition, and MPQ² for the fun condition), were awarded for each group of males and females, in each of two performance conditions, by the researcher (Rater 1). An independent rater (Rater 2) marked eight of thirty-four performances, involving Choirs 1, 2, 6, and 10. The raters derived a total mark out of 100, from nine categories on a marking schedule (see Table 2) based on that developed by the New Zealand Choral Federation Inc., Te Kotahitanga Manu Reo O Aotearoa (2007b), to assess secondary school students. The greatest weighting was apportioned to those categories which could be used to indicate technical measures reflecting anxiety: for example, posture, breath management, intonation and accuracy. Where both raters marked a performance, a mean mark was recorded as the final score for that group (see Table 3). Cohen's kappa was computed to check the reliability of the observer ratings and the kappa of 0.98 indicated that there was a strong agreement between raters.

Table 2

Marking Schedule: Performance Quality /100

<p>POSTURE</p> <ul style="list-style-type: none"> • Standing tall • Relaxed shoulders/jaw • Open across the chest • Head straight • Alert eyes, focus <p style="text-align: right;">/15</p>	<p>ACCURACY</p> <ul style="list-style-type: none"> • Notes • Rhythm • Dynamics • Articulation • Text <p style="text-align: right;">/15</p>	<p>STYLE</p> <ul style="list-style-type: none"> • Integrity and appropriateness <p style="text-align: right;">/5</p>
<p>BREATH MANAGEMENT</p> <ul style="list-style-type: none"> • Silent breath intake • Sustained breath during phrases <p style="text-align: right;">/15</p>	<p>INTONATION</p> <ul style="list-style-type: none"> • Clear vowels • Unisons • Chording • Key changes <p style="text-align: right;">/15</p>	<p>COMMUNICATION</p> <ul style="list-style-type: none"> • Intent of composer presented • Emotion of the piece is shown • Connection with the audience <p style="text-align: right;">/10</p>
<p>CHORAL QUALITY</p> <ul style="list-style-type: none"> • Appropriate use of singing voice • Musical line <p style="text-align: right;">/5</p>	<p>TEXT</p> <ul style="list-style-type: none"> • Clarity of diction • Meaning <p style="text-align: right;">/10</p>	<p>STAGE PRESENCE</p> <ul style="list-style-type: none"> • Walking on/off stage • Sense of ensemble <p style="text-align: right;">/10</p>

Score	General Description	Detailed Description
Above 85%	An extremely convincing performance with little reservation	Sophisticated musicianship with fine control of tonal nuances; a polished, assured and compelling performance
75%–84%	A largely convincing performance, but with some reservation	Satisfying musicianship but with some defects; evidence of style and character
65%–74%	A good performance, but with reservations	A willingness to communicate but significant flaws in musicianship
55%–64%	A competent performance but with reservations	A willingness to communicate but substantial flaws in musicianship
Below 55%	A limited performance but with some potential	Failure to communicate; weak musicianship

Self-report questionnaires.

All participants filled out identical self-report questionnaires comprising 32 questions after their performances in both the task condition (SRQ¹), and the fun condition (SRQ²). Responses were made using a five-point Likert scale (i.e., 1=Strongly Agree, 2=Agree, 3=Not sure, 4=Disagree, 5=Strongly Disagree). The content, style and format for the questionnaire were drawn from several sources: the self-report measure used by Steele and Aronson (1995), a version of the Spielberger State Anxiety Inventory (Geen, 1991; Sarason, 1980), the Sarason Test Anxiety Scale (Geen, 1985; Sarason, 1978), and the FRIEDBEN Test Anxiety Scale (the FTA) (Friedman & Bendas-Jacob, 1997). From these, self-measures of vocal competence, self-worth and cognitive interference were derived in order to measure the effect of enhanced immediate situational threat derived from stereotype threat, on performance quality. Participants also evaluated their own performance.

Steele and Aronson (1995) specified processes which could affect performance in the context of stereotype threat: arousal (stimulated activity which reduces the range of cues participants are then able to use [Easterbrook, 1959]); diverting attention to task-irrelevant worries (Sarason, 1972; Wine, 1971) causing an interfering self consciousness (Baumeister, 1984); over-cautiousness (Geen, 1985); and low performance expectations resulting in withdrawal of effort (Bandura, 1977).

Friedman and Bendas-Jacob (1997) identified three subscales in their 23-item scale (the FTA): “(a) Social Derogation (worries about being socially belittled and deprecated by significant others following failure on a test), (b) Cognitive Obstruction (poor concentration, failure to recall, difficulties in effective problem solving, before or during a test), and (c) Tenseness (bodily and emotional discomfort). The FTA was drawn on for the current study as it offered the potential to identify particular worries

as anxiety-causing, was specifically tailored to adolescents, and acknowledged that a test situation could be perceived to threaten “students’ social standing in the eyes of significant others” (Friedman & Bendas-Jacob, 1997, p. 1037).

Spielberger and Sarason (1989) considered measures of self-concept and self-awareness had a valid place in anxiety scales. This idea was rooted in the idea that social anxiety (the worry that the need to make a good impression will not be met [Schlenker & Leary, 1982]) is embedded in the process of self-presentation (Geen, 1991; Geen & Gange, 1977). The Sarason Test Anxiety Scale (TAS) (Sarason, 1978) and the Test Anxiety Inventory (TAI) (Spielberger, 1980) included measures relating to self-concept and awareness of the self. Friedman and Bendas-Jacob (1997) also acknowledged these components, linking *worry* to self-concept. Thus, questions based on such measures were included in the self-report questionnaire for this study.

The researcher expected to find that males would experience more anxiety and greater performance decrement in the task condition than in the fun condition, and would recognise the presence of gender stereotype threat only in the task condition. It was expected that females would experience less anxiety in the task condition than males, show no significant difference in performance quality between either condition, and recognise no presence of gender stereotype threat in either condition.

Results

Marks of performance quality.

A paired sample *t*-test was conducted to measure differences in observed performance quality (MPQ¹ and MPQ²), for the 16 choirs who completed performances in both conditions. The scores for each group are noted in Table 3. The males were found to have statistically significant lower means in the task condition

($M = 77.08$, $SD = 9.72$) compared to the fun condition ($M = 87.12$, $SD = 6.70$), $t(11) = -5.32$, $p < .001$, $d = 1.22$). In comparison, there were no statistically significant differences between means in the task condition ($M = 75.96$, $SD = 10.75$) and fun condition ($M = 80.46$, $SD = 10.07$), $t(11) = -1.89$, $p = .08$, $d = .43$) found for the females.

Table 3

Observed Marks of Performance Quality

Choir	Sex	Performance 1 (MPQ ¹ /100)			Performance 2 (MPQ ² /100)		
		Task Condition			Fun Condition		
		Rater 1	Rater 2	<i>M</i>	Rater 1	Rater 2	<i>M</i>
1	M	80	80	80	89	87	88
	F	70	70	70	86	83	84.5
2	M	60	60	60			
	F	71	74	72.5	73	72	72.5
3	M	58			80		
	F	60			75		
4	M	69			81		
	F	81			76		
6	M	88	87	87.5	98	94	96
	F	96	95	95.5	100	96	98
7	M	91			94		
8	M	78			79		
	F	78			79		
9	M	91			96		
	F	88			91		
10	M	81	80	80.5	86	87	86.5
11	F	61			63		
12	M	74			86		
13	F	87			77		
14	M	71			85		
	F	70			80		
15*	M	71			79		
	F	71			75		
16*	M	74			95		
	F	78			95		
17*	F	72			72		

Note. *Fun condition preceded task condition.

Choir 2: MPQ² incomplete.

Self-report questionnaire data.

After initial cleaning of the data, a maximum-likelihood factor analysis with Oblimin rotation with Kaiser normalisation was used to estimate the factor loadings of items derived from the self-review questionnaire. Every negatively worded item was reverse-scored so that Strongly Agree became 5, Agree became 4, Not Sure remained as 3, Disagree became 2, and Strongly Disagree became 1, as this aided a clearer visual representation of the data. The number of factors was determined by ensuring that there were sufficient items loaded on each factor (at least 5), that all factors could be meaningfully interpreted, and that each factor explained more variance than a single variable could (i.e., eigenvalue > 1).

Three items did not relate to any factor. Two of these items, designed as a manipulation check (“The performance was to see if boys experience singing in choirs differently to girls” and “The performance was to celebrate singing”) did not clearly relate to any of the factors and were not used any further. One remaining item (“I felt proud to be singing”) was considered ambiguous in meaning and therefore deleted from further analyses.

The final factor analysis of the 32 items revealed four clear factors: Performance Quality, Situational Awareness, Technical Aspects and Social Awareness (see Table 4).

Table 4

Factor Loadings and Intercorrelations between the Factors for the 32 Items

	Performance Quality	Situational Awareness	Technical Aspects	Social Awareness
The choir sang well.	0.88	-0.05	-0.20	0.07
I thought the choir sang badly.	0.81	0.00	-0.17	-0.13
The tricky bits in the music went badly.	0.64	0.01	0.13	-0.04
I was pleased with my performance.	0.64	-0.07	0.10	-0.04
The tricky bits in the music went well.	0.60	-0.13	0.13	0.20
I enjoyed the performance.	0.54	-0.09	-0.01	-0.23
I was dissatisfied with my performance.	0.50	0.03	0.25	-0.21
I hated my performance.	0.46	0.05	0.18	-0.24
I felt I was able to do all the things we rehearsed.	0.44	0.04	0.28	0.08
I was unaware of the details of my surroundings.	0.02	0.70	0.01	-0.13
I noticed the people in the audience.	0.05	0.61	0.00	0.05
I felt fully involved in the music and did not notice the people in the audience.	-0.21	0.58	-0.05	0.08
I was very aware of lots of the details of my surroundings.	0.03	0.54	0.00	0.01
No other thoughts were going through my head, only the music.	-0.09	0.49	-0.04	0.11
A lot of thoughts, not to do with the music, were going through my head.	0.01	0.38	-0.06	0.25
My tuning was good.	0.19	0.00	0.54	0.10
I had trouble sustaining all the breaths through the phrases.	-0.12	-0.05	0.52	0.00
My voice felt different to what it does in rehearsal.	-0.13	0.04	0.52	-0.11
My voice felt much the same as in rehearsal.	0.04	-0.04	0.50	0.02
I could sustain the breaths through the phrases.	0.05	-0.05	0.49	0.04
I felt I could do only some of the things I had rehearsed.	0.20	-0.02	0.46	-0.03
I was out of tune.	0.24	0.16	0.43	-0.17

	Performance Quality	Situational Awareness	Technical Aspects	Social Awareness
What the audience might have been thinking mattered to me.	-0.09	0.04	0.00	0.57
I was embarrassed to be singing. Q826	-0.13	-0.02	-0.09	0.52
Q1528	0.07	0.00	0.04	0.50
I did not care what the audience might have been thinking.	0.06	0.07	-0.04	0.49
	-0.11	0.16	0.03	0.44
Factor Intercorrelations	1	2	3	4
1	1.00	-0.20	0.37	-0.25
2	-0.20	1.00	-0.11	0.31
3	0.37	-0.11	1.00	-0.22
4	-0.25	0.31	-0.22	1.00

Note. Major loadings for each item are bolded.

Alpha estimates of reliability for each factor were 0.87 for Performance Quality, 0.76 for Situational Awareness, 0.73 for Technical Aspects and 0.68 for Social Awareness (see Table 5). These were sufficiently high to provide confidence in using them in subsequent analyses.

Table 5

Estimate of Reliability for Factors 1-4

	Number Of Items	<i>M</i>	<i>SD</i>	Alpha
Performance Quality	9	35.16	6.01	.87
Situational Awareness	6	18.24	4.72	.76
Technical Aspects	7	25.20	4.35	.73
Social Awareness	5	10.91	3.77	.68

A two-way multivariate analysis of variance (MANOVA) was carried out to conclude the analyses of the self-report questionnaire data, using the four factors as dependent variables, and both gender and condition as independent variables. No

statistically significant main or interaction effects were found (see Table 6), although the effect for gender was noted to approach statistical significance ($p = .08$).

Table 6

Two-Way MANOVA for Gender and Condition

Effect	Wilk's Lambda squared	<i>F</i>	<i>df</i>	<i>p</i>	Partial eta
Gender	0.99	2.11	4, 726	0.08	0.01
Condition	0.99	1.94	4, 726	0.10	0.01
Gender * Condition	0.99	1.17	4, 726	0.32	0.01

A case study of three anomalous choirs.

The performance decrement recorded for the males in the task condition did not appear to be accompanied by the expected raised levels of anxiety pertaining to stereotype threat, for the male participants overall. However, this was not the case for the males in two specific choirs. Although the peer audience had not been included as an explicitly active trigger of salience of stereotype threat, two unplanned incidents offered additional insight into the role of the peer audience in this regard. During Choir 3's task condition performance the audience was observed by Rater 1 to chat loudly, jeer at the choir, and laugh. The staff members, who attempted to restrain the audience, were continually ignored. Salience of threat, then, was not only triggered by the choir director before the performance, but reinforced overtly by the peer audience during it. There was an increase in observed performance quality for both genders in the fun condition for Choir 3 (see Table 3), but markedly so for the males, and these males exhibited the greatest increase of all the male groups, between task and fun conditions. There was no dissonance between observed and reported data for this choir. The males exhibited increased means in line with expected results, for

Situational Awareness and Social Awareness, in the task condition (see Figures 1 and 2), suggesting an increased level of anxiety and concern about audience thoughts.

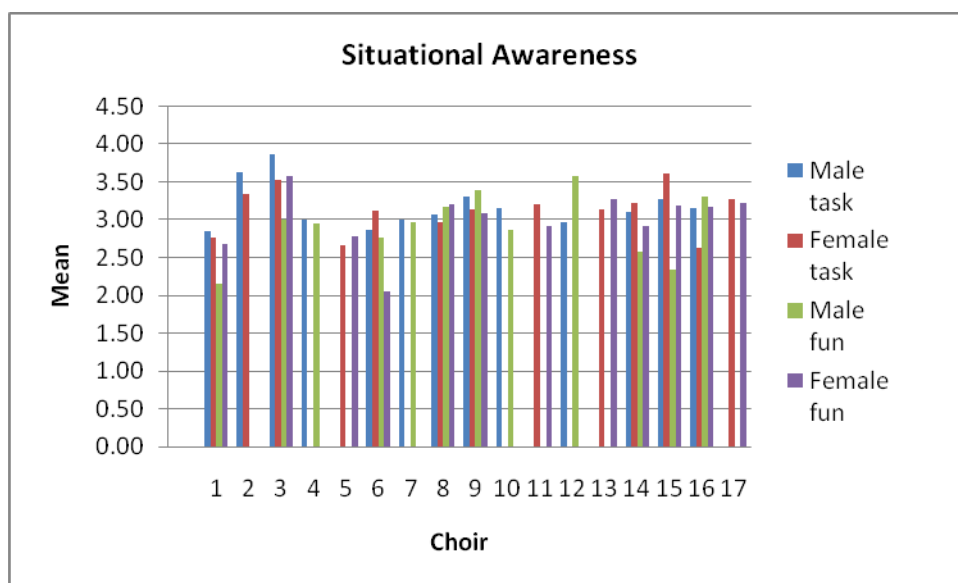


Figure 1. Self-reported means for Factor 2: Situational Awareness.

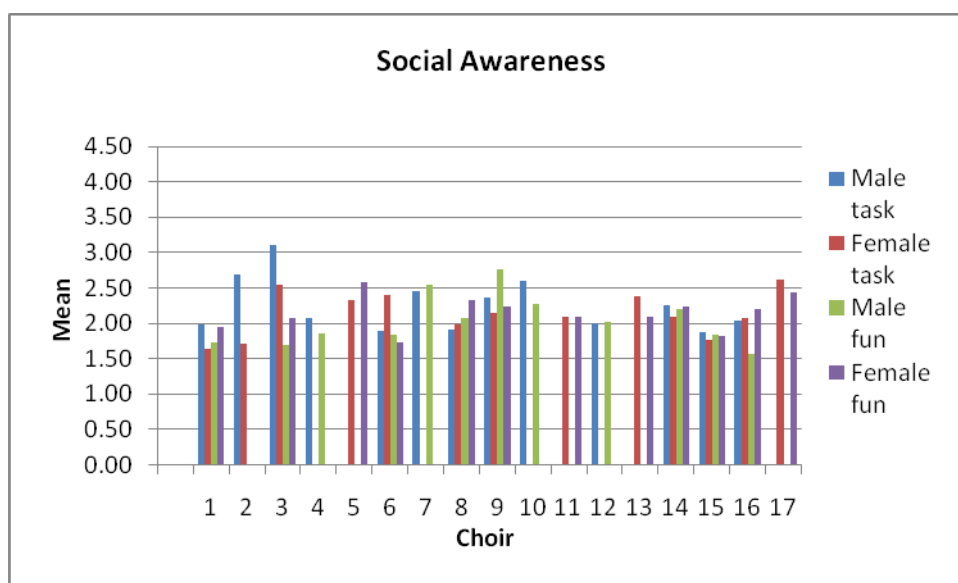


Figure 2. Self-reported means for Factor 4: Social Awareness.

As well, also in line with expected results, the males from Choir 3 exhibited lower means for Performance Quality and Technical Aspects in the task condition (Figures 3 and 4), suggesting that they perceived the performance quality and technical skill to have been less, in this condition.

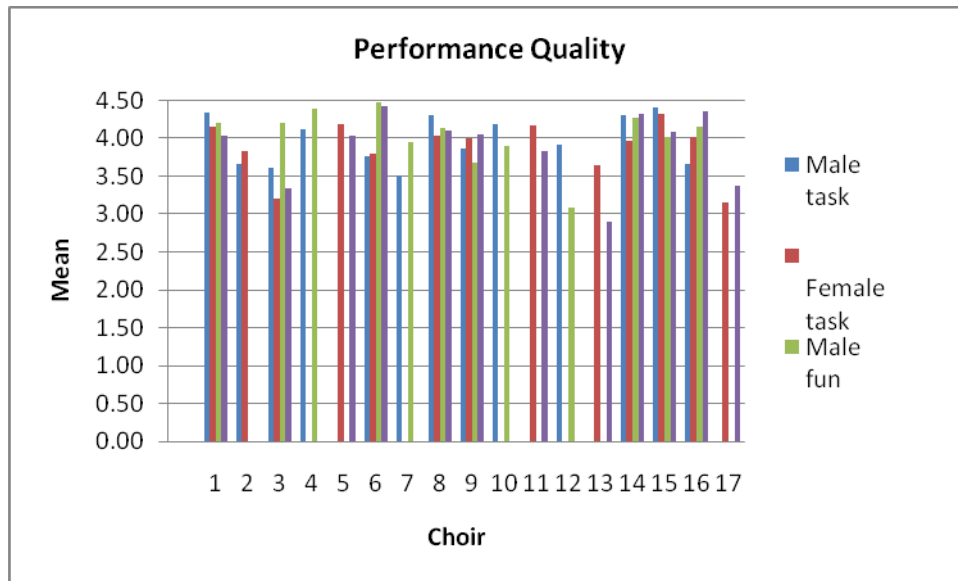


Figure 3. Self-reported means for Factor 1: Performance Quality.

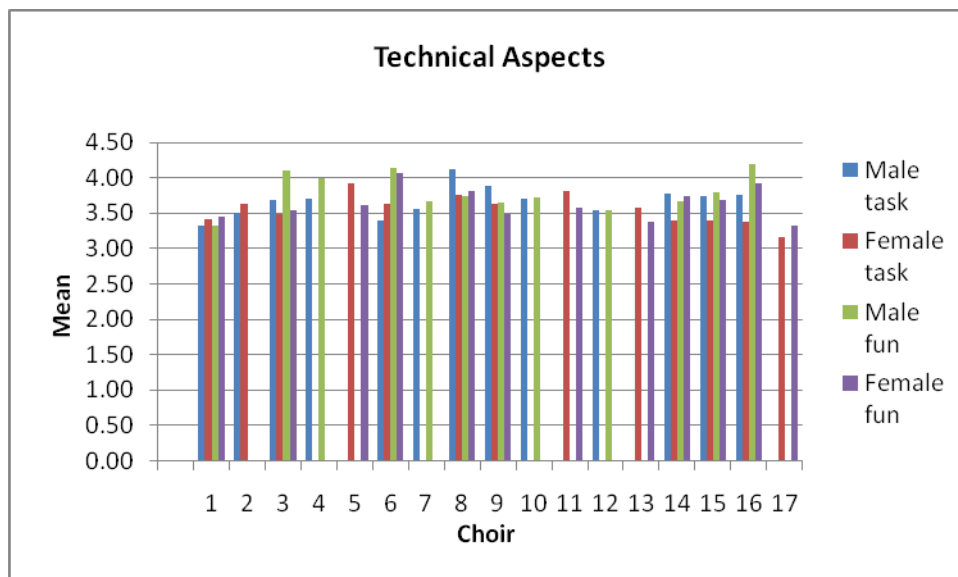


Figure 4. Self-reported means for Factor 3: Technical Aspects.

The data from Choir 2 supported this scenario (see Figures 1–4). Again, overt jeering was directed at the choir during the task condition. In this case the males were observed to disengage from the performance and join in with the derogatory behaviour of their audience peers. Interestingly, the choir director reported that a staff member had commented earlier to one of the males “Oh, so you’re one of the ‘Fa-la-la’ boys are you?”, contributing to what the director perceived as a culture of negativism towards the males in the choir. The males had all withdrawn from Choir 2

before the fun condition, and so the choir was excluded from the study, as such.

However, Choir 2's self-reported means for the task condition indicate consonance with the observed performance quality data for that condition.

Notably, the males in Choir 3 and Choir 2 were not only exposed to high levels of salient threat in the task condition, but had the largest means respectively for Situational Awareness and Social Awareness in that condition (see Figures 1 and 2). Of all the groups, they were the most anxious, and the most worried about what the audience thought of them about being an adolescent male in a choir.

A third choir yielded further anomalous results. In contrast to Choirs 2 and 3, the males in Choir 1, a predominantly Pasifika choir, appeared to have had quite a different performance experience. These males showed little performance decrement in the task condition, while the females in the choir exhibited the sort of decrement in the task condition expected from males. In comparison to the skilled and confident performance of the males in Choir 1, the females in this choir were observed by Rater 1 and Rater 2 to use a lighter 'head voice', where vocal production was limited by partial rather than full and effective physical support of the voice. As well, these females were noted to have to have poorer breath control, and to demonstrate inconsistent intonation (tuning). The overall impression gained by both raters as a result of these observations, was that the females in this choir were less confident than their male colleagues.

Discussion

The paired samples *t*-test conducted to determine differences in means for observed performance quality, revealed results in line with those expected in that a significantly lower mean in the task condition was found for the males, but there was

no significant difference between the means for the two conditions found for the females. However, no significant effect for gender and condition was found as a result of conducting the two-way MANOVA across the four factors. Thus, the observed results differed from those self-reported by the participants, which is not what the researcher expected.

This raised the question of the cause of this difference. Previous research had indicated that there could be dissonance between observed and reported experiences of stereotype threat (Bosson, Haymovitz, & Pinel, 2004), and suggested that the implicit experience of stereotype threat could explain this dissonance. The findings of the first study for this thesis appeared to support this assertion. Despite this, such research did not remove doubt about the reliability of the use of self-report questionnaires, per se, in measuring the effects of stereotype threat, as self-awareness seemed to be impaired.

However, while there was dissonance between the observed and self-reported results overall, this was not the case for the males in two choirs. For these choirs threat from the audience was noted to be blatantly salient in the task condition and, importantly, made so by their peers. This may have indicated that for the choirs where threat was not made blatantly salient, level of salience of threat affected the accuracy with which participants' threat was self-reported. Thus, an insufficient level of salience of threat, rather than reliability of self-reports, may have contributed to dissonance between the majority of observed and reported performances in this study.

Importantly, it was the out-group peer audiences who had been more successful in making threat blatantly salient, rather than the choir directors for Choirs 2 and 3. This observation strengthened the idea that peer influence represented a more powerful force within the lives of adolescents than that of adults (Harris, 1998;

Wigfield & Wagner, 2005), and indeed gave weight to Collins' (2009) assertion that this was particularly so for adolescent males. Furthermore, the overt disapproval of gender-role non-congruence registered by peer-audiences for Choirs 2 and 3 supported the idea of Martino and Pallotta-Chiarolli (2003) that school assemblies can function as a site where gender norms, practices and relationships can be played out.

The male choristers had openly participated in a domain considered feminine, and had displayed expressive traits rather than the agency associated with the ideal form of masculinity. As such, the male choristers could have been considered to represent a challenge to out-group male peers, in offering a visibly alternative and softer form of masculinity to that commonly considered by previous researchers (e.g., Mac an Ghail, 1994) to be dominant. The response to this challenge was expressed by vocal and aggressive audience demonstrations of the "hassling" described by Rout (1997), particularly from out-group male peers. This demonstration supported the finding of Vandello et al. (2008) that gender atypical performances incited responses of aggression in male audiences. The lack of tolerance for alternative forms of masculinity reported by Roulston and Mills (1998), and instead a clear policing of a preferred type of masculinity described by Martino and Pallotta-Chiarolli (2003), seemed to be borne out by this behaviour.

The resulting gender stereotype threat which stood to be mediated by such behaviour appeared ultimately to be manifest in the performance decrement recorded for males in the task condition. However, an equally detrimental result of stereotype threat was demonstrated uniquely by the males in Choir 2. These males were observed to disengage from the choir during their task condition performance, joined their out-group peers in ridiculing their fellow choristers, and subsequently withdrew from the choir altogether. These actions exemplified and added weight to the

suggestions of Steele et al. (2002) that stereotype threat could also result in protective disidentification, and ultimately the avoidance of a domain. Importantly, too, the results of stereotype threat found for the males invited further research to investigate what coping strategies and traits might be shared by those males who *remained* in their choirs despite overt and subtle messages that it was not acceptable to do so.

The males in Choir 1 comprised the only group where performance quality was unaffected by stereotype and, surprisingly, the females in this choir demonstrated performance decrement instead. The choir consisted largely of Pasifika participants of whom most were Samoan, and for whom singing was an integral part of cultural life, especially at church. Therefore it did not seem unusual that the males in this choir were not threatened, since for them, singing was considered acceptable for both sexes. Thus cultural context would appear to have bearing upon stereotype threat, supporting the conception of Steele et al. (2002) that stereotype threat is situation specific.

However, the unexpected performance decrement recorded for the females in Choir 1 presented a conundrum. These females appeared to underperform in comparison with their male counterparts, and yet there was no reported cultural climate of singing being inappropriate for females in this context. An exploration of literature surrounding gender expectations of Pasifika cultures (e.g., Shore, 1981), and specifically that relating to Samoan gender expectations (e.g., Park, Sualii-Sauni, Anae, Lima, Fuamatu, & Mariner, 2002), shed light on the underperformance of the females in Choir 1. In Samoan culture (as was generally found in other Pasifika cultures) females were protected by their men folk (Park et al., 2002) in order to maintain reproductive purity (Shore, 1981). While young women were tightly

controlled by the men to whom they deferred, young men were privileged in terms of agency and freedom (Park et al., 2002).

In view of the cultural expectations explained by this literature, it seemed that *stereotype lift* may have advantaged the performance of the males in Choir 1 in the task condition. “When a negative stereotype impugns the ability or worth of an out-group, people may experience *stereotype lift* – a performance boost that occurs when downward comparisons are made with a denigrated group.” (Walton & Cohen, 2003, p. 456). The dominant role accorded to young Samoan males, as protectors of their sisters (Park et al., 2002), may well have enabled the males in Choir 1 to engage in downward comparison and experience the associated boost in performance.

The data from this first study prompted the need for two further studies. Firstly, a further study was called for to extend and triangulate the data of the initial study, using case study choirs from a range of schools. Secondly, a third and final study was needed to explore beliefs and expectations held in school cultural contexts, which might promote or limit gender stereotype threat. Such research afforded the potential to extend the literature thus far generated on prejudicial and stereotypic beliefs and expectations, and on stereotype threat itself.

While the findings of the first study for this thesis were inconclusive in terms of supporting the hypothesis, they threw light on the research question, suggesting that salience of stereotype threat increased participant awareness of it. Importantly, it may be peers who have the greatest effect in triggering that salience, making blatantly apparent beliefs and expectations which would otherwise only be ambiguously suspected by the targets of stereotype threat. As well, the data suggested that there may be important differences in school cultures which affect how males in choirs are accepted and supported. Moreover, male choristers themselves may share common

traits which enable them to persist in a domain where peer pressure asserts that idea that participation is a threat to identity as a male. The following chapter reports on qualitative data collected from focus groups in a second study. This study investigated the possibility of common male-chorister traits, and differing contextual experiences of stereotype threat for males in choirs, extending and triangulating the findings of the first study.

Chapter 4: Study 2

Questions arose from the initial study for this thesis as to what attributes enabled male choristers to persist in a domain where they were at risk of being subjected to stereotype threat, and how that threat was experienced. This second study aimed to add depth to and triangulate the ideas and findings of the first study by adding qualitative data derived from focus group interviews. As well, the second study addressed two research questions:

1. Are there common attributes that empower young male choristers to endure in a domain which appears to be negatively stereotyped for young men?
2. How is stereotype experienced by adolescent male choristers?

Method

Participants.

The purposive sample for the qualitative data collection in this second study (the focus group interviews), was derived through a “two level” process (Merriam, 1998). Firstly, six school choirs were purposefully selected from the seventeen choirs which contributed data for the first study. Thus, a decile 9 (high socioeconomic) North Shore co-educational school, a decile 2 (low socioeconomic) South Auckland co-educational school, a single sex male central city state school, a rural school, a decile 9 North Shore single sex male state school and a mid-decile (mid-socioeconomic) West Auckland coeducational school were chosen.

This group of choirs was selected in order to determine a sampling frame which would most adequately reflect an acceptable approximation of the wider population (Stewart & Shamdasani, 1990). This rationale was further supported

by the suggestion that sample size should be based on a reasonable coverage of the phenomenon given the purpose of the study (Patton, 1990).

Secondly, a sample of 10 males was randomly chosen by ballot by each choir director, from within each choir. Any male unwilling to participate was replaced by a further candidate, again chosen by ballot. Each male in the finalised group of 10 was issued with a consent form (for those 16 years of age and over) or assent form (for those under 16 years of age who had been given permission by a parent to consider participation). The consent was specific to the focus group interview, and the students were told that the first eight to bring back their forms would be awarded a voucher for a free lunch at the tuck shop. Parental consent for those under 16 years of age had already been gained in the original parental consent forms, which had sought consent for the boys to participate not only in the observation and questionnaire for the first study, but potentially also in the focus groups.

Group size for the focus groups was set at between six and eight in order to enhance genuine discussion. The group was thought to be big enough that the chances of domination by a strong individual were reduced, but not so large that it was difficult to manage (Stewart & Shamdasani, 1990). These six groups of students ($n = 48$) participated in the focus group interviews. Confidentiality was preserved by the use of pseudonyms for names of participants, choir directors and schools.

Procedure.

Informing participants and gaining consent.

Before the schools were approached, permission to undertake the study was obtained from the University of Auckland Human Participants Ethics Committee (ref. 2007/ 446).

Focus group interviews.

Six focus group interviews, facilitated by the researcher's use of prompts and recorded on a digital voice recorder, were conducted to ultimately produce qualitative data in the form of coded transcripts.

The interview schedule (see Table 7) contained mainly open-ended questions which were less structured than those in the self-report questionnaire (Stewart & Shamdasani, 1990); were "funnelled", ranging from a more general to more specific nature (Minichiello, Aroni, Timewell, & Alexander, 1995); were ordered in relative importance; and contained a variety of types of question, for example, descriptive and structural questions (Spradley, 1979), and questions relating to opinion and feeling (Patton, 1989).

Table 7

Focus Group Interview Schedule

Questions Comprising Interview Schedule
1. What made you join the choir?
2. Is it cool in your school to sing in the choir?
3. Do the other students, staff and Arts faculty value the choir?
4. Tell me how you feel before you sing to an assembly audience.
5. Do your friends accept you as a boy who sings in a choir?
6. What are the things you enjoy about singing in the choir?
7. What are the things you don't enjoy about singing in the choir?
8. Is singing in a choir something that most of your friends and family do?
9. If your friends didn't approve of you singing in the choir would you still keep singing?
10. Are there any things that you know of that would stop you staying in the

choir, or that made it hard for you or other boys you know, to join the choir?

The focus group interview schedule was pilot tested on an extra group of eight male secondary school choristers before being used in the study. The prompts and interview technique were found to be satisfactory, and as the data from the pilot focus group interview were of substantial value, they were added to the data from the other six focus groups.

These data were used to aid in “interpreting previously obtained quantitative results” (Stewart & Shamdasani, 1990, p. 15). This multi-method approach was described as achieving “... broader and often better results” (Fontana & Frey, 1994, p. 373). In addition to this, it has been suggested that qualitative data may not only facilitate the interpretation of relationships between variables but help explain the reasons for those relationships, when used in conjunction with quantitative data (Bryman, 1992). The importance of interviewing a group of individuals, carefully selected by ballot to add depth to the quantitative data, was further supported by an assertion that “A small number of such individuals brought together as a discussion and resource group, is more valuable many times over than any representative sample” (Blumer, 1969, p. 41).

The many advantages of the focus group interview made it a strong choice as a source of qualitative data: It afforded direct interaction which enabled immediate clarification, probing and qualification of comments, and nonverbal observations; it was open in format which aided the achievement of deeper levels of meaning; it afforded the possibility of a synergistic relationship between group members; and it provided flexibility and easily understandable results (Stewart & Shamdasani, 1990). Stewart & Shamdasani (1990) also suggested several limitations, or dangers

associated with the focus group approach: the jeopardising of generalisability by the small numbers involved; responses being confounded by other individuals, for example, a dominant group member; the possibility that live data might be seen as more convincing than it actually was; the open-endedness of responses causing potential difficulty in analysis; and, moderator bias.

These obstacles were overcome by extensive reading of the literature related to effective moderating techniques ((Fontana & Frey, 1994; Minichiello, Aroni, Timewell, & Alexander, 1995; Powney & Watts, 1987; Stewart & Shamdasani, 1990; Weiss, 1994) and training on a further group of students who were not involved in the study. As well, a careful study of designing, coding and analysing techniques was made (Corbin & Strauss, 2008; Miles & Huberman, 1994; Stewart & Shamdasani, 1990; Weiss, 1994). It was decided that the strengths of the focus group interview as a means of producing rich and reliable qualitative data outweighed any weaknesses.

The researcher acted as a moderator in guiding the group discussion, intentionally relinquishing a degree of control in order to create an environment where the interviewees were able to put forward their own points of view, and relate their own experiences (Powney & Watts, 1987). This collaborative and subtle means of data collection (Powney & Watts, 1987) enabled the removal of a sense of hierarchy in the interview process (Fontana & Frey, 1994). This may have contributed to a more empathetic approach, important in establishing the "... same linguistic and social framework to make sense of what [was] being said" (Powney & Watts, 1987, p. 13).

Since there is literature which has supported the idea that the skill of the moderator is a major factor in determining the quality of the data, and that data results from an *interaction* between the moderator and the group (Stewart & Shamdasani, 1990), the researcher was careful to develop an awareness of, and to practise the skills

needed, to manage focus group dynamics. Cohesion and compatibility issues were to an extent removed as the choir members were familiar with each other, though not necessarily friends, and hence had developed cohesion within their choral group. However, the researcher strove to be aware of and manage any beliefs, expectations or stereotypes, (Stewart & Shamdasani, 1990) both from herself and group members, which could have inhibited productive discussion. The researcher also aimed to enhance the quality of the focus group interview data by: avoiding a 'set approach' for every focus group; choosing to probe rather than prompt or quiz; listening and allowing silence to occur; being aware of nonverbal cues; encouraging all group members to have their say and carefully managing dominant or difficult personalities; and avoiding imposing her own opinions (Powney & Watts, 1987). Importantly, these interviews gave the subjects the opportunity to voice *their* views (Weiss, 1994), and also provided direction for future research.

Analysis of Focus Group Interview Data.

The focus group interviews were fully transcribed by the researcher, and the transcripts were read through several times in order to get a feel for the participants' experiences (Corbin & Strauss, 2008). These were then coded in order to sharpen and sort the resulting themes and patterns (Miles & Huberman, 1994) and produce concepts, and later, categories (Corbin & Strauss, 2008). Coding had been started after the first focus group interview had been held, in order to ensure conceptual saturation (data collection sufficient to fully account for properties, dimensions and variation within each category) (Corbin & Strauss, 2008). This data reduction process produced seven major categories, a number considered to be neither too sparse nor too cumbersome (Powney & Watts, 1987).

Results

The focus group data resulted in seven themes: choral music was gendered feminine; there was a preferred form of masculinity; there was a hierarchy of school activities; individual identity could be at odds with group identity; there were perceptions of prejudice in some school communities; there were traits held in common between males in choirs; and certain factors in school communities supported or inhibited male participation in choirs. These provided evidence which enriched and supported the findings of the first study. As well, this evidence shed light on the existence and nature of traits shared by male choristers, the way in which stereotype threat was experienced, and opened the way for a third study. Each theme is discussed in detail below.

1. Choral music was gendered feminine.

The idea that music, and specifically choral music is gendered feminine (Green, 1997; Koza, 1993), was endorsed by males in five of the six focus groups, and the pilot test group:

It's just not seen as a masculine thing. [Focus group 4]

There was also the expectation that females would be involved in certain activities:

... Particularly an artistic activity and particularly singing. [Focus group 4]

The males from one focus group commented that some vocal ensembles, such as barbershop choruses, were not viewed as gendered feminine:

Barbershop is more masculine. [Focus group 1]

Barbershop's made for guys. [Focus group 1]

Green(1997) and Ashley (2008a) asserted that choral music involves the sort of display associated with femininity, but the males from this focus group

explained that the style of performance display appropriate for barbershop allowed males to display their masculinity:

It's because of the personality thing... In barbershop you have to show your personality... You can show that you're masculine... You can show that you're a man. [Focus group 1]

The males from several focus groups acknowledged that the idea of choirs being gendered feminine stemmed from stereotyped public opinion:

Yeah, but in modern society as soon as you hear the word choir it's stereotyped like girl. [Focus group 6]

It's expected... Girls in the choir... People expect it to be an all-girls' choir or at least be mainly girls, they don't expect to see a lot of guys up on stage.

[Focus group 3]

There's lots [sic] more girls... They're expected to follow that sort of activity... Singing... Art. [Focus group 4]

According to the males in one focus group, this view extended to other performing art forms as well, including dance. However, while these comments were perceived by the males to be popular public opinion, the males themselves held a different view:

... Men who can dance... That's extremely manly... I think it's more manly than... Playing sports and beating each other up... But unfortunately most people view it as an unmasculine thing. [Focus group 4]

Following on from this idea of public expectation, the males in five of the six focus groups and the pilot test group perceived that their peers considered certain aspects of gender role non-conformity not normal. It was accepted as normal that females should sing in choirs, but seen as not normal for males:

It's expected to have girls up there singing... But when they see guys up there singing they're like... Aaah... Boys on the stage? Singing? Not normal! What's going on? [Focus group 3]

... Generally singing in groups, people seem to group it more with girls as opposed to boys. [Focus group 5]

All the focus groups and the pilot test group thought that higher male voice types like tenors or unbroken male sopranos were open to ridicule as these voice types were not typically associated with manliness:

They would totally shame that person for having a high voice.

In the quartet I sing tenor and that's in falsetto... And people say...

They say, he's a woman!! [Focus group 6]

I liked singing really high like a soprano [laughter], but it's different now. [Focus group 1]

Furthermore, the males from one focus group acknowledged that a performance in a high male voice was thought to be particularly problematic in front of male peers:

I've been a boy soprano for ages now and I wouldn't sing in front of a group of guys in assembly... I know they just make fun of you. [Focus group 2]

However, other males commented that a deeper voice would not attract the same ridicule as it is associated with attributes expected of a male:

I think that [a deeper voice] would be more accepted.

More accepted.

Because of the conception that the deeper your voice the more of a man you are... Because girls have high voices and guys have deeper voices. [Focus group 2]

The males from the first focus group thought the sound associated with barbershop choruses also seemed a safer option for males keen to associate with maleness:

Barbershop has the broader sound. It's real tough! [Focus group 1]

One group of males commented that stereotypical peer opinion and the opinions of people who are unfamiliar with the field may lead to negative comment:

If guys are singing high, they could be insulted [with terms like]

“a nancy” or many other insults like that.

Well, that's what people think. .

That's common perception.

It's stereotype. [Focus group 4]

Cos if you get... A guy singing falsetto, and it's someone who just doesn't understand music, or how singing works then they're gonna say

'Oh wow... You eunuch!' [Focus group 4]

This attitude, however, was not found in all schools. Young male Pasifika choristers accepted singing as natural and in one school claimed that it even raised their esteem as a young man, in the eyes of their peers:

In our culture it's appropriate that you sing... No one cares [minds] if you sing in the choir [as a boy]... Everyone does it 'cos it's fun.

I think it's looked up to for boys, because, sport is kinda the main thing and a guy that can sing and play sport... Is higher. [Focus group 1]

2. There was a preferred form of masculinity.

The males in two focus groups expressed that they felt there was a widespread and nationally preferred form of masculinity which was associated

with emotional toughness in the New Zealand culture. They felt that this explained why it is acceptable for females to sing in choirs, but not males:

But it's only within New Zealand... If you look historically, globally, singing has always been some sort of art that's [born] out of expression, but male people... Stereotypical male people are... Hard and like keeps [sic] their feelings inside, so they're not supposed to sing. But females are expected to sing because they're expected to express their emotion. [Focus group 2]

Males were considered to be rejecting masculinity if they chose to engage in activities associated with females:

... Girls are more expected [to sing in choirs]... That's considered more normal for them, I reckon... Whereas [people think of] boys... "Oh, you're going out of your way to not be manly" or something like that. [Focus group 4]

In addition to this, males felt that their sense of masculinity was threatened if they sang in a choir, as "soft" pursuits did not fit with the activities prescribed as masculine. These were assumed to be sporting and physical in nature:

...It's more suitable for girls because it's soft, but for guys, people think we're s'posed to be in sports teams roughing each other up... Out in the field kinda thing. So when we sing it seems like we're "softies", or, like, not really men.

[Focus group 2]

This may be the reason that some males felt they could not join choirs:

[Some boys think] that they couldn't do it 'cos there's... This stereotype about being in a choir, that if you're in a choir... A boy in a choir... You're a sissy, or... Weak. [Focus group 1]

The Pasifika males from this focus group suggested that singing in choirs might be differently associated with masculinity in non-Pakeha (non-European) communities:

Well, how can I say it, not being racist... White communities... There's kind of like this attitude, where if [as a boy] you join the choir you're a sissy. But not at this [predominantly Pasifika] school. [Focus group 1]

3. There was a hierarchy of pursuits.

Choral music was perceived by all the boys to exist near the bottom of a hierarchy of pursuits. They felt that sport was universally privileged ahead of all the arts and ranked well ahead of music in status, and that rivalry between sports and the arts existed:

I don't think we get the same recognition as the sports teams for instance when they do well... In assembly, sports teams will go up [onto the stage to be congratulated]... Because the school generally likes sport better than music. They will go up for minor things, when we won't even go up for anything. [Focus group 2]

Oh there's a big, big thing about music versus sports.

It's not just music... It's arts. [Focus group 4]

The males of one choir perceived that the status of an activity was associated with its popularity.

The choir's definitely below the 1st XV.

That's why there's 6 of us, not 20! [Focus group 3]

There was a feeling in another focus group that sports and a dominant preferred form of masculinity were historically associated, and also that the privileging of sports was associated with the privileging of masculinity.

Oh you mean culture! [mocking voice]

It's after something [sic] that does sports.

Culture versus sports.

Boys are involved in sports, it's historic, that's why.

Sports always wins. [Focus group 4]

The adolescent males thought that staff accepted and endorsed this status

quo:

It's quite acceptable for say, seniors to go outside of the class and say, coach, but there was a big uproar when (we) went out and did the, um, show band for the production.

Yeah, they did not like that.

And it's more than that... Because the 1st XV could go to Australia for a week

[during school time]... And still [the staff would] not bat an eyelid. And we can go on band camp... Choir and band... Up north for three days... And we'd only miss one day of school and they'd be... They'd...[gesture of exasperation]. [Focus group 4]

Peers were perceived to endorse a preference for males to be involved in sports rather than the arts, even if those peers tolerated males in the choir:

As much as they respect what we did... If you give them the choice of whether we should sing they'd say we should go and play touch or something. [Focus group 4]

Rugby and soccer appeared to be particularly encouraged for males in several schools:

...If you are in the 1st XV rugby team then you're cool, and if you're in the 1st XI soccer then you're cool... If you're a boy... [Focus group 5]

Yeah if I was at rugby practice that's fine [to miss school]!! [Focus group 4]

The males in another focus group thought that the privileging of sport was a national phenomenon.

Obviously the 1st XV would come first because sports is [sic] the most valued thing in this country. [Focus group 1]

4. Individual identity could be at odds with group identity.

The males of all but one focus group reported that there was tension between personal identity and a group identity endorsed by peer pressure. Peer notions of the appropriateness of choirs for males were perceived to be at odds with those of the individual choristers:

It's peer pressure versus the individual. [Focus group 4]

Despite this, the male choristers were united in the view that they would prefer personal identity and truth to themselves over peer pressure, exhibiting a certain robustness of personality.

I guess we don't really care [what people think]. [Focus group 2]

If it makes you happy there's nothing stopping you really. [Focus group 4]

However, the males of one focus group suggested that this may be different for males who have not stayed with the choir. For these males, a need to conform to an expected group identity may have prevailed over personal identity:

I think the biggest thing for most people is peer pressure... If their friends find out they're just like "Oh no, I was just trying it out". Like, some people can't manage their friends... For some people everything revolves around how they look; their image, not really what they want to do. [Focus group 6]

All the males were very aware that performance in front of their general peers would expose them to audience evaluation, and potentially, a negative response. The vast majority of responses acknowledged nervousness:

...[when I perform] *at school* [laughter] [I am] *definitely nervous!!*”

[Laughter] [Focus group 6]

... *As a performance in front of our peers... We know the response we'll get...*

We know we'll get ridiculed. [Focus group 2]

Oh, when you're singing outside your choir you're scared. [Focus group 1]

They also universally commented that their friends were hard to perform to, and they anticipated their friends would be very judgemental:

Oh, well sometimes when you perform they kind of sit up and try and look for you.

Yeah, my friends are like... Oooooo.

... [They] *stare right at you.* [Much laughter and general mayhem]

You're very shy when you're, um, singing around your friends.

[Focus group 1]

Really judgemental, your friends, like if you stuff something up then they come down on you like a ton of bricks. [Focus group 6]

An audience of peers the same age as the choristers was felt by one focus group to be much more worrying than one of a different age group:

If they're closer to your age you might get a little bit more nervous 'cos you know that you're more likely to be in contact with them. [Focus group 4]

However, peer evaluations were felt by all the focus groups not to be threatening when the choristers sang for their musical peers. Here the

anticipation was not of concern about audience thoughts, but a converse feeling of acceptance and appreciation:

At the Gala, people sort of came with the expectation to listen to something great, rather than at assembly it's just like another event to them that they just sit through. [Focus group 2]

We are surrounded by an environment of singers at The Big Sing... I feel more relaxed, because there's that sort of [feeling of] achievement you get when you know you've gained their respect, because they're singers as well so they understand. [Focus group 2]

So actually for me it makes me feel better [to sing] in front of a group of singers. [Focus group 2]

The males all felt that it was important to gain respect from their peers in their school activities, but in all but one focus group the choir was not widely perceived as a group where an adolescent male might earn respect from peers in general:

... You sort of have to earn respect round here... My friends aren't dicks or anything, but... There are lots of people who think, it's like not cool to be in [the choir]. [Focus group 6]

The males in the pilot test group and five out of six of the focus groups thought that the choir was considered something which large numbers of males would choose not to participate in, as it was thought by peers not to be really cool for adolescent males:

... Plenty of my mates they don't exactly see the singing thing as something cool to do, or something they would do in their spare time. [Focus group 4]

However, the male choristers acknowledged that they would be more likely to have the confidence to pursue their own goals despite converse peer pressure, as they matured.

If you'd asked me three years ago if I was going to join [the choir], then I probably would have said no. [Focus group 4]

But, I think you get to a certain age where you just kind of [say] "I don't care"... I'm doing it for me ! [Focus group 4]

When you're younger you have... Different values and you value much more the whole being embarrassed thing, and keep out of the spotlight, whereas when you're older you start to understand that none of that matters... That's not what your values are anymore, so you stop worrying about it. [Focus group 4]

... I guess I was... Really shy.

Then you become more confident... You know who you are.

You just open up...[And do] what you really want to do. [Focus group 5]

Maturity was also seen to enable rational thought to over-ride preconceived stereotypical notions about males in choirs:

... When I was young I thought singing was so... Not cool... Something that weird people do... I mean for guys... I always thought when I was young, guys singing in choir, was ... An un-cool thing to do... When I came to this school I completely opened up and I signed up. [Focus group 5]

The threat of being bullied by older students was also thought to be removed for the males in one focus group as the males matured:

And, could I point out that when you're like a Year 7 there's a lot of really, really bigger kids who can pick on you, but when you are a big kid... It really doesn't matter. [Focus group 4]

There was no out-group pressure in the predominantly Pasifika school, where male choristers reported being supported, accepted, and even revered by the wider school community:

It won't be such a big thing here because they say "Oooh, you can sing other styles of music... Since you sing in the choir you can sing R & B, OK, sing us a song".

They respect you. [Focus group 1]

Interestingly, the Pasifika females in the choir at this school had presented in performance as less confident and accomplished singers than their male peers (see Study 1). While the males appear to acknowledge and experience the effects of stereotype lift, explored by Walton and Cohen (2003), it was the females in this context who had appeared to be disadvantaged.

5. There were perceptions of prejudice in some school communities.

The males from two of the focus groups reported a perception of prejudice amongst their peers in a range of situations:

Well you get a lot of prejudiced people and prejudiced things within a school... [Focus group 4]

This prejudicial attitude was expressed by negative criticism, rather than acceptance of any activity or personal trait that seemed different from an expected norm:

... Regardless of whatever activity you do take... Be it a choir... The majority of arts... Even the more intellectual people could be put down just for intellect. [Focus group 4]

It's tall poppy syndrome [being different]. [Focus group 4]

If you do anything different you always... Get peppered.

Pretty much. It's always been hard. [Focus group 2]

Negative criticism was sometimes expressed in derisive terms.

You get insulted for it [singing in a choir]. [Focus group 4]

The males in this focus group perceived this attitude of prejudice to be universal, extending beyond their own school:

[Prejudice exists] *Especially at this school.*

Any school. [Focus group 4]

However, not all peers were perceived to be prejudiced against males in choirs, and there was a suggestion of different strengths of potential threat associated with the gender role stereotyping attached to choirs:

Well it's not seen as a feminine thing... It's just not seen as a masculine thing.

It depends on what your view on life is. [Focus group 4]

The males in the fourth focus group commented that they were mocked by peers who considered that singing in choirs for males was for “nerds”:

A lot of my mates do think it's nerdy, and they come back at you and they start singing some of the lyrics and mocking you about it. [Focus group 4]

Such mockery started at an earlier age, and was unpleasant for the choristers:

When I was in Year 7 and 8... I certainly got mocked... During the Year 8 choir... And I did not feel comfortable at all. [Focus group 4]

Some of the choristers also admitted that they and their peers incorporated mockery into their culture as a routine aspect of behaviour. Any exposure in a public performance would be liable to invite peer judgement:

Ah, 'cos we mock each other for anything we can find. [Focus group 3]

We've put ourselves out there; we've said we're gonna sing this and basically that's a license to get mocked. [Focus group 4]

However, the choristers attempted to rationalise and deflect this attitude:

Just cos they're jealous.

You... Take a step back and you think well that's just ridiculous. [Focus group 4]

As well, some males strongly endorsed that idea that even if prejudice against males in choirs was not always overtly expressed by peers it was still perceived to be present in a more subtle way:

I certainly haven't [been] mocked but... I certainly will admit that people don't think it's cool [singing in choirs for boys]. [Focus group 4]

These males acknowledged that people's views on male choristers could spring from beliefs and stereotyping and that the male choristers invited comparison by their active participation in the choral domain:

Well that's what people think...

That's common perception.

It's stereotype.

Yeah.

It's what some of them think.

Yeah.

Without us... Those [comparisons] would not be made!!" [Focus group 4]

Quality of performance was important to the males as a means of reputation enhancement which bought them status with their peers and as such, could have the power to disprove the negative stereotype associated with males in choirs:

If you go out there and you sound atrocious you're bound to get... Mocked for whatever reason. But if you go up there and do well then they [sic] get appreciation for it. [Focus group 4]

However, there were still peers whose ignorance served as a barrier to their appreciation of quality, and who persisted with a prejudiced attitude:

You'll still find people who will still use it [the idea that there is something wrong with boys being in choirs] to mock you purely because they don't appreciate the quality of what you've done... Just because they're not interested in music and don't know a lot about it.[Focus group 4]

Furthermore, the males thought that there was a group of these peers in every school whose stereotypical idea about males in choirs would never change:

There will always be a group of people who will be uncomfortable, I think, with that sort of thing [boys being in choirs]. [Focus group 2]

All the males responded strongly to the idea of being rejected by their peers for belonging to the choir. They felt that they would not be able to remain friends with people who did not accept them as choristers:

They're not your friends if they're like that... They're the ones who are losers.

[Focus group 1]

Well I don't really think you could really call them your friends if they were judgemental of the fact that you sang in a choir. [Focus group 6]

Following on from this response to clear lack of acceptance, some choristers expressed the opinion that there could also be a feeling of ambiguity over whether out-group friends were really being supportive:

They think it's cool that I'm doing it [sniggers]... I don't know... Maybe they're being dishonest... Maybe it's just my friends that are like that. [Focus group 6]

Several of the choristers commented that they were bolstered by the fact that their friends were in the choir with them:

... Because my friends are in the choir. [Focus group 2]

The choristers in the predominantly Pacific Island school acknowledged that their friends were not limited to the choir and respected them for being in the choir:

I have heaps of friends outside the choir.

They respect you. [Focus group 1]

However, one chorister in another focus group found that his friends did not mix:

There's my class friends and the music and the arts; arty friends... So they're very separate. [Focus group 5]

Another male in the same group found that there was no real division of in-groups and out-groups among his friends:

The friends I kept through like intermediate... Aren't involved in music, but the new friends that I developed are in music, but they're in other subjects as well... We all get along with each other... There isn't a separation between the music friends and the other friends... It's sort of just one big group now...

The other friends aren't involved in music... It's just what we do... So they're kinda like "Oh yeah, sweet"! [Focus group 5]

6. There were common characteristics among boy choristers.

The male choristers exhibited a number of common characteristics which contributed to their strong identification with the choral domain.

A profound passion for singing was unanimously expressed and enthusiastically endorsed.

I love singing.

I just love singing, that's all. [Focus group 4]

Ooooh, I love it. [Focus group 1]

It's fun.

It is fun... I love it.

Yeah! I love it. [Focus group 5]

Furthermore, this passion for singing embraced a large part of many of the choristers' identities, defining them, as such:

Music's... My passion and singing's just my life... [Focus group 6]

The males stated that neither peer nor parental pressure would curb their determination to engage in the choir:

I think you'd find that the majority of people that sing in the choir have gotten over that 'what people think of me'... I think we've got to the stage now that if you choose to audition and you get in, you do it because you want to, not because of what others think. [Focus group 2]

Despite my dad I would [keep singing]. [Focus group 5]

I'd keep going.

I'd keep singing [despite pressure not to]. [Focus group 1]

One group of the male choristers also suggested, in contrast to this, that a lack of a strong identification with choirs may explain why some other adolescent males are not equipped with the sort of robustness necessary to persevere under various scenarios of duress:

They're like "No, I can't be bothered" and just walk off.

They didn't enjoy it as much as me.

Some of it's because of Mr Jones I think. If he tells them off once they're like... Totally resent it and run away.

They might think "Oh, this is a boring song". [Focus group 6]

The same choristers suggested that some of these other males might find the change of voice off-putting:

There's probably... Another quarter of the school who probably sing quite well... And when their voice changes they lose confidence, I guess. [Focus group 6]

However, the male choristers themselves were not deterred from singing while their voices were breaking:

I just stopped for a few weeks and just started again.

[It was] Kinda weird... I sang treble before and then ... I think when you sing your voice changes more slowly... I didn't notice it too much. But now, sometimes I try and get a high note and it comes out as a squeak, and it's embarrassing, but you get over it. [Focus group 6]

The males often used humour as a tool to deflect possible negativity:

They're like "You sing in a choir?" and you go "Yes [deep voice], yes I do. [low American drawl] Yeah!"

Well I'd like to think that people secretly admire us. [Focus group 3]

Ooooooh!

But our uniforms are awesome!

Yes we have cool blazers. [Laughter]

Yeah, in our borrowed blazers!

We don't sing that good but we still look good! [Laughter] [Focus group 3]

I'll make heaps of jokes about how nerdy it is but they understand that I like it and they respect that I like it. [Focus group 4]

Some of the choristers suggested that training in confident performance skills helped them not to be put off by audiences, and would often engender respect from some peers:

I do drama as well. You kind of build up just immunity to what the audience think about you. You don't really care. You're just doing it. [Focus group 3]

I think we also get a bit of... Respect for being able to stand up there and deliver a performance... I get that and it carries through not just singing... everyone will respect you if you can get up on stage to sing... You have personality and you have charisma, and you have the ability... Confidence in general. [Focus group 4]

Confidence and pride in being a chorister enabled males to gain respect from some out-group friends:

I have a couple of friends that are like "Choir, what a weirdo!", and I'm like "Does it matter if I'm in the choir to you or not?" Like what difference does it make? [Focus group 3]

I do have a handful of friends who haven't got anything to do with any of the arts but they certainly respect that that's what I do... I think that's because I don't treat it as anything I'm embarrassed about... [Focus group 4]

The males from four of the focus groups acknowledged that quality of performance was important as a goal and continued improvement was a motivating factor:

If they're just doing it for the sake of doing it, if they don't have a goal, then I wouldn't wanna join because it would be wasting my time... I want to progress, not just stay at the same level and doing the same thing. [Focus group 2]

As well, poor quality of performance could deter choristers from persisting:

...if you joined a choir that wasn't that good and when you performed people didn't like it because it didn't sound that good, then that would be the end.

[Focus group 2]

The males had previously acknowledged feeling nervous about performing in front of their non-musical peers, and stated that they anticipated being harshly evaluated. However, they firmly denied that such concerns would worry them. They made a show of bravado in asserting this claim:

But if they're like "Nah you sucked" I'll be like "I don't care"... It's a rather forgettable thing really... The whole assembly thing. [Focus group 3]

The males claimed that they would accept valid criticism, but demonstrated that abusive criticism prompted bravado as a defence:

Who cares [about abusive criticism]?

Talk doesn't matter to me anyways [sic].

Critics are critics. [Focus group 3]

The males all mentioned that the opportunity for camaraderie was a major motivating factor for remaining in the choir:

I think the thing for me... Especially in this choir... Is meeting new people... I made lots of friends out of it. [Focus group 6]

Definitely there is the social aspect. [Focus group 2]

Lack of enjoyment and camaraderie [may prevent continuation]. The social side is important. [Focus group 4]

Camaraderie afforded the opportunity for intimacy and belonging to a like-minded in-group:

...working together as a team, and getting to know each other and getting to know each other's weaknesses and strengths and progressing together... Our own culture of boys. [Focus group 2]

Being in the choir for two males meant avoiding loneliness.

It's better than sitting near the tuck shop or something. [Focus group 6]

Yeah, I have nowhere to go. [Focus group 3]

The males were sometimes in the group because a friend was:

If John left I'd probably leave. [Focus group 3]

As well, they stated that solidarity gave them strength:

It's more comfortable for boys to join a larger group of boys: strength in numbers. [Focus group 4]

The males created their own in-group and enjoyed a sense of belongingness:

It's kind of like a big family, because we know each other.

... Boys looking after each other, especially when we travel.

[Focus group 2]

All the focus groups reported that friends ended up together in the choir and attracted more like-minded friends:

Funnily, we actually pull friends into the choir.

Yeah, well we get dragged in. That's how it usually works.

You get dragged in and you drag others with you. It's a vicious cycle.

I already... Knew some people... They were friends, good friends. [Focus 2]

Bros.

Mates. [Focus group 5]

... I made you 'cos I was in there. [Laughter]... If I was going down then you were coming with me. [Focus group 3]

The males demonstrated empathy towards their non-musical peers and a philosophical understanding of out-group ignorance of their field:

If we sang a madrigal piece we'd appreciate the way the music was written and how it sounds... But, someone who's unfamiliar with it they might be like, "Oh, this is really boring", 'cos they don't understand the genre itself. It's just the clash like that." [Focus group 1]

In terms of [peers at] school, they appreciate the sound but they don't have the knowledge. [Focus group 1]

7. Certain factors supported or inhibited adolescent male participation in choirs.

The choristers mentioned several elements of school culture which either supported or inhibited adolescent male participation in choirs.

The director could be proactive in enlisting hesitant male choristers, and in hindsight, the choristers appreciated this:

I didn't know I liked singing and Mrs Smith persistently asked me over and over again over the course of six years and I eventually succumbed... She

caught me and she got me to join the choir and I found out I did like singing.

[Focus group 4]

...she came straight up to me ... And said "Join the choir, there's a choir here". So I joined the choir. [Focus group 5]

I was pushed in the right direction. [Focus group 1]

I joined because the teacher told me to. [Focus group 2]

The choristers acknowledged in most cases that the choir director was looked upon as a strong supporter of the choir:

Miss Brown supports us. [Focus group 3]

Miss White appreciates the choir. [Focus group 5]

... The teacher thinks it's cool. [Focus group 6]

We have a small music department... They kind of think it's great. [Focus group 2]

However, an unsupportive Head of Music was noted to make survival in one school something of a challenge. Interestingly, this scenario was reported by the boys from Choir 3, whose performance quality was observed to be most affected in Study 1:

...Mr Green does not support anyone or anything [Loud laughter].

... He's like "You have no musical talent"... And you're like "Oh but Sir, I'm in your choir" and he's still like [laughter] "Oh, but you don't have much musical talent-I won't say you have none"...

If we became a jazz choir he'd probably be supportive.

He's just a mean person.

If you survive that you've got to be strong! [Focus group 3]

Three of the groups commented that choice of repertoire and style could make a difference to whether peers enjoyed and accepted a performance or not:

I think it depends on what we are singing... 'Cos there's some things that personally within the choir we don't agree with... Sometimes we wear sparkly hats and do the Can Can and we don't like doing that. [Laughter] [Focus group 2]

Several of the males felt that the choir could be aware of the audience's reactions to a piece during its performance:

It's kind of [as] a group you can almost feel when a piece is well liked...

I think it entirely depends on the songs that we sing. [Focus group 2]

Some of them jack at the songs that we sing... All the Latin songs. [Focus group 5]

One group felt that repertoire that interfaces more with youth and popular culture was more accessible to peer audiences, and would widen the audience available to the choir:

We used to sing older songs than we do now and I noticed that when people were coming up to me, and we were singing newer songs, that they liked it and they could relate to it more.

... If you wanted to sing more modern songs I guess you'd be adding yourself to more of the school audience... [Focus group 4]

When asked if a more accessible repertoire would encourage more males to join the choir and foster more staff support, the males from one focus group responded enthusiastically in the affirmative:

Yeah.

Oh yeah.

Oh definitely.

Yeah.

Probably get more respect within the school. Teachers would probably even not bat an eyelid.

There's a bit of contention. One teacher I've heard said "Your choir would be great if you didn't sing such crap songs". She told me that.

[Focus group 4]

The choristers themselves acknowledged that they would leave the choir if the repertoire was unappealing for them:

On that point, I think if... All the songs we sang were boring to guys, like there wasn't much exciting stuff, or stuff we could relate to, then we'd probably... not want to come. [Focus group 5]

Choristers would feel less worried if they chose their own repertoire:

I think that if we did choose more of our songs as a group... I think we might feel more confident. [Focus group 4]

Repertoire of different types was more readily accepted in cultures where the school community was largely involved in church choral music:

For some people who haven't appreciated other styles of music... It's too hard. But... 'Cos the majority of the school go to church and they sing...they have an appreciation of it because they experience what it's like [different types of choral music]. [Focus group 1]

The choristers of one focus group perceived that most peers did not relate to the sort of music the choir presented, and some choristers held the opinion that their peers had poor musical taste:

It's not their music. They don't like it.

Choir isn't really the type of music people are into.

They'd rather listen to filth than actual music.

I'm into happy music.

Yeah, that's why you're in the choir and not laughing at us. [Focus group 3]

The choristers felt their peers might be more accepting of a male singing with a microphone:

They want a guy in front of a 'mic. [Focus group 3]

As well, the introduction of elements of popular musical, like band instruments helped to make the choir more acceptable:

Now that we've got the band with our choir it just adds an element of familiarity for the audience... You can make any old song seem quite up-beat and cool if you have a band. [Focus group 4]

The males noted that in some schools music and choirs were supported by peers and staff, while in others they were not, and that this may have contributed to choirs not being respected, and accepted as an activity for adolescent males:

I know in other schools... If you do music people go "Wow you're really good!", for example, Gulf View School has a lot of respect for their music department, whereas here it's sort of more sport and academic rather than music... Music's not very big. So I think the reason they're so judgemental is that we don't get the sort of respect that sports get.

... Boys' singing isn't really a big thing [at this school]. [Focus group 6]

I think if the school's attitude was... Quite negative [towards boys in choirs], it would put people off. [Focus group 2]

Discussion

The focus groups generated evidence that supported the ideas that choirs were a feminine domain and that participation in a choir threatened adolescent males' masculinity. Further to this, there was a strong sense of the behaviours and performances that were considered normal for young men and that pressure was applied by peers, in the form of mockery, in an attempt to police gender role conformity.

The focus group males felt strongly that it was not considered masculine to sing in choirs, and that their peers thought that males in choirs were weak or soft. They acknowledged that their sense of their own masculinity was threatened by this idea. They felt very nervous and aware of being judged when they sang in front of their non-musical peers, but not when they sang in front of fellow musicians. In line with the observations of Ashley (2008b) this apprehension was worst when the audience consisted of other boys.

Sports, particularly rugby and soccer, were held to be hierarchically privileged and encouraged for males, and choirs were positioned somewhere at the bottom of this hierarchy of pursuits. Thus, choirs were low in status and not always supported by the school per se. The boys acknowledged that toughness and hardness were associated with sports such as rugby, while softness and femininity were associated with choirs.

The male choristers acknowledged a tension between peer group identity and personal identity, stating that there was peer pressure not to sing in the choir. Some males gave in to this pressure, but these particular male choristers did not. They accepted possible separateness from their non-musical peers, preferring to stay true to their wish to be in the choir, and enjoyed the camaraderie and

belongingness afforded by their choir in-group. Some males, notably the males at the predominantly Pasifika school, managed to maintain cross-group friendships successfully, but other males belonged to groups of friends who did not intermix. Some males' friends were all in the choir.

The focus group data revealed that the choristers had common attributes which enabled them to maintain a high identification with the domain of choral music. This was typical of the “vanguard” personality identified by Steele et al. (2002). These researchers noted that individuals at the vanguard of a group would be the ones highly identified with the domain. Interestingly, all the choristers seemed to present as vanguard personalities. Those in the vanguard of a group would be not only the most likely to experience the greatest levels of stereotype threat (Steele et al., 2002), but consequently, the most likely to withdraw from the domain as a result of suffering additional levels of threat (Osborne & Walker, 2006). Interestingly however, while the highly engaged minority-group participants described in Osborne and Walker's (2006) study were faced with choosing between the loss of peer group support and engagement in their chosen field (academia), no such choice was presented to the choristers in the current study: resilience which enabled them to engage in the choral domain (albeit a stigmatised one) was facilitated by the support provided by an in-group whose cultural expectations were in accord with their own.

Passion for singing, enjoyment of camaraderie, determination to persist in the choir, confidence, humour, and empathy for their out-group peers were shared characteristics which engendered endurance in the choristers. As well, the males shared a need to strive for quality in performance, and stated that this

goal was an important means by which respect could be gained from their peers. Paradoxically, the attainment of a quality performance acknowledged by the choristers as so necessary for reputation enhancement was placed at risk of being jeopardised by the effects of stereotype threat. The results of this present study confirmed that while the choristers' attributes ensured endurance in the domain, they did not protect the choristers from the effects of stereotype threat in terms of performance decrement as found in Study 1.

The important final attribute was denial. The adolescent male choristers acknowledged audience threat, but denied adamantly that any worry about what the audience thought about them, or feelings of enhanced situational threat would affect their performance quality. The performance observations recorded in Study 1 tell a quite different story. The males felt able to acknowledge that they experienced a large amount of nervousness before performing to their non-musical peers, but were not able to admit that they might be prey to its effects. Given a scenario of self-presenting as a confident young male, denial as a self-protective response does not seem surprising; however it may stand to inhibit awareness and point to stereotype being experienced implicitly.

In the case of the predominantly Pacific Island school, it was accepted enthusiastically that males could sing in the choir. However, it was not reported that such enthusiastic acceptance was accorded to females in this scenario. This data further pointed to stereotype lift coming into play, and raised the question as to how adolescent Pacific Island females experienced being in the choir.

The range of school cultures from which the focus groups were drawn afforded the opportunity to compare and contrast the expectations of various sectors of each school community. The role of the director as a supporter, the

culture of the music department, peer attitudes, the expectations of the choristers themselves, and the attitudes of other staff all contributed to whether or not the boys felt accepted in the choir and whether stereotype threat was reduced or promoted. This second study, however, was confined only to the choral domain and the question arose as to whether gender-role conformity might be expected and condoned in other activities. Thus, a further study to investigate how gender beliefs and expectations contributed to attitudes of gender-role conformity in the wider school and across a range of activities was deemed necessary. The following chapter will report on this third study.

Chapter 5: Study 3

Research has suggested that while gender stereotypes and gender-role attitudes can be differentiated, they may be entwined (Beere, 1990). As well, it has been asserted that even though individuals have the potential for agency, they are motivated to shape their behaviour so that it is consistent with internalised concepts of sex-role (Kohlberg, 1966). Thus, behaviours considered undesirable and inappropriate for one's own sex are suppressed. Other researchers (e.g., Martin & Halverson, 1981) have suggested that children develop gender schemas which delineate behaviours and characteristics as differentiated for boys and girls, and furthermore, develop specific gender schemas which relate to their own sex. So, children categorise and internalise gender schemas which shape their choice of objects and activities, for example, girls may be encouraged to choose to sew, while boys may prefer to fix cars (Liben et al., 2002). These choices may be further influenced by "self-sanctions" tied to beliefs that self-efficacy could be gender differentiated in certain domains as well (Bussey & Bandura, 1999).

Thus, stereotypes of gender have provided a common and widespread ground upon which differentiation of behaviour and choice for each sex has been based, and thus there has appeared to be a connection between ideas of gender and gender-role identity. However, while a relationship between personality and gender attitude has been revealed in some studies (e.g., Bem, 1974; Bem, 1981; O'Heron & Orlofsky, 1990) Liben et al. (2002) suggested that the findings have been inconclusive. To compound the inconclusive nature of such research, Spence (1985) noted that gender identity and sex-role identity, while potentially independent, were not so in adolescence.

The third study for this thesis aimed to identify beliefs about gender identity, gender role, and expectations of activity-based gender-role conformity, in order to explore and compare gender-stereotypical views held by distinct participant groups within school communities. Thus, not only the targets' but the non-targets' experiences of stereotype threat were investigated. Three research questions were answered:

1. Do beliefs about gender identity and gender-roles, and expectations of activity-based gender-role conformity differ between participant groups (out-group peers, staff, choral directors and choristers) and school contexts?
2. To what extent do out-group peers, teachers, choir directors and choristers endorse stereotypes of gender-role conformity?
3. To what extent are out-group peers, teachers, choir directors and choristers aware of prevailing stereotypes about gender roles?

Method

Participants.

Participants ($N = 1215$) from nine secondary schools were investigated. The participants comprised four groups: teachers ($n = 95$), choir directors ($n = 10$), out-group peers ($n = 743$), and choristers drawn from eleven male, female and mixed choirs across the nine schools ($n = 367$). The participating schools were representative of a mixture of deciles, ethnic and cultural backgrounds, gender mixes, state and private settings, rural and urban settings, and also reflected varying degrees of support for choristers reported by the choir directors. Thus the sample of schools included a high decile school on Auckland's North Shore with a well-established mixed choir, a low decile South

Auckland school with a well-established and supported mixed choir, male choir, and female choir, a West Auckland mid decile school and a North Shore high decile school where the mixed choirs struggled to gain support, a private girls' school with a well established choir, and a central city low decile boy's school where the choir was highly regarded, and a rural North Auckland school which struggled to sustain a mixed choir.

Procedure.

Before the study was conducted, permission to proceed was obtained in the first instance from the University of Auckland Human Participants Ethics Committee, reference 2009/497, and then from the schools and the participants themselves. The study involved the administering of a new scale (The Gender-Role Beliefs and Expectations Questionnaire).

Permission was sought from a cross section of secondary school students ($N = 12$) to pilot test the scale. The pilot test revealed that the scale was appropriate for the age of student for which it was intended. A letter was then sent to the principal of each participating school, informing them about the study and seeking permission to gain site access (examples of Participant Information Sheets and Consent Forms are included in Appendices B 1 and B 2). Participant information sheets were then issued to all participants inviting them to be involved in the study. In addition, participant information sheets were sent home to all parents and guardians of student participants, along with parental consent forms and assent forms for all students under the age of 16. The questionnaires were then administered during form period or interval, or, in the case of the choristers, during rehearsal break, so as not to intrude upon teaching time. They were administered by the researcher in order to make sure all instructions were clear and consistent, and were completed in a quiet classroom, or workroom.

Data were collected between March and July 2010 and analysed using SPSS v 16 (2007).

Instrument.

The Gender-Role Beliefs and Expectations Questionnaire (G-RBEQ) comprises items which generated data providing a profile for each group of participants (out-group peers, teachers, director, and girl and boy choristers) and each of the nine participating school populations. The G-RBEQ data yielded information on sex-typing, beliefs and expectations about gendering and appropriateness of gender-role conformity of certain activities, the extent of awareness of prevailing stereotypes, and the extent to which those stereotypes were endorsed. As well, the G-RBEQ data enabled the participants' perceptions of the beliefs and expectations of *others* with regards to gender-role and gender-role conformity, to be investigated.

Beere (1990) pointed out that researchers should be aware of the difference between stereotypes and attitudes. She defined stereotypes as rigid perceptions based on over-simplified assumptions and drew upon the work of Shaw and Wright (1967) who defined attitudes as "a set of affective reactions towards the attitude object, derived from the concepts or beliefs that the individual has concerning the object, and predisposing the individual to behave in a certain manner toward the attitude object" (Shaw & Wright, 1967, p. 13). However, while an understanding of the distinction between stereotypes and attitudes was stressed as important, Beere (1990) noted that it may be difficult to separate the measurement of stereotypes and attitudes as they appear to be entwined. Brannon (1981), however, suggested that scales which employ summated ratings (e.g., Likert scales) might measure attitudes rather than stereotypes, the latter being more likely to be obtained by rating an adjective check

list. In order to encompass measures of both stereotypes and attitudes, the styles of questioning comprising the questionnaire have been purposefully varied.

The content, style and format of four existing scales were used to develop the four discrete sections comprising the questionnaire. Firstly, the Hoffman Gender Scale (HGS), (Hoffman, Borders, & Hattie, 2000) was used to produce data from which a measure of sex-typing for each individual, group and school population was derived. In its original form, the HGS comprised two subscales of seven items each, and a qualitative question. The first subscale, titled *gender self-definition*, gives a measure of how important a part in personal identity an individual thinks his or her self-defined masculinity or femininity plays. The second subscale, titled *gender self-acceptance*, measures the level of comfort a person registers as a member of his or her gender group. Separate but parallel forms are presented for female and male respondents: Form A is worded for females, and Form B is worded for males. Respondents indicated their level of agreement with each of the seven items in each subscale by rating them on a six point Likert scale (1=Strongly Disagree, 2=Disagree, 3=Somewhat Agree, 4=Tend to Agree, 5=Agree, 6=Strongly Agree). An initial qualitative question asked female respondents to write a description of what they mean by femininity, and male respondents to write a description of what they mean by masculinity. In accordance with a directive for revision in further use (Hoffman, Hattie, & Borders, 2005), this qualitative question was placed at the *start* of the scale, thus affording the opportunity for the respondents to immediately clarify their personal definition of either masculinity or femininity, before considering any further items. Apart from this revision, the scale was included as Part A of the questionnaire in its original form.

The widely used, and well endorsed Short Form of the Bem Sex Role Inventory (BSRI) (Bem, 1974) was also considered for use. Founded on the concept of a sex-typed person being one who has internalised sex-typed standards of desirability for behaviour in men and women prevalent in specific societies (Beere, 1990; Bem, 1975, 1981; Bem & Lenney, 1976; Bem, Martyna, & Watson, 1976), it seemed to offer fruitful possibilities as an instrument. However, the HGS (Hoffman et al., 2000) was chosen in preference as it not only fulfilled the ability to produce a measure of sex-typing, but did not limit respondents' answers to a male/female dichotomy, and also gave a measure of gender self-confidence. Hoffman et al. (2005) found that individuals with strong *gender self-definition* tended to have more traditional stereotypical conceptions of gender than those with weaker *gender self-definition*. Thus data on sex-typing can be derived from this subscale; however, latitude is also allowed for each respondent to self-determine what femininity or masculinity means to her or him. Although the HGS (Hoffman et al., 2000) is a newer instrument, it has been tested substantially (Hoffman, 2001, 2006; Hoffman et al., 2000; Hoffman et al., 2005), and its reliability documented (Hoffman et al., 2000), with coefficient alphas of 0.88 for women and 0.93 for men being noted for the *gender self-description* subscale, and coefficient alphas of 0.90 for women and 0.80 for men being noted for the *gender self-acceptance* subscale. The HGS (Hoffman et al., 2000) has been carefully scrutinised for scoring problems, with a detailed description of scoring for both subscales and the qualitative question being outlined in Hoffman et al. (2005).

The second section of the questionnaire was based upon the short form of the Sex Role Behaviour Scale-2 (SRBS-2) (Orlofsky & O'Heron, 1987) and was used to measure expectations of gender-role conformity with regard to school-based

activities. The short form of the SRBS-2 was found to correlate reliably with the long form of the scale with all alphas being greater than 0.90, and both scales offered the advantage of sampling potentially gendered interests without being confined to a unidimensional concept of either masculinity or femininity (Orlofsky & O'Heron, 1987). As the SRBS-2 is most suitable for college students and adults, the scale was substantially adapted and simplified. Each respondent was asked to indicate whether they thought boys, girls, or both boys and girls participated in each of six sporting and six cultural activities, listed. As well, the respondents were asked whether this status quo was what *should* occur, who they perceived that *others* thought participated in the given activities, and what they perceived *others* thought *should* occur in terms of gendered activity choice.

The third part of the questionnaire was based on the Sex Role Stereotype Questionnaire (SRSQ) (Rosenkrantz, Vogel, Bee, Broverman, & Broverman, 1968b). This semantic differential scale consists of pairs of bipolar adjectives or adjectival phrases about people one might be about to meet for the first time. It has been widely used, successfully modified in terms of items and instructions (Beere, 1990), and is suitable for adaptation and use with children (Curry & Hock, 1981; Hamilton, 1977). Respondents were asked to read a list of 10 adjectival statements which relate to personality qualities and stereotypical beliefs about people involved in a range of activities. Respondents indicated on a five-point Likert scale (1=Strongly Disagree, 2=Disagree, 3=Not sure, 4=Agree, 5=Strongly Agree) how strongly they agreed or disagreed with each statement. This data yielded information about the endorsement of gender-role stereotypes.

A final section, based on the Sex Stereotype Measure II (SSM II) (Williams & Best, 1976), aimed to determine the extent of awareness of adult-defined sex

stereotypes. Here a story describing a person was matched with the silhouette of either a man or a woman. It was also possible for the respondent to choose to match both stories with the same silhouette, or both silhouettes. This type of test seemed suitable as it has been widely used with children and young adults (Edwards & Williams, 1980), and successfully used across a number of different cultures (Williams & Best, 1990).

The expectation was to find a relationship between sex typing and choice of stereotypically gendered activities. It was expected as well that there would be differences in beliefs and expectations of gender-role conformity between the four participant groups, and between school cultures.

Results

Part A. The Gender-Role Beliefs and Expectations Questionnaire.

The quantitative data.

A maximum-likelihood factor analysis with Oblimin rotation with Kaiser normalisation, was used to estimate the factor loadings of items derived from Part A of the questionnaire (see Table 8). A final factor analysis of the fourteen items comprising Part A revealed two factors: Gender Self-Definition (GSD), and Gender Self-Acceptance (GSA).

Table 8

*Factor Loadings and Intercorrelations for the Factors for the 14 Items of the HGS
Comprising Part A*

	GSD	GSA
I am very comfortable being a female/male	.14	.91
I am happy with myself as a female/male	.08	.84
My sense of myself as a female/male is positive	-.03	.74
I am confident in my femininity/masculinity	-.07	.67
I am secure in my femininity/masculinity	-.02	.66
I meet my personal standards for femininity/masculinity	-.11	.52
My perception of myself is positively associated with my biological sex	-.19	.44
I have a high regard for myself as a female/male	-.38	.39
My identity is strongly tied to my femininity/masculinity	-.85	-.05
I define myself largely in terms of my femininity/masculinity	-.81	.00
Being a Female/Male is a critical part of how I view myself	-.74	.02
Femininity/Masculinity is an important aspect of my self-concept	-.73	.09
When I am asked to describe myself, being female/male is one of the first things I think of	-.66	-.05
Being a female/male contributes a great deal to my sense of confidence	-.62	.09
Factor Intercorrelations	1	2
1	1.00	-.62
2	-.62	1.00

Note. Major loadings for each item are bolded.

The items loaded on to each factor slightly differently from the loading of those items included in the corresponding subscales listed in the HGS (Hoffman et al., 2000). Only six of the seven items of the gender self-definition subscale listed in the HGS (Hoffman et al., 2000) loaded onto the first factor. However, one item from the gender self definition subscale of the HGS ('My perception of myself is positively associated with my biological sex'), plus the seven items of the gender self-acceptance subscale of the HGS (Hoffman et al., 2000), loaded on to the second factor, Gender Self-Acceptance. The items loaded in this manner for females, but not for males, where one item from factor two ('I have a high regard for myself as a female/male') loaded instead on to factor one, resulting in seven items per factor. Rather than indicating that reliability could have been compromised, these differences pointed to potentially interesting variations between the data resulting from the original application of the HGS (Hoffman et al., 2005) conducted with tertiary level participants, and the present application where data were gathered from adolescents.

Hoffman et al. (2005) had found that the two subscales of the HGS (Hoffman et al., 2000) both demonstrated good internal consistency with coefficient alphas of 0.88 for women and 0.93 for men being noted for the *gender self-definition* subscale, and coefficient alphas of 0.90 for women and 0.80 for men being noted for the *gender self-acceptance* subscale. In the current study, alpha estimates of reliability were similarly strong (see Table 9) with Cronbach's alpha coefficients of 0.87 for females and 0.89 for males recorded for both factors. These were sufficiently high to provide confidence in using the factors in subsequent analyses.

Table 9

Estimates of Reliability for Factors 1–2, by Gender, and Overall

		Number of items	Mean	SD	Alpha
GSD	Male	6	26.94	6.60	.89
	Female	6	24.93	6.17	.87
	Overall	6	25.78	6.43	.88
GSA	Male	8	42.24	5.93	.89
	Female	8	41.11	5.55	.87
	Overall	8	41.59	5.74	.88

An investigation was conducted to explore the possibility of any relationships between the two factors. Hoffman et al. (2005) had concluded that participants with high gender self-definition viewed gender as a large part of their identity, and were likely to embrace traditionally stereotyped concepts of gender. Following on from this conclusion, Hoffman et al. (2005) asserted that those with low gender self-definition would see gender as a less important part of their identity and would be less likely to base ideas of gender on stereotypical precepts. Gender self-acceptance was explained by Hoffman et al. (2005) as indicating the degree of comfort participants experienced with regards to their concept of their own gender identity. The correlation between the two factors was .60 ($df = 1212, p < .001$), which indicated that there was sufficient variance unique to each dimension, but that they were correlated positively such that a higher score on gender self-definition was likely to also lead to

a higher score on gender self-acceptance. Figure 5 indicates the scatter plot of the two dimensions showing that there is indeed much variability.

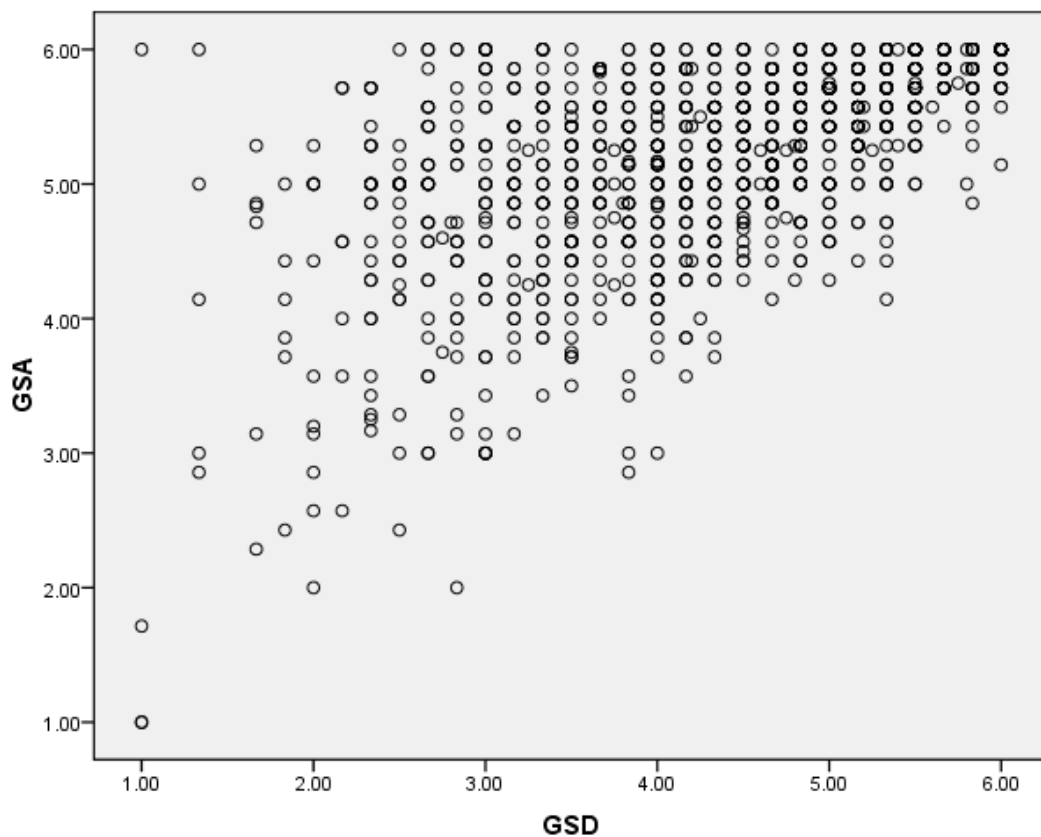


Figure 5. Scatterplot for Gender Self-Definition and Gender Self-Acceptance.

A moderate positive correlation between gender self-definition and gender self-acceptance was higher for males than for females: $r = .70$, $n = 502$, $p < .01$ (males) and $r = .51$, $n = 712$, $p < .01$ (females). The correlation between Gender Self Definition and Gender Self Acceptance appeared, then, to be stronger for males than for females; however, a z -test of differences between the two component correlations revealed no statistically significant differences ($z = 5.3$, $p > .05$). The correlations between GSD and GSA for males and females indicated that concept of gender self-definition was more stereotypical in nature and associated with correspondingly high levels of gender self-acceptance, for both sexes. Although no statistically significant difference was found between these correlations for males and females, an observed

trend could be considered to indicate that the correlation was greater for males than for females.

In addition, the relationship between GSD and GSA by participant group, and participant group by gender were explored (see Table 10). No statistically significant difference in the correlation between the two variables was found within or between any of the adolescent participant groups (peers and choristers) by gender, or overall ($p > .05$). However, a pattern of higher correlation between GSD and GSA was noted for the adolescent groups (peers and choristers), as compared to the staff and choir directors, and male participants appeared to demonstrate a trend towards higher correlation between GSD and GSA than females, in general.

The small number of choir directors presented a limitation and would have potentially rendered results less generalisable. Thus, no further explorations of the correlations between GSD and GSA for this group were pursued. However, a comparison of the correlations for the two variables, between staff and the adolescent groups, revealed important differences. A z -test of differences revealed a statistically significant difference in the correlations between GSD and GSA between staff and peers ($z = -3.66, p < .001$). Importantly, this difference was found to be demonstrated with more strength between male staff and male peers ($z = -2.98, p < .01$), than between female staff and female peers ($z = -1.96, p < .05$).

No statistically significant difference was found for the correlations between GSD and GSA between female staff and female choristers overall ($p > .05$), however, a difference was found when the equivalent male groups were compared. A z -test of differences between the two component correlations indicated a statistically significant difference between male staff and male choristers from mixed choirs ($z = -2.24, p = .01$), and male staff and male choristers from single sex choirs

($z = -3.0, p < .01$). Thus, correlations between GSD and GSA did not differ significantly between and within adolescent groups (peers and choristers), although there was a trend which suggested that males may demonstrate a correlation between the two variables with more strength than females. Importantly however, statistically significant differences revealed between the component correlations for staff and peers (particularly male peers), and staff and male choristers, seemed to point to the idea that developmental stage explained the greater degree of correlation between GSD and GSA noted for adolescents. Staff participants' comparative maturity may have explained their registration of self-definitions of gender which indicated a departure from stereotypical gender norms to a much greater extent than was noted for adolescents. This more flexible sense of gender self-definition indicated for staff might also have been explained by professional integrity in terms of accepting and supporting a multiplicity of gender identities per se.

Table 10

Correlations for Gender Self-Definition (GSD) and Gender Self-Acceptance (GSA) by Participant Group, and Participant Group by Gender

Participant Group	Overall			Male			Female		
	$r_{\text{GSD/GSA}}$	n	p	$r_{\text{GSD/GSA}}$	n	p	$r_{\text{GSD/GSA}}$	n	p
Staff	0.37	95	<.01	0.30	30	0.11	0.39	65	<.01
Peer	0.66	742	<.01	0.72	318	<.01	0.59	424	<.01
Choir director	0.19	10	0.60						
Chorister (mixed)	0.56	121	<.01	0.70	43	<.01	0.49	78	<.01
Chorister (single sex)				0.74	107	<.01	0.46	139	<.01

The predominant trend of a higher correlation between GSD and GSA for males, and a lower one for females was consistent for each of the ethnic groups (see Table 11). Pasifika men indicated the highest level of correlation between GSD and GSA, and Pasifika and Māori females demonstrated the smallest difference between male and female correlations for the two variables. However, no statistically significant differences were noted between or within each ethnic group ($p > .05$).

Table 11

Correlations for Gender Self-Definition (GSD) and Gender Self-Acceptance (GSA) for Ethnicity and Gender

Ethnicity	Male			Female		
	$r_{\text{GSD/GSA}}$	n	p	$r_{\text{GSD/GSA}}$	n	p
European	0.69	213	<0.01	0.53	375	<0.01
Māori	0.67	58	<0.01	0.64	39	<0.01
Pacific Island	0.74	112	<0.01	0.67	88	<0.01
Asian	0.68	55	<0.01	0.41	135	<0.01
Other	0.66	49	<0.01	0.35	65	<0.01

Elements of these trends were reflected in correlations for GSD and GSA by school, and school and gender (see Table 12): males appeared to demonstrate higher levels of correlation for GSD and GSA, and the difference between levels of correlation for males and females was smaller where there was a high percentage of Pasifika and Māori in the school population (e.g., School 1). Interestingly, although a high level of correlation between GSD and GSA was exhibited by a single sex male school where the boys were largely Pasifika (School 4), this level was smaller in comparison with a largely Pasifika male group in a coeducational setting (School 1).

It could be suggested that this difference may have been explained by variation in school type. The Pasifika females in School 1 also exhibited the highest correlation between GSD and GSA of all the female school groups, and it might be suggested that cultural context could have influenced this difference. However, no statistically significant level of difference was noted for correlations between the two variables between or within schools ($p > .05$).

Two anomalous trends were noted. Firstly, the largest gap for correlation between GSD and GSA between males and females, and the highest correlation between GSD and GSA for predominantly European male school populations occurred in a school which registered an overt peer attitude of non-approval toward the choir in Study 1 (School 3). Secondly, the lowest correlation between GSD and GSA for females occurred in the rural school (School 8), although a limitation should be noted in the marginal level of significance for this correlation.

Table 12

Correlations for Gender Self-Definition (GSD) and Gender Self-Acceptance (GSA) by School, and by School and Gender

School	Overall			Male			Female		
	$r_{\text{GSD/GSA}}$	n	p	$r_{\text{GSD/GSA}}$	n	p	$r_{\text{GSD/GSA}}$	n	p
1	0.75	133	<.01	0.78	69	<.01	0.71	64	<.01
3	0.62	133	<.01	0.75	82	<.01	0.34	51	<.05
4	0.70	138	<.01	0.70	135	<.01			
8	0.42	90	<.01	0.66	31	<.01	0.25	59	.06
11	0.54	213	<.01				0.54	211	<.01
14	0.60	138	<.01	0.67	61	<.01	0.53	77	<.01
15	0.61	114	<.01	0.63	70	<.01	0.59	44	<.01
16	0.56	118	<.01	0.62	49	<.01	0.51	69	<.01
18	0.45	137	<.01				0.45	134	<.01

An investigation of the correlation between GSD and GSA by age level, and by age level and gender (see Table 13), revealed further support for the previously noted trends; for example, the highest level of correlation was to be found consistently in the male group at each adolescent age level. The strength of correlation peaked overall at 15 years, at different times for each sex (14 years for males, and 15 years for females), and weakened as age level progressed after the peak. These correlations contrasted with the lower correlations between GSD and GSA found for staff and choral directors (see Table 10), and were consistent with the statistically significant differences in correlation found between staff and adolescent groups. The lack of

statistically significant differences found for correlations for GSD and GSA between or within the varying age levels ($p > .05$), however, could possibly be explained, as the data were combined at each age level rather than split into participant groups. As well, in terms of reporting further support for the trends previously indicated in the analysis of this data, a limitation in terms of generalisability should be noted: Since the number of males in the 20+ age level was small, the results listed for this group in Table 13 should be interpreted with caution.

Table 13

Correlations for Gender Self-Definition (GSD) and Gender Self-Acceptance (GSA) by Age Level, and Age Level and Gender

Age Level	Overall			Male			Female		
	$r_{\text{GSD/GSA}}$	n	p	$r_{\text{GSD/GSA}}$	n	p	$r_{\text{GSD/GSA}}$	n	p
12-13	0.61	217	<.01	0.70	94	<.01	0.54	123	<.01
14	0.65	231	<.01	0.80	108	<.01	0.46	123	<.01
15	0.69	227	<.01	0.74	86	<.01	0.65	141	<.01
16	0.64	250	<.01	0.71	98	<.01	0.58	152	<.01
17-18	0.55	182	<.01	0.70	82	<.01	0.43	100	<.01
20+	0.37	102	<.01	0.30	32	.11	0.40	70	<.01

So, to sum up, a pattern of correlation was noted between GSD and GSA which indicated that alignment of gender self-definition with stereotypical ideas of gender was associated with greater gender self-acceptance. Trends were noted which indicated that this was highest for males, for Pasifika and Māori adolescents of both sexes, in certain school cultures, was lowest for females in rural communities, and

declined as age progressed. The correlation between the two component variables differed between adult and adolescent groups with statistical significance, however, adding weight to the idea that alignment with stereotypical gender norms may be pronounced for adolescents, and particularly so for adolescent males.

The qualitative data.

The initial questions in Part A of the Gender Role Beliefs and Expectations Questionnaire were “What do you mean by femininity?” (female respondents) and “What do you mean by masculinity?” (male respondents). These questions yielded data which reflected how respondents conceptualised femininity and masculinity. These data were coded, according to the 14 discrete categories established by Hoffman et al. (2005). Hoffman et al. (2005) had established the categories by using inductive analysis (Patton, 1987). Where several components in one statement contributed to a blended idea embracing two or more of the discrete categories, they were placed in merged categories, as exemplified by the last two categories in Table 14 (see Appendix C). Hoffman et al. (2005) gave examples of statements representing more than one category, and the final categories in Table 14 (see Appendix C) are based on two of these statements. In the present study, these are acknowledged as blended categories in their own right. Table 14 (see Appendix C) then presents the 16 categories generated from the data, the percentage of males and females who responded to each category, and examples of the types of responses given in each. The examples are labelled according to the sex of the respondent who contributed them: female (F) and male (M). An independent rater coded a random sample of 50 responses into the 16 categories. Overall there was 97% agreement on coding between the researcher and the independent rater.

Of the total number of female participants who responded to the questionnaire ($n = 712$), 91% completed the initial question ($n = 650$), generating 743 separate responses. Of the total number of male participants who responded to the questionnaire ($n = 503$), 85% completed the initial question ($n = 429$), generating 486 separate responses. Statements either fitted single categories, or were split into separate response components which were distributed among two or more categories.

Personal definitions of gender appeared then to adhere closely to stereotypical views, supporting the evidence found in the quantitative data for this section of the questionnaire. Categories which reflected a predominance of female responses over male responses had an emphasis on appearance, awareness of societal expectations and identification with nurturing roles for young women: attractiveness (17%), societal standards (16%), personal feeling/“a sense” (13.5%), and expressive/relational (10.5%). Very few young women identified with force and assertion as contributing to what femininity meant to them (1%). The percentage of male responses per category was greatest for forceful/assertive (47%), and personal feeling/ “a sense” (12%), and very few males recorded that expressive/relational skills were part of their description of what masculinity meant to them (.2%). Thus, the majority of female participants favoured a personal definition of femininity which included appearance, especially if linked to societal norms and expectations, and the bulk of the male participants notably offered a definition of masculinity which embraced force and assertion.

For both sexes, the choice of biological sex as a definition of gender was comparatively low (13.5% (F), 11.4% (M)) indicating that cultural factors rather than biological factors were influential in shaping gender self-definition. It should be noted that while some female participants ($n = 4$) recorded that “femaleness” could be

embraced by boys too, there were no reported comments that maleness could be embraced by girls. Male choristers' responses were similarly stereotypical in pattern to those of male peer participants. For example, the response count for male choristers and male peers varied very little for forceful/assertive. Male choristers' responses in this category represented 44% of the total responses for male choristers, while male peers' responses to this category represented 46% of the total male peer responses. This result indicated that gender self-definition may not necessarily have been tied to gender-role transgression in terms of activity choice.

Part B. Activity choice and gender role conformity.

To begin analysis of this section, cross-tabulations were performed to demonstrate the percentage of participants who indicated either male, female or both sexes would be involved in a range of activities (see Table 15). The percentages were available for all four of the subchoices (Who do *you think* participate in the following activities? Who do *most people think* participate in these activities? Who do *you think should* participate in the following activities? Who do *most people think should* participate in the following activities?), within Part B. Although subsequent chi-square tests of independence indicated no statistically significant differences in participant responses overall, between the four subchoices for each activity, trends indicating several broad themes and patterns were noted.

There were several activities which seemed to be considered exclusively male domains: rugby, barbershop, and cricket. As well, one activity seemed to be considered an exclusively female domain: netball. It should be explained that cricket is a ball sport which calls for highly developed hand-eye coordination and strategic skill, and although it is not a contact sport it is largely represented in the media as a masculine domain. As well, rugby and netball are respectively the national men's and

women's team ball sports in New Zealand. Both sports involve tactical skill and fitness, but the former is characterised by a high degree of overtly aggressive contact among the players. For these activities, for example, (see Table 15) the majority of participants thought that the domain was engaged in predominantly by the gender associated with it, that "*others*" were perceived to endorse this perception even more markedly, and that 'others' would resist change in terms of more equitable participation.

Table 14

Cross-tabulations Overall for Perceptions of Activity Choice

Activity	Who participates?			Who do most people think participate?			Who should participate?			Who do most people think should participate?		
	%Boys	%Girls	%Boys and Girls	%Boys	%Girls	%Boys and Girls	%Boys	%Girls	%Boys and Girls	%Boys	%Girls	%Boys and Girls
Rugby	71	1	29	90	1	8	42	2	56	78	2	19
Cricket	62	1	37	85	1	14	31	3	66	66	2	32
Barbershop	47	11	42	59	17	25	27	8	65	47	15	38
Netball	1	80	19	2	89	9	3	46	52	2	78	19
Volleyball	3	16	81	11	36	52	5	11	85	11	28	61
Orchestra	2	10	88	6	29	67	3	8	89	5	23	71
Show	1	10	90	2	36	62	2	8	91	2	25	72
Choir	2	26	73	3	62	35	3	14	84	3	46	51
Soccer	20	2	78	60	2	38	16	3	81	48	3	49
Jazz Band	12	5	83	25	12	63	8	5	87	18	9	73
Athletics	8	1	91	29	3	68	7	2	91	21	2	77
Rock Band	33	1	66	64	21	34	18	2	80	46	3	52

Note. Majority gender-category choices are bolded for each activity.

It appeared that participants thought that other activities were engaged in to a large extent by *both* sexes, but were felt to be predominantly *feminine* domains: volleyball, orchestra, show, and choir. Similarly, some activities were thought to be engaged in to a large extent by *both* sexes but felt to be predominantly *masculine* domains: soccer, rock band, jazz band, and athletics. In these activities, for example, choir and rock band (see Table 15), participants' choices were more slanted towards gender equity, but they perceived that *others* held a more rigid expectation of gender conformity in terms of engagement in the domain. So for these activities participants' own more gender-equitable views of activity choice seemed to be *at odds* with a perceived heavily gendered view of others.

Endurance versus change of beliefs and expectations about activity choice.

Participants seemed to perceive that the influence of stereotypical gendering of some activities would endure when asked 'who *should* participate' in the various activities: rugby, cricket, barbershop would remain thought of as male domains; netball would endure as a strongly feminine domain (see Table 15). Participants' responses indicated that in an ideal world they would desire change toward a more equitable involvement by both sexes in most activities, for example, volleyball, orchestra, and athletics (see Table 15). However, participants perceived that 'others' would be less willing to change their views on gender-role conformity and school-based activity choice: In the case of several activities, although more equitable involvement was projected as desirable by participants, the activities would still be gendered strongly towards males (e.g., soccer, rock bands, athletics, and jazz band) and females (e.g., volleyball, orchestra, show and most notably choir), by others (see Table 15).

As well, there was a gap between participants' and others' beliefs and expectations regarding gendered choice of school-based activity. Participants

often viewed 'other people' as having more sharply defined views of gendering of activities than themselves and sometimes perceived others as holding a different view altogether regarding gendering of activity. For example, where participants viewed choirs as being strongly patronised by *both* boys and girls (although 'peers' identified female participation most strongly), *others* were perceived as believing that the majority of school choristers were *girls*.

Participant group characteristics and differences.

Although chi-square tests of independence had revealed no statistically significant differences for responses to Part B of the questionnaire between the four participant groups, there appeared to be trends indicating differences in outlook for these groups. *Staff*, and particularly *choral directors'* views on the gender-appropriateness of activities could be markedly different to those of the other participant groups (e.g., for rugby) (see Table 16). These differences may have been seemed influenced by ideals rather than reality, for example, staff and choral directors indicated a consistently stronger desire for an increase in gender equity of involvement in rock bands, show, cricket, barbershop, volleyball, orchestra, jazz bands and choirs than most other groups, with the possible exception of single sex male choristers, for some activities. This indication was demonstrated even for the strongly gendered domains of rugby (see Table 16), soccer and netball, although to a lesser extent. A limitation should be noted in that the numbers of choral director participants was low.

Table 15

Cross-tabulations for Perceptions of Activity Choice for Rugby, by Participant Group

Rugby Participant group	Who participates?			Who do most people think participate?			Who <i>should</i> participate?			Who do most people think <i>should</i> participate?		
	%Boys	%Girls	%Boys and Girls	%Boys	%Girls	%Boys and Girls	%Boys	%Girls	%Boys and Girls	%Boys	%Girls	%Boys and Girls
Staff	78	0	22	92	3	6	35	0	65	80	0	20
Peers	71	1	27	90	2	9	45	2	53	77	3	21
Choral director	80	0	20	100	0	0	50	0	50	90	10	0
Mixed Choristers total	66	0	37	96	0	4	43	3	53	86	2	12
Mixed choir Females	67	0	33	96	0	4	37	4	59	81	3	16
Mixed choir males	65	0	35	95	0	5	54	2	44	95	0	5
Female Choristers	72	0	28	91	2	8	48	6	47	79	5	17
Male Choristers	62	0	38	89	0	11	27	2	71	77	2	21

Female choristers in single-sex choirs seemed to display a traditional view of gender-role expectations and choice of school-based activity. They demonstrated a strong alignment with a stereotypical view (as indicated by reported perception of the views on the gender-appropriate activity choice of ‘others’) and often reported less desire for change in an ideal world, for example, rugby (see Table 16), where their reported data was slightly more conservative than out-group peers. It might be suggested that girls who sing in choirs in a single-sex setting conformed closely to gender expectations, that is, their choice of activity conformed with expectations for their gender, as choirs are considered by most to be a feminine domain. Interestingly, they seemed to have a consistently lower desire for gender equity in activity choice than female choristers in mixed choirs.

Male choristers in single-sex choirs perceived that there was more gender equity in activities than other participants, and more was desired and perceived possible by them, but, like the other participant groups, they reported that they thought *others’* choice of activity may be more biased in terms of gender-role conformity, than their own. These choristers in male-only choirs, however, may have presented as having a distinct outlook rather more aligned with that of the *vanguard personality* identified in Study 2 male choristers: they were highly engaged in a domain deemed more suitable for females; they acknowledged prejudice, but actively demonstrated a resistance to being influenced by it; they were passionate and determined advocates for their chosen gender non-congruent domain; furthermore, they demonstrated concern for freedom from stereotypical limitations in terms of gendered choice of activity. They may also have been more supported in a single-sex setting to manifest their views without obstruction.

Male choristers from mixed choirs had different perceptions from their counterparts in male-only choirs. Their view was comparatively more conservative. Mixed-choir males did not exhibit such a strong belief that change should occur with regard to gender equity in activities which were heavily gender-biased, as single-sex choir male choristers. Mixed-choir male choristers reported the strongest projected perception that they and *others* thought that rugby should remain a male domain, whereas single-sex male choristers reported a strong belief that rugby should be available for all (see Table 16). As well, while there was often a *gap* between participants' views and what they believed *others* thought in terms of gender conformity in choice of school-based activities, male choristers from mixed choirs often reported a *sharper* registration of others' stereotypical views in terms of the gender-appropriateness of activities, than female choristers from mixed choirs or male choristers from male-only choirs. It is possible that mixed-choir male choristers had the greatest real experience of overtly displayed gender transgression: they were males in a female domain and this may have brought gender non-congruence into sharp focus for them.

Interestingly, though, these males were stronger advocates of choir as a gender-appropriate choice for both boys and girls than were choristers in male-only choirs (see Table 17). Along with female choristers in female-only choirs, males from mixed choirs registered the lowest level of acknowledgement of others' view that choir was for girls. This deviation from the relatively conservative pattern expected could be explained for female choristers in female-only choirs by the absence of threat of gender-transgression reducing the necessity of stereotype-awareness in this domain. For mixed-choir male choristers, however, there may have been a different explanation: a high level of engagement in a domain where cues of

gender-transgression might be suggested to abound within a coeducational context may well have prompted suppressive mechanisms such as self-protective denial, in addition to the passion reported by the focus groups in Study 2. Thus, while these choristers appeared conservative in their perceptions of choice for other activities, they were motivated to adopt a different attitude in their chosen field.

Table 16

Cross-tabulations for Perceptions of Activity Choice for Choir, by Participant Group

Choir	Who participates?			Who do most people think participate?			Who <i>should</i> participate?			Who do most people think <i>should</i> participate?		
			%Boys and Girls			%Boys and Girls			%Boys and Girls			%Boys and Girls
	%Boys	%Girls		%Boys	%Girls		%Boys	%Girls		%Boys	%Girls	
Staff	1	28	71	7	61	32	1	4	95	1	36	63
Peers	2	31	67	3	63	35	3	19	79	4	47	49
Choral director	0	10	90	0	80	20	0	0	100	0	40	60
Mixed Choristers total	0	13	87	3	61	36	1	6	93	4	50	47
Mixed choir Females	0	16	84	1	63	36	1	5	93	3	55	43
Mixed choir males	0	9	91	5	58	37	0	7	93	5	40	55
Female Choristers	4	5	92	6	51	43	5	7	89	2	38	60
Male Choristers	1	23	76	2	70	29	2	7	92	2	50	48

There was less discrepancy between the views of out-group peers and choristers with regard to gender-role conformity and involvement in school-based activities, than choristers *perceived*, with reference to their comments from the focus groups in Study 2. Out-group peers reported a desire for greater gender equity in rugby than mixed-choir males and single sex choir females, which is not what was expected. The beliefs reported by male choristers in Study 2 (that out-group peers thought that singing in choirs was more for girls) may have been fuelled by sources other than the majority of peers themselves (or by a vocal peer minority). Thus, although out-group peers reported a lesser desire for gender equity in choirs than mixed and single-sex choir choristers, their results did indicate that a move toward greater gender equity in the domain was desired (see Table 17).

While these themes and patterns can only be reported as trends, further chi-square tests of independence revealed that the views of males and females differed significantly for perceptions of choice within a number of activities (see Table 18 *Chi-square Tests of Independence for Activity Choice, by Gender*) that are more often presented as less stereotypically gendered. There appeared to be smaller statistical differences between the sexes, indicating a closer agreement in choices relating to stereotypically gendered activities, for example rugby and netball. Notably, participants of both sexes differed little in their opinions of others' perceptions of participation in these activities (see Table 18) as well. Importantly, participants' perceived choices of activity in an ideal world consistently differed significantly between the sexes (see Table 18). While the specific nature of the differences was not able to be identified by the chi-square tests of independence, there was an indication in the resulting cross-tabulations that female choices seemed to lean toward gender equity to a greater extent than those of males. Females consistently thought that *both*

boys and girls should participate in all activities, to a much greater extent than males. For example, male endorsement of the participation of *both* sexes in rugby (30.8 %) was less than female endorsement (69.2%), and this pattern was replicated for equitable participation in netball (male endorsement, 32%; female endorsement 68%), rock band (male endorsement, 35%; female endorsement, 65%), and choir (male endorsement, 38%; female endorsement 62%). It might be suggested, therefore, that these data support the idea that females may be less confined by notions of gender-role conformity in activity choice than males.

Table 17

Chi-square Tests of Independence for Activity Choice, by Gender

Activity	Who participates?	Who do most people think participates?	Who should participate?	Who do most people think should participate?
Rugby	$\chi^2(2, n = 1205) = 8.26$ *	$\chi^2(2, n = 1192) = 2.03$, $p = 0.3$.	$\chi^2(2, n = 1190) = 69.68$ ***	$\chi^2(2, n = 1176) = 2.77$, $p = .25$.
Cricket	$\chi^2(2, n = 1203) = 16.03$ ***	$\chi^2(2, n = 1191) = 12.91$ **	$\chi^2(2, n = 1194) = 46.41$ ***	$\chi^2(2, n = 1177) = 6.83$ *
Barbershop	$\chi^2(2, n = 1108) = 5.76$, $p = .06$.	$\chi^2(2, n = 1169) = 6.17$ *	$\chi^2(2, n = 1182) = 48.45$ ***	$\chi^2(2, n = 1163) = 10.38$ **
Netball	$\chi^2(2, n = 1204) = 1.78$, $p = 0.4$.	$\chi^2(2, n = 1191) = 5.6$, $p = .06$.	$\chi^2(2, n = 1192) = 47.45$ ***	$\chi^2(2, n = 1175) = 6.3$ *
Volleyball	$\chi^2(2, n = 1205) = 8.66$ ***	$\chi^2(2, n = 1193) = 39.7$ ***	$\chi^2(2, n = 1194) = 25.69$ ***	$\chi^2(2, n = 1178) = 23.43$ ***
Orchestra	$\chi^2(2, n = 1206) = 1.92$, $p = 0.4$.	$\chi^2(2, n = 1191) = 8.0$ *	$\chi^2(2, n = 1195) = 26.77$ ***	$\chi^2(2, n = 1177) = 10.78$ **
Show	$\chi^2(2, n = 1206) = 1.0$, $p = 0.6$.	$\chi^2(2, n = 1192) = 6.4$ *	$\chi^2(2, n = 1193) = 43.18$ ***	$\chi^2(2, n = 1177) = 11.11$ **
Choir	$\chi^2(2, n = 1205) = 8.66$ *	$\chi^2(2, n = 1191) = 23.7$ ***	$\chi^2(2, n = 1194) = 29.11$ ***	$\chi^2(2, n = 1177) = 6.19$, $p = .05$.
Soccer	$\chi^2(2, n = 1204) = 13.75$ **	$\chi^2(2, n = 1192) = 7.52$ *	$\chi^2(2, n = 1193) = 39.84$ ***	$\chi^2(2, n = 1177) = 15.28$ ***
Jazz Band	$\chi^2(2, n = 1204) = 7.78$ *	$\chi^2(2, n = 1109) = 4.64$, $p = .09$.	$\chi^2(2, n = 1191) = 34.56$ ***	$\chi^2(2, n = 1177) = 7.73$ *
Athletics	$\chi^2(2, n = 1205) = 30.7$ ***	$\chi^2(2, n = 1191) = 16.35$ ***	$\chi^2(2, n = 1193) = 42.20$ ***	$\chi^2(2, n = 1177) = 23.63$ ***
Rock Band	$\chi^2(10, n = 1205) = 24.6$ ***	$\chi^2(2, n = 1192) = 17.7$ ***	$\chi^2(2, n = 1192) = 72.97$ ***	$\chi^2(2, n = 1176) = 12.24$ **

Note. Chi-square tests of independence which reached statistical significance are bolded: * $p < .05$; ** $p < .01$; *** $p < .001$.

Part C. Endorsement of stereotypical statements.

Participants were asked to indicate their level of endorsement for several stereotypical comments related to gender-role. An initial investigation of means for Part C (see Figure 6) indicated that female involvement in male domains (e.g., rugby) appeared to be condoned to a greater extent than male involvement in female domains (e.g., netball, choir and dance), and this pattern was most keenly endorsed by out-group peers, and least supported by staff. There was little support for the idea that 'boys who play netball are strong', particularly from peers, and little support for the idea either that girls and boys 'who sing in choirs are sissies', although again peers registered the strongest agreement with these statements and there was stronger agreement with the comment that boys were sissies if they sang in choirs, than there was for girls.

The idea that 'boys who play rugby are manly' was endorsed strongly by all, but particularly peers. Although the idea that 'girls who play rugby are manly' was endorsed overall to a lesser degree, it was endorsed notably by peers. Staff registered the lowest level of endorsement of the idea that rugby-playing boys and girls are manly. The idea that girls 'who dance are admirable' was endorsed more strongly than the same comment for boys, to the greatest extent by choral directors and male choristers from single-sex choirs, and to the least extent by peers. There was little support for boys who dance being admirable but it should be noted that several respondents had made qualitative comments that the level of endorsement was contingent on the style of dance: hip hop was admirable for boys but ballet was not.

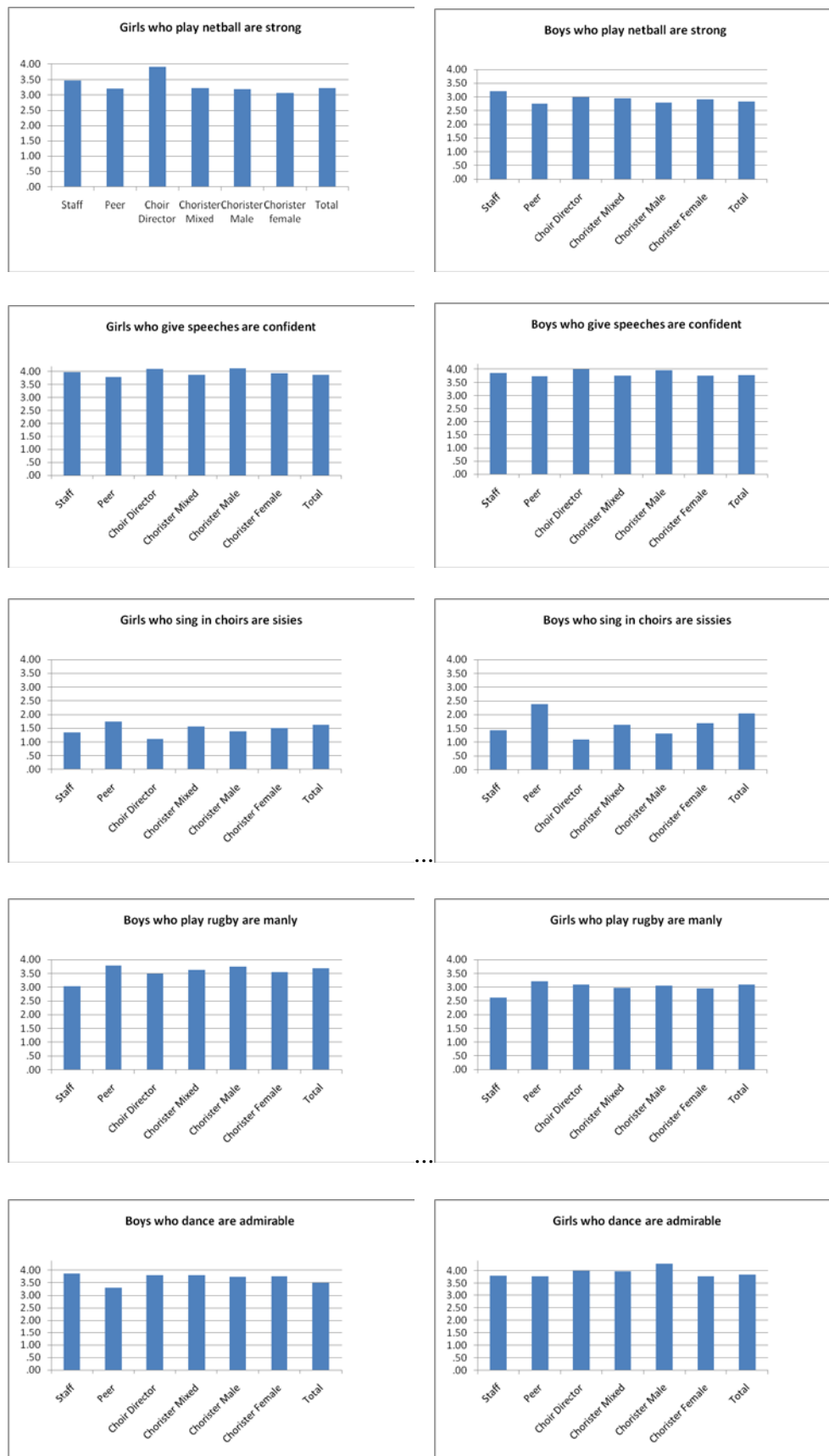


Figure 6. Means for stereotypical comments, by participant group.

The ten stereotypical comments were subjected to a factor analysis, but no meaningful factors were revealed. This may be explained by the contrasting nature of the paired comments. However, to investigate any relationships (and the possibility of predictive relationships) between the stereotypical comments, and to reveal attitudinal patterns between, in the first instance the two genders (see Table 19) and subsequently participant groups, the data in Part C were correlated.

Table 18

Correlations for Stereotypical Comments, by Gender

FEMALES										
MALES \	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
1. Girls who play netball are strong	1.00	0.61	0.28	0.25	0.07	0.11	0.16	0.23	0.25	0.14
2. Boys who play netball are strong	0.40	1.00	0.18	0.23	0.00	-0.12	0.05	0.04	0.15	0.24
3. Girls who give speeches are confident	0.37	0.09	1.00	0.70	-0.04	0.02	0.16	0.26	0.33	0.25
4. Boys who give speeches are confident	0.33	0.22	0.82	1.00	-0.05	-0.02	0.16	0.25	0.37	0.28
5. Girls who sing in choirs are sissies	0.03	-0.03	-0.08	-0.11	1.00	0.32	0.20	0.14	0.00	-0.06
6. Boys who sing in choirs are sissies	0.04	-0.18	-0.06	-0.12	0.51	1.00	0.32	0.31	0.01	-0.25
7. Girls who play rugby are manly	0.08	-0.08	0.11	0.08	0.19	0.26	1.00	0.40	0.21	0.08

FEMALES										
MALES \	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
8. Boys who play rugby are manly	0.17	-0.05	0.26	0.17	0.07	0.25	0.46	1.00	0.37	0.13
9. Girls who dance are admirable	0.26	0.12	0.28	0.26	-0.03	0.02	0.16	0.31	1.00	0.59
10. Boys who dance are admirable	0.19	0.25	0.20	0.16	-0.08	-0.37	-0.03	0.08	0.39	1.00

Note. Bolded correlations are considered significant.

A predictive association between certain stereotypical comments.

Support for comments which endorsed gender-role transgression predicted support for other such comments, and conversely support for comments which endorsed gender-role conformity predicted support for similar comments. Thus, where there was a significant endorsement of a comment which supported males in a more typically feminine field, this was often associated with indications of support for males in other feminine fields: for example, males who thought that boys who played netball were strong also thought that boys who danced were admirable, and thought boys who give speeches (which could be considered a more expressive medium, and thus be more closely associated with femininity) were confident. Males who endorsed boys who dance as admirable also thought that boys in choirs were not sissies. In terms of comments reflecting a stereotypical expectation of gender compliance, males and females who thought that boys who sing in choirs are sissies also thought that girls who play rugby are manly and boys are not admirable if they dance.

Similarities and differences between participant groups.

There were similarities between the participant groups which supported these general ideas, but also distinct differences. A predictive association for comments which indicated support for either gender-role conformity, or gender-role transgression was particularly clear for peers. Notably, peers who thought that boys who dance were admirable also thought that boys who play netball were strong, and that boys in choirs were not sissies (indicating association of comments which support gender-role transgression). However, for peers, heavy endorsement of male and female rugby players as masculine was associated strongly with an attitude that boys (but not girls) in choirs are sissies and that girls (but not boys) who play netball are strong (indicating association of comments which support gender-role conformity).

Staff seemed ambivalent in their support of choirs for boys, but those staff that thought girls who played rugby were manly also thought that boys in choirs were sissies, indicating that staff could have an effect in transmitting messages which may not always help young people who wish to participate in domains not commonly associated with their sex.

Choir directors were more likely to have an equitable attitude when endorsing stereotypical comments: Choir directors who endorsed boys who dance as admirable also endorsed girls who dance as admirable, girls and boys who play rugby as manly, girls and boys who sang in choirs as not being sissies, girls, and particularly boys who give speeches as confident and boys (but not girls) who play netball as strong. Although the number of choir directors was small, the effect of attitudes which supported gender equity could be suggested to make a valuable contribution to school cultures, and be of great significance for the young people with whom they worked.

Interestingly, choristers in *mixed choirs* had a much more gender-congruent attitude than either single sex male or single sex female choristers. Choristers from *mixed choirs* who thought that boys who dance were admirable also thought that boys who sing in choirs were not sissies. However, where these choristers thought that rugby-playing boys were manly they also thought that girls (but not boys) who dance were admirable. In contrast, single-sex choir male choristers showed a strong lack of support for endorsement of comments indicating stereotypical gender conformity with regards to engagement in specific domains. They thought more strongly than any other group that boys who dance were admirable. A similar but weaker pattern was shown by single-sex choir female choristers.

It seems that although the extent of peer threat may be less than choristers anticipated, peers certainly do hold stereotypically biased beliefs and expectations of

gender conformity with regard to gendering of activities. Choral directors presented as strong advocates of gender equity and the removal of stereotypical constraints surrounding activity choice. Young males in single sex-choirs seemed to exhibit the most daring attitude to endorsing gender non-congruence and young males in mixed choirs seemed not to share this attitude to the same extent. As well, there appeared to be a gap between staff and student beliefs and expectations about conformity to stereotypical gender roles associated with activities. Importantly, female involvement in male domains seemed to be more accepted than male involvement in female domains.

Part D: Stereotype awareness.

The final part of the G-RBEQ involved matching stories with male or female icons: Story 1 (the physical game scenario which portrayed aggressive, stereotypically masculine traits) and Story 2 (the choral performance scenario which portrayed expressive stereotypical feminine traits) (see Figure 7). Cross-tabulations were carried out for gender, ethnicity and age level for the data resulting from this part of the questionnaire. As expected, the results strengthened findings and trends revealed in Parts A, B and C: There was a strong alignment with stereotypical gender norms and this was more pronounced for some groups. Thus, awareness of stereotypically masculine and feminine gender-norms portrayed in Story 1 and Story 2 was reported with more strength by males, Pasifika and Māori. As well, flexibility in terms of departing from rigid ideas of gender-role conformity increased with age and was greater for females overall.



<p>Participants were presented with two stories which each described an imaginary person, and asked to draw a line which joined each story to the picture or pictures which they thought best fitted each story.</p>	
<p>Story 1:</p> <p>I came off the field covered in mud, sweat and a few bruises. It had been a great game and we played really well. Those training runs had really helped my stamina and the coach told us that we had made it pretty hard for the other team to score their one and only goal.</p>	
<p>Story 2:</p> <p>I was so proud when we had finished the concert. I loved the feeling of being in tune with everyone else, and the performance was the best we had ever achieved. Our director had chosen some great songs and all those hours of rehearsal really paid off.</p>	

Figure 7. Part D Stories

Participants reported that involvement in the scenario associated with Story 1 (game scenario) was related strongly to boys, not to girls, and moderately to both sexes. Males supported participation of boys in the scenario more strongly than females (79.3% of males as compared to 66% of females linked the male icon to the story), and females supported the participation of both sexes in the scenario more strongly than males (29.3% of females as compared to 15.8% of males linked both the male and female icons to the story). Neither males nor females endorsed the scenario as feminine

(5% of males linked the female icon to the scenario and 4.7% of females linked the female icon to the scenario). A chi-square test of independence found that the difference in responses Story 1, by gender, were statistically significant, $\chi^2(2, n = 1167) = 28.99, p < .001$.

In response to Story 2 (Performance scenario) participants reported that it had a strong association with femininity (66% of males linked the female icon to the story as compared to 62% of females), relatively little association with masculinity (9.2% of males linked the male icon to the story as compared with 7.6% of females), and a moderate association with both sexes (24% of males linked both the female and male icons to the story as compared to 30.5% of females). As was noted for Story 1, female participants registered this latter association more strongly than male participants. A chi-square test of independence found that differences in response for Story 2, by gender, were of marginal significance $\chi^2(2, n = 1164) = 5.35, p = .06$. However, it could be considered that these differences indicated a trend where males (more so than females) perceived Story 2 to be more clearly demarcated feminine, and where females were more likely than males to condone participation in the described scenario, of both sexes.

In terms of ethnicity, the game scenario was supported as masculine most strongly by Pasifika and Māori participants (80.5% of Pasifika and 79.3% of Māori linked the male icon to the story), and those participants supported the scenario to the least degree as feminine, excluding 'other' ethnicities (3.8% of Pasifika and 1.1% of Māori linked the female icon to the story). These same groups also demonstrated the least support for associating the story with both males and females (15% of Pasifika and 19.5% of Māori linked both the male and female icons to the story). Interestingly, European participants showed the most support for associating the story with both sexes

(26.7% of European participants linked both the male and female icons to the story). A chi-square test of independence found that there was a statistically significant difference in responses to Story 1 by ethnicity $\chi^2(8, n = 1145) = 16.78, p = .03$.

Pasifika and Māori participants supported the performance scenario most strongly as feminine (73.5% of Pasifika and 73.9% of Māori linked the female icon with this story), European participants again associated it most strongly of all the groups with both sexes (32.5% of European participants linked both the male and female icons to the story), and few participants linked the male icon to the story (excluding 'other' ethnicities, the slightest degree of association was registered by 6.5% of Pasifika and 5.7% of Māori, who linked the male icon to the story). The strongest support for a masculine association with the story was from European participants, 10.2% of whom linked the male icon to the story. A chi-square test of independence found that there were statistically significant differences between the responses to Story Two, by ethnicity $\chi^2(8, n = 1142) = 24.64, p = .002$.

In terms of age level, the youngest group of participants (12–13-year-olds) seemed the keenest to link the male icon to the game scenario, and the least willing to link both the male and female icons to that story (77% of 12–13-year-olds supported the game scenario as masculine and 18.6% of 12–13-year-olds linked both the male and female icons to that story). A minimal percentage of every age level suggested the story was associated with females. The adult group (20+) supported the association of both males and females with the Game scenario most strongly (42.3% of adults linked both the male and female icon to the story). A chi-square test of independence indicated that the difference in responses to Story 1, by age level, was statistically significant $\chi^2(10, n = 1162) = 33.64, p < .001$.

The same sorts of patterns were observed for the performance scenario, but this story was endorsed as feminine: 72.2% of the 12–13-year-olds linked the female icon to the second story, and 21.1% of that group linked both the male and female icons to that story. Similarly, the adult group registered the largest support for both sexes' association with the story (49.5% of adults linked both the male and female icons to the story). A chi-square test of independence found that the responses for Story 2, by age level, were significantly different $\chi^2(10, n = 1159) = 46.55, p < .001$.

Thus, these data indicate that female participants were less tied to expectations of conformity with stereotypical notions of gender norms, and male participants seemed more rigidly confined to expectations of the stereotypical gender norms associated with both scenarios: the aggressive agency portrayed in the game scenario and the expressive nature of the performance scenario were endorsed as being associated with masculinity and femininity respectively with most strength by males and with least strength by females. As well, female participants endorsed flexibility in terms of deviating from prescribed ideas of gender-norms for both sexes to a greater extent than males. Pasifika and Māori participants' choices endorsed more traditionally stereotypical ideas of gender-norms associated with the two scenarios. This pattern was similar for younger adolescents but contrasted with that observed for adults: a rigid adherence to ideas of stereotypical gender norms in terms of scenario choice decreased with age.

Discussion

This final study set out to identify and assess the effect of beliefs about gender identity, gender role, and expectations of gender-role conformity in terms of school-based activity choice. Gender-stereotypical views held by distinct participant groups within school communities were explored and compared in order to investigate not only the targets' but non-targets' experience of stereotype threat. The results of this study

revealed that adolescent participants were more likely to feel comfortable about their gender self-definitions if these were closely aligned with stereotypical gender norms. Moreover, the results of the study indicated that perceptions of activity choice were in most cases confined by stereotypical expectations about gender identity and gender-role conformity. These findings supported the results of the previous two studies which indicated that out-group peers were perceived and observed to disapprove of gender-role transgression. This scenario had been found to occur for boys in choirs (considered a feminine domain), and that the knowledge of such disapproval (for the most part experienced implicitly) triggered stereotype threat resulting in performance decrement and contributed to a continued predominance of females in the choral domain.

Correlations between the two factors derived from the data for Part A of the Gender-Role Beliefs and Expectations Questionnaire (Gender Self-Description and Gender Self-Acceptance) indicated that adolescents felt most comfortable about their gender self-definition if it was closely aligned with stereotypical norms, in contrast to adults. This relationship may not have been surprising, as in adolescence not only might emergent gender identities be particularly vulnerable (Erickson, 1968), but a growth in awareness in self-image, peer relationships (Hall, 2009), and acceptance in terms of peer expectations of gender might be argued to be at the forefront of adolescents' concerns (Wigfield & Wagner, 2005). Interestingly, there were participant groups for whom the correlation between GSD and GSA indicated trends of either a strong or an unexpectedly weak adherence to stereotypical norms, and these seemed to be related to unique contexts.

This adolescent scenario may have been compounded by an equally present need to belong (Steele & Aronson, 2005), and made even more meaningful for adolescent boys, for whom Collins (2009) had asserted peer opinion was the most

influential force at school. For boys, belonging was suggested to be tied to practices of masculinity promoted through “mateship”, and was contingent on adherence to expectations of stereotypical ideas of masculinity which embraced not only aggression and agency but heterosexuality (Harrison, 2009). Furthermore, peer pressure could extend to the overt policing of conformity to heteronormative gender boundaries, particularly for males (Martino & Pallotta-Chiarolli, 2003) and peer discrimination could be associated negatively with peer acceptance (Brown & Bigler, 2005). Where self-definition of gender identity matched stereotypical beliefs and expectations of gender, male participants were thus more likely to feel comfortable as their gender concept was less likely to promote risk of exclusion from their peers.

The suggestion that gender-role rigidity was much more enforced for males than females (Harrison, 2009) may have explained why for females, self-acceptance of gender self-definition seemed less dependent on a close alignment with gender norms. However, the relative independence of gender self-description from stereotypical gender norms seemed least so for Pasifika and Māori females. Park et al. (2002) pointed out that Samoan females were protected by their brothers, and later their husbands and were aware of very clear cut roles associated with femininity. (It should be noted that the majority of Pasifika respondents were Samoan). The reproductive purity of Pasifika females was closely guarded in order to ensure the hierarchical cultural status of their family (Shore, 1981), and displays of masculine gender attributes were equally carefully monitored for Pasifika males (Ortner, 1981). Similarly, Mikaere (2005) asserted that there were clear expectations for Māori females. However, in the contemporary context, gender-role expectations for both sexes have been made complex by an overlaying of European concepts of gender and status which are at odds with those of pre-colonial Pasifika and Māori: In the pre-colonial context role

specialisation did not preclude status but the contemporary scenario has resulted in loss of gender status, and consequent marginalisation for females (Hoskins, 2000; Mikaere, 2005; Park et al., 2002). Thus, the trend of a greater degree of correlation between Gender Self-Description (GSD) and Gender Self-Acceptance (GSA) found for Pasifika males and Pasifika and Māori females might be explained. The diminishing of the correlation with age could be attributed to the vulnerability of emerging gender identity in adolescence (Erickson, 1968), giving way, in adulthood, to a growth in acceptance of gender identity if it differs from that which might be stereotypically expected (Harter, 1999; Spence, 1985). However, it should be remembered that the numbers of older participants in this study were small.

In qualitative responses which triangulated the quantitative data, the majority of participants defined femininity and masculinity along stereotypical lines. While the majority of female participants reported that attractiveness and compliance with stereotypical gender norms defined femininity, the majority of males defined masculinity in terms of assertion and force. These responses indicated a relationship between stereotypically expected and actual gender traits: The definitions of femininity and masculinity recorded by participants appeared to reflect societal ideas of females and males, termed by Davis (1990) as “objectified” and “agentic”, respectively. Adding a deeper perspective to this idea were examples of female responses within the expressive/relational category which indicated that the gentleness associated with nurturing could also extend to passivity and vulnerability. In contrast to these was the solitary example of a male response for the expressive/relational category which mentioned mateship, a bond arguably based on assertive rather than passive practices (Harrison, 2009a), and one used to police conformity to traditional heteronormative concepts of masculinity (Martino & Pallotta-Chiarolli, 2003). These data indicate then,

that adolescent gender identity may have been affected by expectations for and beliefs about gender differentiation and conformity, and that females may have been more comfortable with their gender identity than males if it deviated from stereotypical gender norms, than males.

Context may have increased or diminished the differences in the correlation between GSD and GSA, by ethnicity and gender. Thus, several anomalous results noted between schools could be explained. Two schools, one single-sex male (School 4) and one coeducational (School 1) comprised largely Pasifika populations, but interestingly, it was the Pasifika males in the coeducational school who produced the greater correlation between GSD and GSA. Adherence to clear cut gender roles might arguably contribute to this relationship (Park et al., 2002), and particularly so as the Pasifika females in that school recorded the highest correlation between GSD and GSA for all female participant groups. However, the larger correlation between GSD and GSA for the Pasifika males in the coeducational setting may have been explained by the conjoint presence of both sexes acting to sharpen gender differentiation, with particular implications for the males (Falomir-Pichastor & Mugny, 2009). Indeed, the females in School 1 appeared notably passive during their task performance in Study 1, allowing the males to show off their considerable skill. To add weight to the idea that a coeducational context may enhance gender differentiation, research (e.g., Falomir-Pichastor & Mugny, 2009; Rout, 1997) has suggested that intensified shows of “masculinity” would be prompted when there may be doubt about gender identity in a given setting, eschewing of the feminine for males being one such behaviour. While it was a measure of gender identity, not behaviour that was being scrutinised in this section of the data (although there are researchers; e.g., Green, 1997, who would not separate the two concepts), one might suggest that coeducational settings may create a

context in which the need to differentiate between masculine and feminine gender identities is heightened in order to remove doubt of gender transgression, especially for males.

Adding strength to this idea, it was noted that the males in a predominantly European coeducational school context (School 3), generated the highest correlation for GSD and GSA and, at this school the largest difference was indicated between males and females for this correlation, of all predominantly European schools. The males in this school then registered a high level of comfort with their gender self-definition if it aligned with stereotypical norms and, interestingly, it was the out-group peers in this school who had blatantly demonstrated intolerance towards males who gender-transgressed by engaging in a female domain (the choral domain) in the first study.

One other anomaly occurred: The females in the rural school (School 8) demonstrated the lowest correlation between GSD and GSA overall. It might be suggested that females in rural communities may develop and accept a less stereotypically feminine gender identity as they may, as part of rural life, be practically involved in domains traditionally perceived as male. Most importantly, this group of rural females highlighted support for the idea that while there is a low level of tolerance for male gender-identity transgression, gender-identity transgression in females is accepted to a much larger extent (Martin, 1990; Schmalz & Kerstetter, 2006).

Comfort associated with conformity to expected norms in terms of gender identity seemed to be echoed by perceptions of gendered categorisation and appropriateness of choice in school-based activities. Participants identified certain activities as differentially typed male or female, demonstrating awareness of aggressively physical pursuits (e.g., rugby) being considered male domains while expressive/aesthetic pursuits (e.g., choir) were considered feminine domains,

particularly those concerned with vocal performance. Males of all ages, and particularly Pasifika and Māori males, demonstrated awareness of this categorisation with the most strength, although this trend diminished with age.

These findings support the results of other research (Klomsten et al., 2005; Koivula, 2001; Metheny, 1965) which revealed that stereotypically expected gender characteristics (e.g., grace and emphasis on the body as an object used to aesthetically please others, for females, and aggression and courage, for males) were reflected in sports categorised as feminine (e.g., dance, considered by these researchers as a sport) and males (e.g., rugby). The findings of the present study indicated that the majority of participants perceived that choice of school-based activities would be made on the basis of congruence with the gender typing of the domain: Males were perceived to dominate participation in male domains, and females in female domains. These findings also supported other aspects of the research of Klomsten, et al. (2005).

While male participants indicated more keenly that gender congruence in activity choice was preferable, there were some interesting departures from this view. Females recorded a much more egalitarian perception of participation in activities than males, reflecting the earlier findings of Kulik (2000) in contemporary Israel. In similar research which investigated actual participation in sport, Klomsten, et al. (2005) noted an increase in engagement of girls in masculine sports in contemporary Norway, but no such increase for boys in feminine sports. Participant groups also differed in their perceptions of gender-role conformity in terms of perceived activity choice. Male choristers in single sex-male choirs were anomalous among male participants in this regard, demonstrating an unusually strong desire for gender equity in most pursuits: They seemed less tied to stereotypical expectations of gender-role conformity in terms of activity choice. The engagement of these males in a predominantly feminine field

could be considered to suggest a non-compliant attitude in terms of gender-role conformity. In the same way that Bem (1981) suggested that individuals hold stable conventional or non-conventional attitudes towards gender-roles, it might be argued that these males' non-conformist attitude to participation in a gender non-congruent domain may well extend to an overall egalitarian attitude to activity choice. This lack of concern with gender-role transgression may have been enhanced, too, by a greater sense of support and identity-safety within a single-sex school as there were fewer obvious cues that male choristers were engaged in a feminine domain. Steele (2010) pointed out that the amount of threat felt by students at school may be substantially reduced in "identity-segregated schools", for example, single-sex school settings. Providing evidence which supports these latter ideas, by contrast, the attitudes of male choristers in coeducational choirs were markedly less egalitarian. Of the remaining adolescent participant groups, it could be argued that the single-sex choir female choristers faced no issues of gender transgression, being girls engaged in a gender-congruent feminine domain: Their stable attitude of gender-role conformity was expected and explicable. The final adolescent group, out-group peers, seemed to hold the sorts of beliefs and expectations about gender reported in Study 1 and Study 2, and although these may have been held to a lesser extent than choristers had perceived, they were sufficient to constitute the "threat in the air" described by Steele (1997).

Correlations between stereotypical comments indicated that participants' choices reflected the stable attitudes towards either gender-role conformity or gender-role transgression described by Bem (1981). Endorsement of stereotypical comments which condoned gender conformity predicted a positive attitude to other such comments, and the same was true of those comments indicating gender-transgression. There is literature which has suggested that gender-role transgression was particularly

problematic for boys (Liben, Bigler, Ruble, Martin, & Powlishta, 2002; Maccoby, 1998; Martin, 1990; Schmalz & Kerstetter, 2006) and further research which revealed that individuals' stereotypical heteronormative views may not only extend to disapproval of gender transgression, but could also be linked with prejudice towards ethnic minority groups (Falomir-Pichastor & Mugny, 2009). It could be suggested that this research holds special implications for boys who challenge gender norms, and indeed for the sustaining of prejudicial cultures in schools.

All participants believed themselves to be less prejudiced than other people. The occurrence of perceptions of less self-bias than the bias attributed to others has been found in other literature (Ellemers, Van Rijswijk, Roefs, & Simons, 1997; Ridgeway & Correll, 2004). Ellemers et al. (1997) based their study in the field of social identity theory (Tajfel, 1978; Tajfel & Turner, 1986), and explored the idea that in order to achieve a positive concept of social identity, people will perceive the values and attributes of their in-group to be superior to those of out-groups, and asserted that group status may affect this view. However, since beliefs and expectations can be dispersed and reinforced in the media, and indeed can prime stereotype activation (Davies et al., 2005; Davies, Spencer, Quinn, & Gerhardstein, 2002) it is possible that this less favourable perception of *others'* stereotypical ideas about gender may not only reflect such in-group bias but also mirror implicitly held beliefs and expectations perceived to be at large in the community.

Thus, not only were the concerns voiced by boy choristers in Study 2 that choirs were not expected to be an appropriate activity choice for boys and that their peers believed boys in choirs to be effeminate found to be grounded in reality, but the wider core beliefs from which this "threat in the air" originated were exposed.

Conclusion

This study completed the work undertaken so far by this researcher on gender stereotype threat and boys in choirs, and added to the literature on stereotype threat, prejudice, teacher and peer beliefs and expectations, and the “missing males” in the arts. The findings of the study further identified beliefs and expectations which mediated gender stereotype threat, and importantly exposed the way in which these beliefs and expectations not only shaped perceptions of activity choice for adolescents, but were inextricably bound up with the formation of adolescent gender identity itself. These beliefs persist and while Liben, et al. (2002) called for a better understanding of the mechanisms which perpetuate gender differentiation, Ridgeway and Correll (2004) noted that changing a core structure of gender beliefs presented a formidable challenge. However, further research is urged to tease out and challenge core beliefs and expectations which underpin gender roles and gender-role conformity, not only with the aim of attacking stereotype threat at its very root, but also with the objective of contributing to the creation of healthy school cultures which accept diversity of gender identity and afford real choice for all. A general discussion of the findings of the three studies will be presented in the final chapter of the thesis.

Chapter 6: Discussion

The initial purpose of this thesis was to investigate the effect of stereotype threat on adolescent males in choirs (a domain stigmatised for males), and specifically whether that threat caused performance decrement. The relationship between salience of threat and participants' awareness of it was revealed. As well, identity traits which promoted endurance in the choral domain for adolescent male choristers, and accounts of their personal experiences of stereotype threat indicated that these individuals possessed unique skills and attitudes. The thesis broadened to investigate the wider effect of beliefs and expectations about gender stereotypes on adolescent gender identity formation and activity choice, and pointed to the wider educational implications of stereotyping.

Three related studies were developed. The first and second studies situated the construct of stereotype threat within the musical context for male choristers (Koza, 1993), and within the context of gender and identity (e.g., Butler, 1990; Connell, 2002). The third study widened the scope to embrace research which explored the effects of beliefs and expectations on student outcomes (e.g., Jussim, Eccles, & Madon, 1996; Rosenthal & Jacobson, 1968; Rubie-Davies, 2006), and that which situated a wider range of school activities within a context of gender (e.g., Metheny, 1965). The studies that comprised this thesis provided findings which supported, challenged and extended the research on stereotype threat. As well, the aim was to ascertain the part which stereotype may play in maintaining a gender-based power binary and constricting choice for adolescents. The ways in which the studies have contributed to the stereotype threat literature will be expanded upon in the following paragraphs.

Evidence from the first study indicated that gender stereotype threat caused performance decrement for adolescent male choristers but not adolescent female

choristers when they performed in front of out-group peer audiences. Importantly, the findings of the study revealed that awareness of threat only occurred when it was triggered by blatantly salient peer disapproval of engagement in the domain.

Otherwise, threat was experienced implicitly: where cues were not blatantly salient choristers were unaware that they were experiencing stereotype threat. Further to these findings, the second study revealed traits in common among the adolescent male choristers which engendered high identification with the choral domain and ensured endurance in that domain. However, while facilitating a determination to participate in the choral domain which set them apart from their out-group peers, these distinct traits did not render the choristers immune to the effects of stereotype threat.

The third study explored the effect of beliefs and expectations about gender identity, gender role and gender-role conformity which had mediated stereotype threat for adolescent male choristers in the first and second studies. The findings of the third study revealed that these beliefs and expectations influenced adolescent perceptions about gender identity, and choice of a range of school-based activities. This study found that adolescents felt most comfortable about their gender self-description when it closely matched stereotypical gender norms. In addition, adolescents' perceptions about activity choice were found to be closely aligned with ideas of stereotypical gender role-conformity. The three studies were linked by findings which revealed that stereotypical ideas about gender had both specific and wider spread implications for the constriction of adolescent development.

Contributions of Studies 1 and 2 to Stereotype Threat Research

The finding of performance decrement for targets in the first study was not unexpected since similar findings in a range of contexts had been reported in previous research on stereotype threat (e.g., Huguet & Régner, 2007; Schmader et al., 2008;

Steele & Aronson, 1995). However, elements of the first and second studies contributed to hitherto little explored aspects of stereotype threat research: the role of differential levels of salience of threat, an exploration of the ‘vanguard’ personality (Steele et al., 2002), stereotype lift (Walton & Cohen, 2003), and the ‘spill over’ effect (Beilock et al., 2007). Each is explored below.

The role of differential levels of salience of threat.

The contrast of consonance between self-reported threat-based anxiety and observed performance decrement for male choristers in two choirs, and dissonance for male choristers in others, highlighted the role which differing levels of salience of stereotype threat played in triggering awareness of it: Awareness of threat was only self-reported when the out-group peer audience openly mocked the choristers. In this case, performance decrement for the adolescent male choristers was accompanied by acknowledgement of threat-induced anxiety. However, where threat was not made blatantly salient, performance decrement for the adolescent male choristers occurred without the choristers’ awareness of threat.

Steele et al. (2002) offered specific words of caution on the effectiveness of self-report measures, noting that this form of methodology has been commonly used to assess the state anxiety that accompanies and mediates stereotype threat with mixed results (e.g., Osborne, 2001; Spencer, Steele, & Quinn, 1999). Importantly, Steele et al. (2002) argued that there can be many reasons for finding a null effect in such cases, listing among them lack of awareness of increased anxiety and the possibility that anxiety may only mediate stereotype threat in specific conditions.

Heeding these cautions, the design of the first study aimed to address any potential lack of awareness of threat by having the choir directors trigger threat before each of the boys’ task performances by employing, in addition, a separate measure of

performance decrement, and by situating the study in a real-world setting. Thus awareness should have been heightened by multiple cues and the value of the self-report data should thus have been enhanced. In the event, this design would have produced inconclusive findings had it not been for the unrestricted behaviour of two out-group peer audiences enabled in the real-world context. Thus, two important findings were revealed throwing light on the value of self-report measures and on implications for future research design for their implementation with adolescents: It was not choir directors but out-group peers who had the most meaningful effect in mediating threat, and the self-report data was inconclusive unless threat was made blatantly salient by these out-group peers. Importantly, the self-report data did reveal expected levels of threat-induced anxiety in the latter case, suggesting that level of salience of threat rather than self-reports per se represented a barrier to accurate reporting.

Evidence which supported the idea that other factors may have influenced the ability of boy choristers to accurately report anxiety was provided by focus group data from the second study. One of the traits held in common between the boy choristers was self-protective denial: The boys stated that their knowledge of beliefs about the inappropriateness of boys' participation in choirs and of mockery from peers would have no effect on their performance. There was then disparity between these comments and the boys' observed performance decrement, unless threat was made blatantly salient, indicating that denial created an added barrier to awareness of threat. This finding supported the assertion of von Hippel et al. (2005) that self-protective denial may affect the accuracy of self-reports, and other research which suggested that stereotype threat may be experienced implicitly (Bennett & Gaines, 2010; Bosson, Haymovitz, & Pinel, 2004).

Thus, the role of blatantly salient threat was revealed to have effect on awareness of anxiety associated with stereotype threat for the participants in this first study. As well, the role of peer beliefs and expectations in mediating stereotype threat was revealed, and the value of conducting stereotype research in real-world settings was reinforced, particularly so as the construct relies on situational cues to trigger threat.

Stereotype lift.

An interesting reverse trend in performance quality, and attitudes reported in the qualitative data for a largely Pasifika (and predominantly Samoan) coeducational school (School 1) augmented the findings of the first study. Here, the males acknowledged pride in being a chorister and maintained consistently high performance quality between the task and fun conditions. However, instead the females demonstrated a trend of decrease in performance quality in the task condition which would have been expected for the males. In this cultural context, the male choristers reported in their focus group data that to be able to sing as well as participate in sports was an extra mark of kudos for young men: No stigma was attached to being a male in a choir and performance in front of a peer audience was rewarded with respect. One could suggest that in this context *stereotype lift* (Walton & Cohen, 2003) came into play, assisting the performance of the male choristers but penalising that of the females'. Drawing upon the work of Bandura (1986), Walton and Cohen (2003) asserted that such downward comparison could result in heightened self-efficacy, an expectation of respect from others (Cohen, Steele, & Ross, 1999) and a propensity for optimal performance since social acceptance would not be contingent on success (Baumeister, Twenge, & Nuss, 2002), negating performance decrement associated with excessive effort (Baumeister, 1984) in the context of stereotype threat (Steele & Aronson, 1995). Thus the performance of the advantaged group would be enhanced. Walton and Cohen drew a

distinction between stereotype lift and *stereotype susceptibility*, carefully noting that the latter term, outlined by Shih et al. (1999), described the performance boost which occurred as a result of a positive stereotype associated with an in-group, whereas in the case of stereotype lift, the performance boost is the result of a negative stereotype levelled at an alternative group.

The remarks of the males in the focus group from School 1 indicated that male self esteem and reputation were enhanced by participation in the choir and affirmed a position of privilege for males who sing. The same status was not accorded to females who sang and played sport, and the attitude of the male choristers in School 1 to their female colleagues was that of a superior in-group whose sense of heightened self-esteem, and leadership was bestowed by virtue of their being male. This stance reflected research which reported that gender roles in Samoan and Māori culture had been altered by the influence of European colonisation, resulting in a gender status which privileged males rather than females in the post-colonial context (Mikaere, 2005; Park et al., 2002). These ideas clarified the assertions of Walton and Cohen (2003) that “Stereotype lift particularly benefits people who believe either in the validity of negative stereotypes or in the legitimacy of group-based hierarchy” (Walton & Cohen, 2003, p. 464). So these male choristers’ reported feelings of pride and assured self-efficacy were realised in a superior musical performance in front of their peers, while the female choristers’ passivity was displayed by downcast eyes and only a partial use of vocal potential. The adolescent males shone in line with the cultural prerogative described by Park et al. (2002) for Samoan men. One might suggest that such a prerogative exemplified not only the group-based hierarchy described by Walton and Cohen (2003), but also indicated a gender-based hierarchy in which males in choirs were not always so culturally advantaged (Ashley, 2008b; Harrison, 2001; Koza, 1993).

The “spill over” effect.

Evidence which further endorsed the idea of both stereotype lift and stereotype threat was underpinned, however, by a fundamental difference from Steele and Aronson’s (1995) original work. The premise on which Steele and Aronson’s (1995) seminal study was based was that African Americans were believed to be possessed of inferior intellectual ability, and it was the triggering of this “threat in the air” (Steele, 1997) that activated the stereotype threat responsible for causing performance decrement. In this study (Steele & Aronson, 1995), as well as in later studies (e.g., Alter, Aronson, Darley, Rodrigues, & Ruble, 2010), the nature of the stereotype threat was directly linked to the domain in which the tests of performance decrement were situated. Herein lies an important point of difference with the present study: Threat was not induced by the suggestion that adolescent males were believed to be inferior singers to adolescent females, but that performance in the choral domain was an indication of failure to live up to beliefs and expectations about gender. The “threat in the air” for adolescent male choristers was that their participation in a feminine domain was indicative of inferior masculinity.

Stereotype threat in this case, then, was mediated by beliefs and expectations about one domain but the effects of threat were manifest in another. Although a substantial amount of research has been conducted on the effects of stereotype threat on working memory (e.g., Schmader, 2010; Schmader & Johns, 2003; Schmader et al., 2008), little of it has explored how threat in one domain can result in performance decrement in another. There is research, however, which has provided evidence in support of the indirect or “spill over” effects of stereotype threat (Beilock et al., 2007; Inzlicht & Kang, 2010), indicating that a cultural stereotype may negatively affect performance in an unrelated domain. Building on previous work (e.g., Baumeister,

Bratslavsky, Muraven, & Tice, 1998) which had explored the effect of depletion of cognitive resources in one domain on task performance in another, Beilock et al. (2007) asserted that “stereotype threat may ‘spill over’ onto other tasks that use the same processing resources but that are not implicated by the negative stereotype” (Beilock et al., 2007, p. 258). The findings of four studies conducted by Inzlicht and Kang (2010) indicated that stereotype threat spill over can affect self-control in non-stereotyped domains, supporting the findings of Beilock et al. (2007). The findings of the first study for this thesis indicated that threat triggered by a peer audience induced worries about gender transgression for adolescent males in choirs resulted in vocal performance decrement. These findings supported those of Beilock et al. (2007), and Inzlicht and Kang (2010), that threat can be experienced in one domain and affect performance in another.

In as much as the findings of the first study supported the idea that stereotype threat experienced in one domain may affect performance in another, they also indicated that stereotype threat may be intertwined with social identity threat in a more pervading way for the male choristers. As this thesis was being finalised, Steele (2010) published a new work which clarifies this hypothesis. He stated “threat makes the identity to which it is directed, of all the person’s social identities, the one that dominates emotion, thinking, the one that for that time ‘invades the person’s whole identity’” (Steele, 2010, p. 73). Thus a sharp registration of disapproval of gender transgression directed at males within this choral context brought an enveloping sense of gender to the fore, and it was threat to this aspect of the adolescent males’ identity which mediated the anxiety and negatively affected their vocal performance.

Since there is research which purports that gender itself is a performance (Butler, 1990; Green, 1997), one might further hypothesise that to perform for one’s

peers as an adolescent male chorister was not only to expose a specific musical identity for evaluation, but was to present one's broader gender identity for scrutiny at the same time: For the male choristers in the present study, stereotype threat mediated through implied or blatant challenge to gender identity resulted in vocal performance decrement. The findings of Studies 1 and 2 for this thesis support research which has explored the spilling over of the negative consequences of gender discrimination (Adams et al., 2006) and indicate the need for future research to explore the relationship between stereotype threat (as a specific threat) and social identity threat (as a broader threat which may embrace stereotype threat).

The vanguard personality.

Collins (2009) asserted that the extra physiological stress experienced for boys in musical activities could contribute to their disengagement from the musical domain, yet the male choristers investigated in the first two studies for this thesis, exhibited personal qualities which firmly protected them from such disengagement. Moreover, these traits protected the male choristers from the disengagement which Steele et al. (2002) asserted might be the ultimate consequence of stereotype threat.

The second study triangulated the results of the quasi-experiment conducted in the first and revealed qualitative evidence which both supported and shed new light on previous stereotype research. One particular aspect was supported with rather more magnitude of occurrence than the original researchers had reported: Steele et al. (2002) had described "vanguard" individuals as those who were extremely highly identified with a given domain, pointing out that paradoxically, it was these individuals who stood to experience the strongest effects of stereotype threat. These authors asserted that in every group there would be a few people who fitted this description, but in the participant sample for

the first two studies of this thesis, the boy choristers all presented distinctly as vanguard personalities: highly identified with the domain, and more so as participation involved personal *choice* in engaging in a field stigmatised for boys. These boys exhibited a number of common traits: passion for singing; determination; humour; camaraderie which provided in-group strength; melancholic acknowledgement that others perceived choirs to be a feminine domain; empathy for this prejudicial attitude demonstrated by their peers; and self-protective denial.

Thus in placing personal vocation before social expectations, the boy choristers persisted in a domain which stood to expose them to threat, not only resulting from negative stereotypes levelled at their group, but felt deeply at a personal level. Tajfel and Turner (1986) distinguished between threat to social identity and personal identity, asserting that the former occurred when group concerns were foremost (and where a person was highly identified with the group), and that the latter occurred where an individual feared that a group stereotype might affect them personally in a negative manner. Further research had suggested that boundaries between social identity threat and personal identity threat may be blurred (Deaux, 1993), that the two may be linked and occur simultaneously (Shapiro & Neuberg, 2007; Wout et al., 2008) and that although stereotype threat most markedly affects those with highly invested *group* identities, every group member's *personal* identity will be affected by threat to some extent (Wout et al., 2008). Since the boy choristers were not only highly personally invested in the domain but were highly identified with their choral in-group in terms of group identity, their salient social identities as choristers and males would thus be particularly vulnerable to threat.

It is fruitful with this vulnerability in mind, to discuss one other trait held in common between the adolescent male choristers, shared with many adolescent males, and which stood to exacerbate the conflict between personal and social identities: The boy choristers reported the desire to enhance their reputations with their peers by attaining the highest performance quality possible. However, the findings of the first study indicated that where the realisation of such a goal might have been a possibility for girl choristers, the effects of stereotype threat imposed a barrier to such an achievement for their male counterparts. Literature (e.g., Carroll, Houghton, Durkin, & Hattie, 2009) has cited reputation enhancement as central to adolescent males' social standing. In prioritising personal vocation, the boy choristers consciously jeopardised their wider social reputation by participating in a field which displayed them as open transgressors of gender norms (Ashley, 2008a), and paradoxically this decision ultimately resulted in decrease of the performance quality with which their reputation could have been enhanced.

The vanguard nature of the boy choristers' personalities could also have distinguished them as "trail blazers" whose determination to swim against the tide of peer expectation of gender-role conformity set them apart. The boys demonstrated traits which enabled them to combat disengagement in the choral field. As well, they articulated clearly the specific beliefs about gender identity, gender role and gender-role conformity which had mediated stereotype threat for them, and the particular role which peers played in its mediation. However, their staunch attitude to pursuing their chosen path in music did not enable them to achieve the quality they desired when performing to their peers, and did nothing to change the deep-seated beliefs and expectations which mediated threat.

In as much as their overt display of gender transgression ultimately resulted in performance decrement and loss of an opportunity to enhance their reputations, the adolescent male choristers seemed, in turn, to pose a threat to the out-group peer males in their audience. Where the assembly audiences were observed to express disapproval of adolescent males' participation in choirs, it was the out-group peer males who were particularly demonstrative of this view. This observation supports other research (e.g., Vandello et al., 2008) which has indicated that controversial attitudes resulting in conspicuous gender-role transgression (such as that demonstrated by the adolescent male choristers in the present study) could indeed have stood to trigger threat for others and notably so for out-group male peer audiences.

Steele (2010) cited Barack Obama's example of freely celebrating his own multiple and fluid identities to the American public: "It was his stress on identity not his suppression of it, that made him a symbol of hope" (Steele, 2010, p. 219). In contrast however, one would suggest that the displays of identity presented by the boy choristers to their peers represented not a warmly anticipated celebration of individuality, but a threat which targeted deep-seated beliefs and expectations about gender in not only the choristers but also in their adolescent out-group peer audience.

Study 3: The Effect of Beliefs and Expectations about Gender on Adolescent Gender Self-Definition and Activity Choice

Stereotype threat and its effects then served not only as a barrier to realising potential for the targets (recipients) of threat, but also served to expose beliefs and expectations by which threat was mediated, and importantly so by peers. This third study, which completed the present work, sought to clarify the nature of these beliefs and expectations of gender identity, gender role and gender-role conformity, and revealed their role in shaping perceptions about choice of other school-based activities

and gender identity for not only the *targets* of stereotype threat, but *non-targets* as well. This final study incorporated a wider range of participants and school-based activities in order to investigate whether “threats in the air” might influence the decision-making of adolescents *beyond* the situations in which threat was salient.

Gender stereotypes and gender self-definition in adolescence.

A major finding of this third study indicated that adolescent participants felt a greater degree of comfort with their gender self-definition if it was closely aligned to stereotypical ideas of gender. Trends also occurred which suggested that this pattern was greatest for males (and particularly so for Pasifika males) and for younger adolescent participants, and decreased with age. Davis (1990) had described such ideas of gender stereotype as portraying females as objectified and males as agentic, and these ideas were echoed in the personal descriptions of gender reported in this third study for this thesis. Most participants described gender then in stereotypical terms: Male respondents emphasised assertive/forceful attributes in their descriptions of masculinity while female respondents included aspects of attractiveness (physical appearance and “ladylike” behaviour) in their descriptions to the largest extent.

Research has suggested that stereotypical images of gender (e.g., Davis, 1990) are conveyed widely in the media (Davies et al., 2002; Millington & Wilson, 2010) and conformity with such stereotypes has been encouraged, particularly for boys, and importantly by peers (Martino & Pallotta-Chiarolli, 2003). Thus the trend that males’ gender self-definitions were aligned with stereotypical gender norms with the most strength is not unexpected. These findings support and were explained by literature which suggested that peer opinion is the most important influence of all for adolescent boys at school (Collins, 2009), that there is greater expectation of gender-role conformity for boys than girls (Martin, 1990; Schmalz & Kerstetter, 2006), that males

express greater anxiety if stereotypical gender roles are transgressed (Falomir-Pichastor & Mugny, 2009) and incur harsher penalties for gender-role transgression than females (Martino & Pallotta-Chiarolli, 2003). Moreover, literature which identified Samoan gender roles as particularly clear-cut in the post-colonial context, with an emphasis on a dominant role for men (Park et al., 2002) may have helped to explain why the correlation between gender self-definition and gender self-acceptance was strongest of all for Pasifika males. As well, it was not surprising that younger adolescent participants felt a strong need to conform to societal expectations of gender since in adolescence the need to belong is magnified (Steele & Aronson, 2005), opinions and expectations mirrored by significant others hold additional weight (Harter, 1999), and peer expectations are of paramount importance (Wigfield & Wagner, 2005).

Females exhibited a trend of being more comfortable with gender self-definitions which diverged from stereotypical ideas about femininity than males were when gender self-definition diverged from stereotypical ideas about masculinity. However, this finding seemed to be demonstrated least for Pasifika and Māori females and an explanation may be associated with further implications. Harter (1999) asserted that adolescent females who adhere strictly to a stereotypically feminine gender orientation and adolescents from ethnic minority groups may stand to suffer lowered self-worth. She explained, interestingly, that those in the latter group were exposed to further pressures as they needed to forge selves which negotiated several different cultural contexts. The influence of clearly defined Christianised European gender-roles for Samoan females, in the contemporary New Zealand setting (Park et al., 2002), may explain a closer adherence to stereotypical ideas of gender for female adolescent Pasifika, and coupled with the need to negotiate the complexity of cultural contexts may imply that self-esteem could be at risk for this group. These ideas may partly contribute

to data which indicated that more than twice as many female as male Pasifika secondary school students in New Zealand reported significant symptoms of depression (15% and 7%, respectively), and nearly three times as many female as male Pasifika secondary school students in New Zealand reported suicidal thoughts (27% and 10% respectively) (Helu, Robinson, & Grant, 2009). Further research seems necessary to investigate whether the gender issues revealed in the third study of this thesis may have bearing upon these statistics.

In terms of explaining these trends for female adolescent Māori, researchers (Hoskins, 2000; Mikaere, 2005) have asserted that during the European colonisation of New Zealand, specialised gender roles which entailed no contingent differentiation in gender status in Māori culture were replaced with those embedded in a European gender power binary, placing females in a position of diminished power. In the light of this assertion, the formation of gender identity may be made problematic by the assimilation of gender norms unrelated to Māori culture, and the negotiation of multiple cultural contexts could be suggested to be further challenged for adolescent Māori females. Importantly, the potential lowering of self-worth resulting from such scenarios (Harter, 1999) is indicated to have negative implications for well-being (Irving, Wall, Neumark-Sztainer, & Story, 2002; Raab, 2001) and seems deserving of further research.

Rural females were found in the third study to demonstrate a trend of being minimally tied to stereotypical gender norms in terms of comfort with gender self-definition. Thus where gender transgression tended to be accepted to a greater extent for females than for males, the rural context allowed females to transgress ideas of gender self-definition with even greater latitude. This finding reinforces that of previous research (e.g., Klomsten et al., 2005; Kulik, 2000) which pointed out the

greater lassitude allowed on gender transgression for females, and sheds light on how this idea may be applied to the rural context as there was no indication that rural males felt a greater sense of flexibility in terms of gender self-definition.

The finding that a concept of gender self-definition which was more tied to stereotypical gender norms was significantly higher for adolescent than adult participants did not seem surprising. This finding supported literature (e.g., Harter, 1999; Spence, 1985) which has described personal beliefs and values as becoming more prevalent as adolescence progresses into adulthood, and the influence of societal stereotypes as falling away.

Gender-typing and gender-role conformity in school-based activities.

Further findings from the third study revealed that participants perceived that activities were gender-typed male or female. As expected, males (particularly Pasifika and Māori males) were more likely to perceive aggressive/physical activities as associated with males and expressive/non-physical activities as associated with females although this perception decreased with age. Choristers from single sex male choirs were the notable exception in this pattern, demonstrating views which indicated a greater perception and desire of gender equity in the gender-typing of activities. These males exhibited attitudes consistent with the personality traits of male choristers in Study 2 identifying them as akin to the “vanguard” personalities described by Steele et al. (2002). Furthermore, they may have been subject to less threat than those boys in coeducational settings as, in line with the assertions of Steele (2010) cues triggering threat would be reduced in “identity-segregated” settings. This assertion was further supported by the finding that male choristers in coeducational settings held traditional perceptions of gender-typing and participation in school-based activities. In accordance with the findings on gender self-definition in this study and in literature which supports

these findings (e.g., Klomsten et al., 2005; Kulik, 2000; Maccoby, 1998; Martin, 1990; Mikaere, 2005; Park et al., 2002; Schmalz & Kerstetter, 2006) females (with the exception of Pasifika and Māori females) were more likely than males to condone gender-role transgression in terms of activity choice. Females from single-sex choirs, however, provided an interesting anomaly in that their view about activity choice was relatively conservative. Since these female choristers were not gender-transgressing it is possible that their conformist view extended to other activities too.

Findings that activities were perceived as gender-typed supported literature which positioned music as feminine (e.g., Koza, 1993), sports as gender-differentiated (Metheny, 1965) and scholastic activities in New Zealand schools as gendered in nature (Fry, 1985). Such literature (e.g., Fry, 1985; Harrison, 2009b; Koza, 1993; Martino & Pallotta-Chiarolli, 2003; Metheny, 1965) revealed that appropriate choice of school-based activity was founded upon a basis of societal expectation of heteronormative conformity. Thus, stereotypical conceptions of masculinity as agentic and femininity as objective were reflected in the gender-typing of school-based activities, and choice of these activities was restricted by societal ideas of conformity to gender role.

A gender-based hierarchy of activities.

Adding a further dimension to the concept of gender differentiation in school-based activities, data from the second study had revealed that activities were not only gender-typed, but ranked in hierarchical order: Sports involving aggression and contact were gender-typed masculine (e.g., rugby), and those which placed the participants in aesthetically pleasing or expressive roles were gender-typed feminine (e.g., dance and choirs). This hierarchy appeared to reflect a link between status and gender, with those activities associated with masculinity ranked ahead of those activities associated with femininity. As well as supporting

other research which linked status and gender (e.g., Ashley, 2009; Millington & Wilson, 2010), these findings fitted neatly with the earlier research of Rosenkrantz, Vogel, Bee, Broverman, and Broverman (1968a) which revealed that stereotypically masculine traits were more frequently valued than stereotypically feminine traits, per se. Adolescent male choristers had reported in their focus group data that they felt their peers placed choirs at the very bottom of the hierarchy of pursuits, rendering their involvement in choirs as not only an example of gender transgression but an example of engagement in a low-status field. As well as pointing then to a gender-based hierarchy of activities, the findings of this thesis strengthened the assertions of other researchers (e.g., Connell, 1995; Hoffman et al., 2005; Millington & Wilson, 2010) that while a multiplicity of masculinities was acknowledged, only one traditional stereotypical form, expressed in terms of aggression and agency, dominated.

Power relations affect in-group perceptions of out-group opinions.

The findings of the final study of this thesis supported then the existence of a gender-based hierarchy of pursuits, but also shed light on the way that power relations can affect in-group ideas of out-group opinion of them. Other researchers (e.g., Lammis, Gordijn, & Otten, 2008; Vorauer, & Sakamoto, 2008) have investigated how certain groups have engaged in *meta-stereotyping* (the ideas that in-group members universally feel are held about them by members of an out-group). Importantly, meta-stereotyping was found to occur when a particular in-group occupied a position of powerlessness and desired to know how it was viewed by a more powerful out-group (Lammis et al., 2008). Meta-stereotyping then reflected a dynamic based on power relations and interestingly, Lammis et al. (2008) noted that the comparatively powerful out-group was not motivated to adopt such meta-stereotyping measures.

It appears that the adolescent male choristers' keen awareness of peer attitudes towards them was motivated and amplified by the knowledge that their status positioned them as a less powerful minority. In support of this idea, data from the third of the present studies revealed that males in mixed choirs registered the sharpest awareness of the stereotypical views of *others*. All participants had indicated a perception of others as more biased than themselves, but for these male choristers it might be suggested that not only the desire to present oneself in a glowing light (Ellemers et al., 1997) came into play, but that gender contrast in a coeducational setting intensified meta-stereotyping and placed their powerlessness in the spotlight.

A link between stereotype threat and prejudice invites future research.

A further finding of the third study indicated that participants' endorsement of a particular gender-stereotyped comment was found to predict endorsement of other similar comments and thus predict stable attitudes suggested in other research (e.g., Bem, 1981) towards either gender-role conformity or gender-role transgression. Such evidence may have wider-reaching implications for school cultures in that prejudice in one area has been found to transfer to prejudicial attitudes in other areas (Beran, Claybaker, Dillon, & Haverkamp, 1992; Ellis, Kitzinger, & Wilkinson, 2002). Thus the effects of beliefs and expectations which support heteronormative conformity may not be limited to the situational contexts which instigate gender stereotype threat, but may contribute in a wider sense to a culture of prejudice within schools.

The broader role of stereotype threat in maintaining prejudice then was brought into question. The disapproval of gender transgression blatantly expressed by two out-group male audiences in the first study for this thesis indicated that prejudice affects not only the targets of threat but the non-targets. This finding supports the work of Green (1997) who revealed that the relationship between audience and performer was a

reciprocal one. The ideas that such a relationship exists, and furthermore that stereotypical ideas can be intensified by audience numbers (Wilder & Shapiro, 1991), reinforced the suggestion that stereotype threat may not be most effectively studied with only the target's perspective in mind since threat may involve a complex interrelationship between both targets *and* non-targets. Research is called for to further investigate whether as Steele et al. (2002) suggested, the job of the trigger of stereotype threat is finished once threat has been activated or whether there may be an ongoing reciprocal relationship involving threat between targets and non-targets of stereotype threat. In the light of these ideas, the notion of stereotype threat as a coincidental accompaniment of prejudice (Goff et al., 2008) seems problematic. In its involvement in policing gender-role conformity, particularly for boys, stereotype threat may well extend to being a tool of prejudice, rather than an "unfortunate concomitant".

Educational Implications

The expectations of conformity to stereotypical gender norms for males evidenced in the three studies comprising this thesis point to implications for education laid out in previous research (e.g., Fischer & Good, 1998; Hoffman et al., 2005). This previous research pointed out the link between the performance of traditional masculinity and undesirable behaviours such as high-risk sexual activity and psychologically forceful behaviour, as well as characteristics such as impaired emotional skills and psychological distress. Hoffman et al. (2005) also cautioned that definitions of masculinity which include dominance over women (included in the forceful/assertive category which attracted the highest percentage of qualitative responses for males in the third of the present studies) may hold negative implications for power imbalances in male-female relationships. In the light of the findings of the third study for this thesis, Pasifika and Māori males would stand to be the groups most

affected by a scenario of risk and the need is made clear for education within school communities to counteract the possible effects of such implications.

The findings of all three of the studies for this thesis indicated that expectations concerning gender identity and gender role must be carefully voiced in order to scaffold choices which afford scope rather than restriction for adolescents. Furthermore, complementing studies which revealed the importance of teacher expectations in shaping student outcomes (Rosenthal & Jacobson, 1968; Rubie-Davies, 2006; Rubie-Davies et al., 2006), the present studies revealed that *peer* expectations held the most meaningful sway for adolescents. The findings of the present studies indicated the importance for teachers of facilitating peer-involvement in activities which promote healthy concepts of gender identity in school cultures. As the studies for this thesis revealed that concepts of adolescent gender self-definition are largely shaped by stereotypical gender norms, the idea of Hoffman et al. (2005) of raising awareness of different masculinities and femininities through discussion with adolescents seems a fruitful one. Furthermore, in the light of evidence from the present studies such discussions would be most effective if they were *peer-led*. Such discussions might challenge media images which play on consumers' gender insecurities, motivate media action to change gender stereotypes, and support the healthy ideas about gender and the development of positive gender identities for young people advocated by Hoffman et al. (2005).

The most meaningful and all-embracing educational implication may derive from the finding in the third study of this thesis that prejudicial attitudes are predictive and distinct in terms of gender conformity or gender transgression. Previous research (Allport, 1954) had linked a prejudicial outlook to a threat orientation resulting in mental rigidity, and intolerance of other people's views. However, in contrast, evidence

of unique traits which set adolescent male choristers apart from their out-group peers in the second study of the thesis indicated that these choristers universally demonstrated the sorts of mental and emotional skills associated with Allport's "tolerant" personalities. The adolescent male choristers cited tolerance and empathy toward out-group peer views towards males in choirs (even though such views were unfavourable to the choristers themselves), they strongly endorsed gender equity and were not confined to choices of activity which reflected stereotypical gender roles, they had the ability to self-reflect, and they possessed a sense of humour which extended to the ability to laugh at themselves. As well, aesthetic and social values were held in high regard by them: a passion for the intrinsic value of music, and camaraderie were important. The ego-security and ego-strength described by Allport (1954) seemed to define these choristers. Thus not only did their data shed light on the ability of these "vanguard personalities" to endure in a stigmatised domain, but it also reinforced the link of beneficial cognitive and emotional traits with a non-prejudicial and tolerant attitude. In contrast to the more rigid attitude evidenced in terms of activity choice by other peers, these adolescent male choristers demonstrated the positive mental and emotional effects of tolerance. These findings suggested that mental and emotional consequences resulting from prejudicial attitudes may extend far beyond the situational pressure of stereotype threat and are limiting in nature.

Further to this idea was that of the potential for downward comparison evidenced by the examples of stereotype threat and stereotype lift documented in the studies for this thesis. Downward comparison holds implications for the self-esteem of adolescents who do not belong to privileged groups within school communities as well as for those who depend on such downward comparison to achieve self-esteem: ultimately both are at risk. Wills (1981) asserted that there was a propensity for

prejudiced individuals to engage in downward comparison with stereotyped out-groups. Moreover, researchers (e.g., Vick, Seery, Blascovich, & Weisbuch, 2008) have found that when stereotype threat which usually advantages non-targets is removed, non-targets appear to be disadvantaged. The studies for this thesis supported the findings of Vandello et al. (2008) that challenge to gender status was perceived as threatening for men but not women. Such findings indicated that downward comparison had links with prejudice, implications for self-esteem, and supported the idea of Sherman et al. (2005) that further research is needed to ascertain the relationship between stereotype and prejudice.

Conclusion

The findings of the studies indicated the need for future research to explore the idea of a *reciprocal relationship* between the targets and non-targets of stereotype threat. Thus, limiting the study of stereotype threat to its effects on targets seems no longer to be an adequate way to address the study of a construct which appears to be inseparable from the wider environment, particularly in a real-world setting. Evidence from the studies supported an idea of stereotype threat as intertwined with other aspects of social identity threat, the possibility of reciprocal threat between targets and non-targets, and the need for further research to pursue its little-explored relationship with prejudice. Such research is called to investigate stereotype threat as a *tool* of prejudicial mechanisms which bolster a gender-based power binary, serving to restrict both males' and females' choices of gender identity and options for self development.

The studies highlighted implications for negative behaviours associated with stereotypical concepts of masculinity which have had an effect on both sexes in terms of violence, relational and mental health problems, and more broadly, that prejudice limits cognitive and emotional skills. Evidence was provided that heteronormative

conformity was policed in both subtle and overt ways, indicating particularly restrictive implications for those groups who most endorse such conformity, and punitive outcomes for those who do not.

In a practical sense, the studies contributed to stereotype threat research within a real-world context, across a variety of cultural and socioeconomic settings, and with a substantial sample. They enabled further testing of the Hoffman Gender Scale (Hoffman et al., 2000) and the development of two new scales (the Self-Report Questionnaire: Choral Performance, and the Gender-Role Beliefs and Expectations Questionnaire) and invited further comparative research. The importance of peer influence, further highlighted by the studies, supports the need for creating gender-safe pedagogies where challenges to the beliefs and expectations that underlie gender stereotype threat may be most effectively led by peers. Hoffman emphasised the importance of such changes in these words:

Creating systemic, lasting change in this regard is a major undertaking, exacerbated by both subtle and blatant pressure to conform to out-moded ideals, minimisation of the importance of gender issues and a belief held by many that gender has been dealt with sufficiently ... we must accept this challenge if we truly want future generations to have the freedom to fully express their humanity. (Hoffman et al., 2005, p. 81)

References

- About, F. E. (2008). A social cognitive development theory of prejudice. In S. M. Quintana & C. McKown (Eds.), *Handbook of race, racism, and the developing child* (pp. 55–71). Hoboken, NJ: John Wiley.
- Abrams, D., & Manstead, A. S. (1981). A test of theories of social facilitation using a musical task. *British Journal of Social Psychology*, *20*, 271–278.
- Adams, G., Garcia, D. M., Purdie-Vaughns, V., & Steele, C. M. (2006). The detrimental effects of a suggestion of sexism in an instruction situation. *Journal of Experimental Social Psychology*, *42*, 602–615.
doi:10.1016/j.jesp.2005.10.004
- Allport, G. W. (1954). *The nature of prejudice*. Cambridge, MA: Pegasus Books.
- Alter, A. L., Aronson, J., Darley, J. M., Rodrigues, C., & Ruble, D. N. (2010). Rising to the threat: Reducing stereotype threat by reframing the threat as a challenge. *Journal of Experimental Social Psychology*, *46*, 166–171.
doi:10.1016/j.jesp.2009.09.014
- Apple, M. W. (1979). *Ideology and curriculum*. London, England: Routledge & Kegan Paul.
- Aronson, J., Fried, C., & Good, C. (2002). Reducing the effects of stereotype threat on African Americans by shaping theories of intelligence. *Journal of Experimental Social Psychology*, *38*, 113–125. doi:10.1006/jesp.2001.1491
- Ashley, M. (2002). The spiritual, the cultural and the religious: What can we learn from a study of boy choristers? *International Journal of Children's Spirituality*, *7*, 257–272. doi:10.1080/1364436022000023185
- Ashley, M. (2006). You sing like a girl? *Sex Education*, *6*, 193–205.
doi:10.1080/14681810600578792

- Ashley, M. (2008a). Boyhood melancholia and the vocal projection of masculinity. *Thymos: Journal of Boyhood Studies*, 2, 26–35. doi:10.3149/thy.0201.26
- Ashley, M. (2008b). Slappers who gouge your eyes: Vocal performance as exemplification of disturbing inertia in gender equality. *Gender and Education*, 1–16. i-First article. doi:10.1080/09540250802213164
- Ashley, M. (2009). *How high should boys sing? Gender, authenticity and credibility in the young male voice*. Farnham, England: Ashgate.
- Baddley, A. D., & Hitch, G. (1974). Working memory. In G. H. Bower (Ed.), *The psychology of learning and motivation*. (Vol. 8, pp. 47–89). New York, NY: Academic Press.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84, 191–215.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Barrett, M., & Davis, S. C. (2008). Applying social identity and self-categorisation theories to children's racial, ethnic, national and state identification and attitudes. In S. M. Quintana & C. McKown (Eds.), *Handbook of race, racism and the developing child* (pp. 72–110). Hoboken, NJ: John Wiley.
- Baumeister, R. F. (1984). Choking under pressure: Self-consciousness and paradoxical effects of incentives on skillful performance. *Journal of Personality and Social Psychology*, 46, 610–620.
- Baumeister, R. F., Bratslavsky, E., Muraven, M., & Tice, D. M. (1998). Ego depletion: Is the active self a limited resource? *Journal of Personality and Social Psychology*, 74, 1252–1265.

- Baumeister, R. F., & Leary, M. R. (1995). The need to belong. *Psychological Bulletin*, *117*, 497–529. doi:10.1037/0033-2909.117.3.497
- Baumeister, R. F., Twenge, J. M., & Nuss, C. K. (2002). Effects of social exclusion on cognitive processes: Anticipated aloneness reduces intelligent thought. *Journal of Personality and Social Psychology*, *83*, 817–827. doi:10.1037//0022-3514.83.4.817
- Beere, C. A. (1990). *Gender roles. A handbook of tests and measures*. Westport, CT: Greenwood Press.
- Beilock, S. L., Rydell, R. J., & McConnell, A. R. (2007). Stereotype threat and working memory: Mechanisms, alleviation and spillover. *Journal of Experimental Social Psychology: General* *136*, 256–276. doi:10.1037/0096-3445.136.2.256
- Bem, S. L. (1974). The measurement of psychological androgyny. *Journal of Consulting and Clinical Psychology*, *42*, 155–162.
- Bem, S. L. (1975). Sex role adaptability: One consequence of psychological androgyny. *Journal of Personality and Social Psychology*, *31*, 634–643.
- Bem, S. L. (1981). Gender-schema theory: A cognitive account of sex-typing. *Psychological Review*, *88*, 354–364.
- Bem, S. L., & Lenney, E. (1976). Sex-typing and the avoidance of cross-sex behavior. *Journal of Personality and Social Psychology*, *33*, 48–54.
- Bem, S. L., Martyna, W., & Watson, C. (1976). Sex-typing and androgyny: Further explanations of the expressive domain. *Journal of Personality and Social Psychology*, *34*, 1016–1023.
- Bennett, T., & Gaines, J. (2010). *Believing what you hear: The impact of aging stereotypes on the old*. Philadelphia, PA: Routledge.

- Beran, N. J., Claybaker, C., Dillon, C., & Haverkamp, R. J. (1992). Attitudes towards minorities: A comparison of homosexuals and the general population. *Journal of Homosexuality*, 23(3), 65–83. doi:10.1300/J082v23n03_05
- Blair, C. (2006). How similar are fluid cognition and general intelligence? A developmental neuroscience perspective on fluid cognition as an aspect of human cognitive ability. *Behavioral and Brain Sciences*, 29, 109–160. doi:10.1017/S0140525X06009034
- Blair, I. V. (2002). The malleability of automatic stereotypes and prejudice. *Personality and Social Psychology Review*, 6, 242–261. Retrieved from <http://www.erlbaum.com/Journals/journals/PSPR/pspr.htm>
- Blumer, H. (1969). *Symbolic interactionism: Perspective and method*. Englewood Cliffs, NJ: Prentice Hall.
- Bosson, J. K., Haymovitz, E. L., & Pinel, E. C. (2004). When saying and doing diverge: The effects of stereotype threat on self-reported versus non-verbal anxiety. *Journal of Experimental Social Psychology*, 40, 247–255. doi:10.1016/S0022-1031(03)00099-4
- Bosson, J. K., Taylor, J. N., & Prewitt-Freilino, J. L. (2006). Gender role violations and identity misclassification: The roles of audience and actor variables. *Sex Roles*, 55, 13–24. doi:10.1007/s11199-006-9056-5
- Bourdieu, P. (1974). The school as a conservative force: Scholastic and cultural inequalities (J. C. Whitehouse, Trans.). In J. Eggleston (Ed.), *Contemporary research in the sociology of education* (pp. 32–41). London, England: Methuen.
- Brannon, R. (1981). Current methodological issues in paper-and-pencil measuring instruments. *Psychology of Women Quarterly*, 5, 618–627. doi:10.1111/j.1471-6402.1981.tb00600.x

- Braver, T. S., Barch, D. M., Kelley, W. M., Buckner, R. I., Cohen, N. J., Miezen, F. M., et al. (2001). Direct comparison of prefrontal cortex regions engaged by working and long-term memory tasks. *NeuroImage, 14*, 48–59.
doi:10.1006/nimg.2001.0791
- Brodish, A. B., & Devine, P. G. (2009). The role of performance avoidance goals and worry in mediating the relationship between stereotype threat and performance. *Journal of Experimental Social Psychology, 45*, 180–185.
doi:10.1016/j.jesp.2008.08.005
- Brown, C. S., & Bigler, R. (2005). Children's perceptions of discrimination: A developmental model. *Child Development, 76*, 533–553. doi:10.1111/j.1467-8624.2005.00862.x
- Brownless, A. W. (2008). *Billy's Book for Blokes*. Sydney, Australia: Allen & Unwin.
- Bryman, A. (1992). Quantitative and qualitative research: Further reflections on their integration. In J. Brannen (Ed.), *Mixing methods: Qualitative and quantitative research* (pp. 57–78). Aldershot, England: Avebury.
- Bussey, K., & Bandura, A. (1999). Social cognitive theory of gender development and differentiation. *Psychological review, 106*, 696–713.
- Butler, J. (1990). *Gender trouble: Feminism and the subversion of identity*. New York: Routledge.
- Carr, P. B., & Steele, C. M. (2009). Stereotype threat and inflexible perseverance in problem solving. *Journal of Experimental Social Psychology, 45*, 853–859.
doi:10.1016/j.jesp.2009.03.003
- Carroll, A., Houghton, S., Durkin, J., & Hattie, J. A. (2009). *Adolescent reputations and risk: Developmental trajectories to delinquency*. New York, NY: Springer.

- Cohen, G. L., Steele, C. M., & Ross, L. D. (1999). The mentor's dilemma: Providing critical feedback across the racial divide. *Personality and Social Psychology Bulletin*, 25, 1302–1318. doi:10.1177/0146167299258011
- Collins, A. (2009). A boy's music ecosystem. In S. D. Harrison (Ed.), *Male voices: Stories of boys learning through making music* (pp 33–47). Camberwell, Australia: ACER Press.
- Connell, R. W. (1987). *Gender and power*. Cambridge, England: Polity Press.
- Connell, R. W. (1995). *Masculinities*. St Leonards, Australia: Allen and Unwin.
- Connell, R. W. (2002). *Gender*. Cambridge, England: Polity Press.
- Conway, A. R. A., Cowan, N., & Bunting, M. F. (2001). The cocktail party phenomenon revisited: The importance of working memory capacity. *Psychonomic Bulletin and Review*, 8, 331–335.
- Conway, A. R. A., Cowan, N., Bunting, M. F., Therriault, D. J., & Minkoff, S. R. B. (2002). A latent variable analysis of working memory capacity, short-term memory, processing speed and general fluid intelligence. *Intelligence*, 30, 163–183.
- Conway, A. R. A., & Engle, R. W. (1994). Working memory and retrieval: A resource-dependent inhibition model. *Journal of Experimental Psychology: General*, 123, 354–373. doi:10.1037/0096-3445.123.4.354
- Conway, A. R. A., Jarrold, C., Kane, M. J., Miyake, A., & Towse, J. N. (2007). *Variation in working memory*. New York, NY: Oxford University Press.
- Cooksey, J. M. (1993). Do adolescent voices 'break' or do they 'transform'? *Voice*, 2, 15–39.

- Corbin, J., & Strauss, A. (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. (3rd ed.). Thousand Oaks, CA: Sage.
- Cox, P. N. (1968). Some relationships between test anxiety, presence or absence of male persons, and boys' performance on motor task. *Journal of Experimental Child Psychology*, 6, 1–12. Retrieved from <http://www.elsevier.com/locate/jecp>
- Cross, W. E., & Cross, T. B. (2008). Theory, research and models. In S. M. Quintana & C. McKown (Eds.), *Handbook of race, racism and the developing child* (pp 154–181). Hoboken, NJ: John Wiley.
- Curry, J. F., & Hock, R. A. (1981). Sex differences in sex role ideals in early adolescence. *Adolescence*, 16, 779–789.
- Danaher, K., & Crandall, C. S. (2008). Stereotype in applied settings re-examined. *Journal of Applied Social Psychology*, 38, 1639–1655. doi:10.1111/j.1559-1816.2008.00362.x
- Davies, P. G., Spencer, S., & Steele, C. M. (2005). Clearing the air: Identity safety moderates the effects of stereotype threat on women's leadership aspirations. *Journal of Personality and Social Psychology*, 88, 276–287. doi:10.1037/0022-3514.88.2.276
- Davies, P. G., Spencer, S. J., Quinn, D. M., & Gerhardstein, R. (2002). Consuming images: How television commercials that elicit stereotype threat can restrain women academically and professionally. *Personality and Social Psychology Bulletin*, 28, 1615–1628. doi:10.1177/014616702237644
- Davis, S. (1990). Men as success objects and women as sex objects: A study of personal advertisements. *Sex Roles*, 23, 43–50.

- Deaux, K. (1993). Reconstructing social identity. *Personality and Social Psychology Bulletin, 19*, 4–12. doi:10.1177/0146167293191001
- Deaux, K., & Major, B. (1987). Putting gender into context: An interactive model of gender-related behaviour. *Psychological Review, 94*, 369–389.
- Degner, J., & Wentura, D. (2010). Automatic prejudice in childhood and early adolescence. *Journal of Personality and Social Psychology, 98*, 356–374. doi:10.1037/a0017993
- Delgado, A., & Prieto, G. (2008). Stereotype threat as validity threat: The anxiety-sex-threat interaction. *Intelligence, 36*, 635–640. doi:10.1016/j.intell.2008.01.008
- Demorest, S. M. (2000). Encouraging male participation in chorus. *Music Educators Journal, 86*, 38–41. Retrieved from <http://www.menc.org/resources/view/menc-journals>
- Devine, P. G. (1989). Stereotypes and prejudice: Their automatic and controlled components. *Journal of Personality and Social Psychology, 56*, 5–18.
- Devine, P. G., & Brodish, A. B. (2003). Modern classics in social psychology. *Psychological Inquiry, 14*, 196–202. Retrieved from <http://www.jstor.org/stable/1449675>
- Dibben, N. (2002). Gender identity in music. In R. A. R. MacDonald, D. J. Hargreaves & D. E. Miell (Eds.), *Musical Identities*. (pp. 117–133). Oxford, England: Oxford University Press.
- Easterbrook, J. A. (1959). The effect of emotion on cue utilization and the organisation of behavior. *Psychological Review, 66*, 183–201.
- Edwards, J. R., & Williams, J. E. (1980). Sex-trait stereotypes among young children and young adults: Canadian findings and cross-national comparisons. *Canadian Journal of Behavioural Science, 12*, 210–220

- Ellemers, N., Van Rijswijk, W., Roeffs, M., & Simons, C. (1997). Bias in intergroup perceptions: Balancing group identity with social reality. *Personality and Social Psychology Bulletin*, *23*, 186–198. doi:10.1177/0146167297232007
- Ellis, S. J., Kitzinger, C., & Wilkinson, S. (2002). Attitudes towards lesbians and gay men and support for lesbian and gay human rights among psychology students. *Journal of Homosexuality*, *44*, 121–138. doi:10.1300/J082v44n01_07
- Engle, R. W., Tuholski, S. W., Laughlin, J. E., & Conway, A. R. A. (1999). Working memory, short-term memory, and general fluid intelligence: A latent variable approach. *Journal of Experimental Psychology: General*, *128*, 309–331.
- Epstein, D. (2001). Boyz' own stories: Masculinities and sexualities in schools. In W. Martino & B. Meyenn (Eds.), *What About the Boys? Issues of Masculinity in Schools* (pp. 96–109). Buckingham, England: Open University Press.
- Erickson, E. H. (1968). *Identity: Youth and crisis*. New York, NY: Norton.
- Falomir-Pichastor, J. M., & Mugny, G. (2009). "I'm not gay...I'm a real man!" : Heterosexual men's gender self-esteem and sexual prejudice. *Personality and Social Psychology Bulletin*, *35*, 1233–1243. doi:10.1177/0146167209338072
- Fischer, A. R., & Good, G. E. (1998). New directions for the study of gender role attitudes: A cluster analytic investigation of masculine ideologies. *Psychology of Women Quarterly*, *22*, 371–384. doi:10.1111/j.1471-6402.1998.tb00163.x
- Fontana, A., & Frey, J. H. (1994). Interviewing: The art of science. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 361–376). Thousand Oaks, CA: Sage.
- Fornet-Betancourt, R., Gomez-Müller, A., & Gauthier, J. D. (1987). The ethic of care for self as a practice of freedom: An interview with Michel Foucault on January

- 20, 1984. *Philosophy and Social Criticism*, 12, 112–131.
doi:10.1177/019145378701200202
- Freer, P. (2010). Two decades of research on possible selves and the 'missing males' problem in choral music. *International Journal of Music Education*, 28, 17–30.
doi:10.1177/0255761409351341
- Friar, K. K. (1999). Changing voices, changing times. *Music Educators Journal*, 86, 26–29. Retrieved from <http://www.menc.org/resources/view/menc-journals>
- Friedman, I. A., & Bendas-Jacob, O. (1997). Measuring perceived test anxiety in adolescents: A self-report scale. *Educational and Psychological Measurement*, 57, 1035–1047.
- Fry, R. (1985). *It's different for daughters: A history of the curriculum for girls in NZ schools 1900-1975*. Wellington, New Zealand: NZ Council for Educational Research.
- Gates, J. T. (1989). A historical comparison of public singing by American men and women. *Journal of Research in Music Education*, 37, 32–47. Retrieved from <http://www.jstor.org/stable/3344951>
- Gaul, S. (2006). Boys singing their hearts out. *The Boys in Schools Bulletin*, 9, 25–28.
- Gawronski, B., LeBel, E. P., & Peters, K. (2007). What do implicit measures tell us? Scrutinising the validity of three common assumptions. *Perspectives on Psychological Science*, 2, 181–193. doi:10.1111/j.1745-6916.2007.00036.
- Geen, R. G. (1985). Evaluation apprehension and response withholding in solution of anagrams. *Personality and Individual Differences*, 6, 293–298.
- Geen, R. G. (1991). Social motivation. *Annual Review of Psychology*, 42, 377–399.
- Geen, R. G., & Gange, J. J. (1977). Drive theory of social facilitation: Twelve years of theory and research. *Psychological Bulletin*, 84, 1267–1288.

- Gilrain, K. (2006). Care of the professional voice: The neuropsychology of music. *Journal of Singing*, 62, 289–294. Retrieved from http://gateway.proquest.com.ezproxy.auckland.ac.nz/openurl?url_ver=Z39.88-2004&res_dat=xri:iimp:&rft_dat=xri:iimp:journal:JID08848106
- Gimmig, D., Huguet, P., Caverni, J. P., & Cury, F. (2006). Choking under pressure and working memory capacity: When performance pressure reduces fluid intelligence. *Psychonomic Bulletin and Review*, 13, 1005–1010.
- Giroux, H. A., & McLaren, P. (Eds.). (1994). *Between Borders: Pedagogy and the Politics of Cultural Studies*. New York, NY: Routledge.
- Goff, P. A., Steele, C. M., & Davies, P. G. (2008). The space between us: Stereotype threat and distance in interracial contexts. *Journal of Personality and Social Psychology*, 94, 91–107. doi:10.1037/0022-3514.94.1.91
- Goffman, I. (1963). *Stigma*. New York, NY: Simon and Shuster.
- Green, L. (1997). *Music, gender, education*. Cambridge, England: Cambridge University Press.
- Guinote, A., Willis, G. B., & Martellotta, C. (2010). Social power increases implicit prejudice. *Journal of Experimental Social Psychology*, 46, 299–307. doi:10.1016/j.jesp.2009.11.012
- Grimm, L. R., Markman, A. B., Maddox, T. W., & Baldwin, G. C. (2009). Stereotype reinterpreted as a regulatory mismatch. *Journal of Personality and Social Psychology*, 96, 288–304. doi:10.1037/a0013463
- Hall, C. (2005). Gender and boys' singing in early childhood. *British Journal of Music Education*, 22, 5–20. doi:10.1017/S0265051704005960

- Hall, C. (2009). 'Without music I'd just be another kid': Boys and the choral experience. In S. D. Harrison (Ed.), *Male voices: Stories of boys learning through making music* (pp. 16–32). Camberwell, Australia: ACER Press.
- Hall, N., Crisp, R., & Suen, M. (2009). Reducing implicit prejudice by blurring intergroup boundaries. *Basic and Applied Social Psychology*, *31*, 244–254. doi:10.1080/01973530903058474
- Hall, S. (1988). The toad in the garden: Thatcherism among the theorists. In C. Nelson & L. Grosberg (Eds.), *Marxism and the Interpretation of Culture* (pp. 35–57). Urbana and Chicago, IL: University of Illinois Press.
- Hamilton, M. L. (1977). Ideal sex roles for children and acceptance of variation from stereotypic sex roles. *Adolescence*, *12*, 89–96.
- Hamman, D. L. (1982). An assessment of anxiety in instrumental and vocal performances. *Journal of Research in Music Education*, *30*, 77–90. Retrieved from <http://www.jstor.org/stable/3345040>
- Hanley, B. (1998). Gender in secondary music education in British Columbia. *British Journal of Music Education*, *15*, 51–69. doi:10.1017/S0265051700003764
- Harris, J. R. (1998). *The nurture assumption*. New York, NY: Touchstone.
- Harrison, S. D. (2001). Real men don't sing. *Australian Voice*, *11*, 31–36.
- Harrison, S. D. (2002, December). *Engaging boys in the arts*. Paper presented at the Australian Association for Research in Education Conference, Brisbane.
- Harrison, S. D. (2009a). Aussie blokes and music. In S. D. Harrison (Ed.), *Male voices: Stories of boys learning through making music* (pp. 4–15). Camberwell, Australia: ACER Press.

- Harrison, S. D. (2009b). Music making in adolescence and beyond. In S. D. Harrison (Ed.), *Male voices: Stories of boys learning through making music* (pp. 48–61). Camberwell, Australia: ACER Press.
- Harter, S. (1999). *The Construction of the self: A developmental perspective*. London, England: Guilford.
- Hasher, L., & Zacks, R. T. (1988). Working memory, comprehension, and aging: A review and a new view. In G. H. Bower (Ed.), *The Psychology of Learning and Motivation* (Vol. 22, pp. 193–225). San Diego, CA: Academic Press.
- Helu, S. L., Robinson, E., & Grant, S. (2009). *Youth '07: The health and wellbeing of secondary school students in New Zealand. Results for Pacific young people*. Auckland, New Zealand: The University of Auckland.
- Hoffman, R. M. (2001). The measurement of masculinity and femininity: Historical perspective and implications for counseling. *Journal of Counseling and Development, 79*, 472–485. Retrieved from <http://www.counseling.org/publications>
- Hoffman, R. M. (2006). How is gender self-confidence related to subjective well-being? *Journal of Humanistic Counseling, Education and Development, 45*, 186–197. Retrieved from <http://www.counseling.org/journals/>
- Hoffman, R. M., Borders, L. D., & Hattie, J. A. (2000). Reconceptualizing femininity and masculinity: From gender roles to gender self-confidence. *Journal of Social Behavior and Personality, 15*, 475–503. Retrieved from <http://search.ebscohost.com.ezproxy.auckland.ac.nz/login.aspx?direct=true&db=aph&jid=SBP&site=ehost-live>
- Hoffman, R. M., Hattie, J. A., & Borders, L. D. (2005). Personal definitions of masculinity and femininity as an aspect of gender self-concept. *Journal of*

- Humanistic Counseling, Education and Development*, 44, 66–82. Retrieved from <http://www.counseling.org/journals/>
- Hoskins, T. C. (2000). In the interests of Māori women? Discourses of reclamation. In A. Jones, P. Herda & T. M. Suaalii (Eds.), *Bitter sweet: Indigenous women in the Pacific* (pp. 33–48). Dunedin, New Zealand: University of Otago Press.
- Huguet, P., & Régner, I. (2007). Stereotype threat among schoolgirls in quasi-ordinary classroom circumstances. *Journal of Educational Psychology*, 99, 545–560. doi:10.1037/0022-0663.99.3.545
- Inzlicht, M., & Kang, S. K. (2010). Stereotype threat spillover: How coping with threats to social identity affects aggression, eating, decision making, and attention. *Journal of Personality and Social Psychology*, 99, 467–481. doi:10.1037/a0018951
- Irving, L. M., Wall, M., Neumark-Sztainer, D., & Story, M. (2002). Steroid use among adolescents. *Journal of Adolescent Health*, 30, 243–252.
- Jagger, A. M. (1988). *Feminist politics and human nature*. Totowa, NJ: Rowman & Littlefield.
- Johns, M., Schmader, T., & Martens, A. (2005). Knowing is Half the Battle. *Psychological Science*, 16, 175–179. doi:10.1111/j.0956-7976.2005.00799.x
- Jussim, L., Eccles, J. S., & Madon, S. (1996). Social perception, social stereotypes, and teacher expectations: Accuracy and the quest for the powerful self-fulfilling prophecy. In M. P. Zanna (Ed.), *Advances in Experimental Social Psychology* (Vol. 28, pp. 281–388). San Diego, CA: Academic Press.
- Katz, P. A., & Zalk, S. R. (1978). Modification of children's racial attitudes. *Developmental Psychology*, 14, 447–461.

- Keller, J., & Dauenheimer, D. (2003). Stereotype threat in the classroom: Dejection mediates the disrupting threat effect on women's math performance. *Personality and Social Psychology Bulletin*, *29*, 371–381. doi:10.1177/0146167202250218
- Kennedy, M. A. (2002). 'It's cool because we like to sing': Junior high school boys' experience of choral music as an elective. *Research Studies in Music Education*, *18*, 24–34. doi:10.1177/1321103X020180010401
- Kennedy, M. C. (2004). "It's metamorphosis": Guiding the voice change at the American Boy Choir School. *Journal of Research in Music Education*, *52*, 264–280. Retrieved from <http://www.jstor.org/stable/3345859>
- Kessels, U. (2005). Fitting into the stereotype: How gender-stereotyped perceptions of prototypic peers relate to liking for school subjects. *European Journal of Psychology of Education*, *20*, 309–323.
- Klomsten, A. T., Marsh, H. W., & Skaalvik, E. M. (2005). Adolescents' perceptions of masculine and feminine values in sport and physical education: A study of gender differences. *Sex Roles*, *52*, 625–636. doi:10.1007/s11199-005-3730-x
- Knowles, M., Lucas, G. M., Molden, D. C., Gardner, W. L., & Dean, K. K. (2010). There's no substitute for belonging: Self-affirmation following social and nonsocial threats. *Personality and Social Psychology Bulletin*, *36*, 173–186. doi:10.1177/0146167209346860
- Kohlberg, L. (1966). A cognitive-developmental analysis of children's sex-role concepts and attitudes. In E. E. Maccoby (Ed.), *The development of sex differences* (pp. 82-173). Stanford, CA: Stanford University Press.
- Kohlberg, L. (1969). Stage and sequence: The cognitive developmental approach to socialization. In D. A. Goslin (Ed.), *Handbook of socialisation theory and research* (pp. 347–480). Chicago, IL: Rand McNally.

- Koivula, N. (2001). Perceived characteristics of sports categorized as gender-neutral, feminine and masculine. *Journal of Sport Behavior, 24*, 377–393.
- Koza, J. E. (1993). The missing males and other gender related issues in music education: A critical analysis of evidence from the Music Supervisors' Journal, 1914-24. *Journal of Research in Music Education, 41*, 212–232. Retrieved from <http://www.jstor.org/stable/3345326>
- Kulik, L. (2000). Gender identity, sex typing of occupations and gender role ideology among adolescents: Are they related? *International Journal for the Advancement of Counselling, 22*, 43–56.
- Lamb, L., Bigler, R., Liben, L., & Green, V. (2009). Teaching children to confront peers' sexist remarks: Implication for theories of gender development and educational practice. *Sex Roles, 61*, 361–382. doi:10.1007/s11199-009-9634-4
- Lammis, J., Gordijn, E. H., & Otten, S. (2008). Looking through the eyes of the powerful. *Journal of Experimental Social Psychology, 44*, 1229–1238. doi:10.1016/j.jesp.2008.03.015
- Leary, M. R., & Baumeister, R. F. (2000). The nature and function of self-esteem: Sociometer theory. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 32, pp. 1–61). San Diego, CA: Academic Press.
- Leary, M. R., Tambor, E. S., Terdal, S. K., & Downs, D. L. (1995). Self-esteem as an interpersonal monitor: The sociometer hypothesis. *Journal of Personality and Social Psychology, 68*, 518–530. doi:10.1037/0022-3514.68.3.518
- LeBlanc, A. (1994). A theory of music performance anxiety. *Quarterly Journal of Music Teaching and Learning, 5*, 60–68.

- LeBlanc, A., Jin, Y. C., Obert, M., & Siivola, C. (1997). Effect of audience on music performance anxiety. *Journal of Research in Music Education, 45*, 480–496.
Retrieved from <http://www.jstor.org/stable/3345541>
- Liben, L., Bigler, R., Ruble, D. N., Martin, C. L., & Powlishta, K. (2002). The developmental course of gender differentiation: Conceptualizing, measuring, and evaluating constructs and pathways. *Monographs of the Society for Research in Child Development, 67*(2). Retrieved from <http://www.jstor.org/stable/3181530>
- Logel, C., Iserman, E. C., Davies, P. G., Quinn, D. M., & Spencer, S. (2009). The perils of double consciousness: The role of thought suppression in stereotype threat. *Journal of Experimental Social Psychology, 45*, 299–312.
doi:10.1016/j.jesp.2008.07.016
- Mac an Ghail, M. (1994). *The making of men: Masculinities, sexualities and schooling*. Buckingham, England: Open University Press.
- Maccoby, E. E. (1998). *The two sexes: Growing up apart, coming together*. Cambridge, MA: Harvard University Press.
- Martin, C. L. (1990). Attitudes and expectations about children with nontraditional and traditional gender roles. *Sex Roles, 22*, 151–165.
- Martin, C. L., & Halverson, C. F. (1981). A schematic processing model of sex typing and stereotyping in children. *Child Development, 52*, 1119–1134.
- Martino, W., & Meyenn, B. (Eds.). (2001). *What about the boys? Issues of masculinity in schools*. Buckingham, England: Open University Press.
- Martino, W., & Pallotta-Chiarolli, M. (2003). *So what's a boy? Addressing issues of masculinity and schooling*. Maidenhead, England: Open University Press.

- Martinot, D., & Desert, M. (2007). Awareness of a gender stereotype, personal beliefs and self-perceptions regarding math ability: When boys do not surpass girls. *Social Psychology of Education, 10*, 455–471. doi:10.1007/s11218-007-9028-9
- Marx, D. M., Brown, J. L., & Steele, C. M. (1999). Allport's legacy and the situational press of stereotypes. *Journal of Social Issues, 55*, 491–502. Retrieved from <http://www.wiley.com.ezproxy.auckland.ac.nz/WileyCDA/>
- Marx, D. M., & Staple, D. A. (2006). It's all in the timing: Measuring emotional reactions to stereotype threat before and after taking a test. *European Journal of Social Psychology, 36*, 687–698. doi:10.1002/ejsp.310
- McKown, C., & Strambler, M. (2009). Developmental antecedents and social and academic consequences of stereotype-consciousness in middle childhood. *Child Development, 80*, 1643–1659. doi:10.1111/j.1467-8624.2009.01359.x
- McKown, C., & Weinstein, R. S. (2003). The development and consequences of stereotype consciousness in middle childhood. *Child Development, 74*, 498–515. doi:10.1111/1467-8624.7402012
- Meece, J. L., Glienke, B. B., & Burg, S. (2006). Gender and motivation. *Journal of School Psychology, 44*, 351–373. doi:10.1016/j.jsp.2006.04.004
- Mendoza-Denton, R., Park, S. H., & O'Connor, A. (2008). Gender stereotypes as situation behavior profiles. *Journal of Experimental Social Psychology, 44*, 971–982. doi:10.1016/j.jesp.2008.02.010
- Merriam, S. B. (1998). *Qualitative research and case study applications in education*. San Francisco, CA: Jossey-Bass.
- Metheny, E. (Ed.). (1965). *Connotations of movement in sport and dance*. Dubuque, IA: Brown.

- Mikaere, A. (2005). Cultural invasion continued: The ongoing colonisation of tikanga Māori. *Yearbook of New Zealand Jurisprudence*, 8, 134–172.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis* (2nd ed.). Thousand Oaks, CA: Sage.
- Millington, B., & Wilson, B. (2010). Context masculinities: Media consumption, physical education, and youth identities. *American Behavioral Scientist*, 53, 1669–1688. doi:10.1177/0002764210368091
- Mills, J. (2000). Secondary singing inspected. *British Journal of Music Education*, 17, 61–66.
- Mills, M. (2001). Pushing it to the max: Interrogating the risky behaviour of being a boy. In W. Martino & B. Meyenn (Eds.), *What about the boys? Issues of masculinity in schools* (pp. 53–65). Buckingham, England: Open University Press.
- Minichiello, V., Aroni, R., Timewell, E., & Alexander, L. (1995). *In-depth interviewing: Principles, techniques and analysis*. Melbourne, Australia: Longman.
- Miyake, A., Friedman, I. P., Emerson, M. J., Witzki, A. H., Howerter, A., & Wager, T. D. (2000). The unity and diversity of executive functions and their contributions to complex "frontal lobe" tasks: A latent variable analysis. *Cognitive Psychology*, 41, 49–100. doi:10.1006/cogp.1999.0734
- Miyake, A., & Shah, P. (1999). *Models of Working Memory: Mechanisms of Active Maintenance and Expectation Control*. New York, NY: Cambridge University Press.

- Montieth, M. J., Sherman, J. W., & Devine, P. G. (1998). Suppression as a stereotype control strategy. *Personality and Social Psychology Review*, 2, 63–82. Retrieved from <http://www.erlbaum.com/Journals/journals/PSPR/pspr.htm>
- Nayak, A., & Kehily, M.-J. (2001). 'Learning to laugh': A study of schoolboy humour in the English secondary school. In W. Martino & B. Meyenn (Eds.), *What about the boys? Issues of masculinity in schools* (pp.110–123). Buckingham, England: Open University Press.
- New Zealand Choral Federation Inc. (2007a). The Big Sing: Performance order.
- New Zealand Choral Federation Inc. (2007b). The Big Sing: Marking schedule.
- New Zealand Choral Federation Inc. (2008). The Big Sing: Performance order.
- North, A. C., & Hargreaves, D. J. (1999). Music and adolescent identity. *Music Education Research*, 1, 75–92. Retrieved from <http://www.tandf.co.uk.ezproxy.auckland.ac.nz/journals/carfax/14613808.html>
- O'Heron, C. A., & Orlofsky, J. L. (1990). Stereotypic and nonstereotypic sex role trait and behaviour orientations, gender identity, and psychological adjustment. *Journal of Personality and Social Psychology*, 58, 134–143.
- Orlofsky, J. L., & O'Heron, C. A. (1987). Development of a Short-Form Sex Role Behavior Scale. *Journal of Personality Assessment*, 51, 267–277. Retrieved from <http://www.informaworld.com.ezproxy.auckland.ac.nz/smpp/title~content=t775653663>
- Ortner, S. B. (1981). Gender and sexuality in hierarchical societies: The case of Polynesia and some comparative implications. In S. B. Ortner & H. Whitehead (Eds.), *Sexual meanings: The construction of gender and sexuality* (pp. 359–409). Cambridge, England: Cambridge, University Press.

- Osborne, J. W. (2001). Testing stereotype threat: Does anxiety explain race and sex differences in achievement? *Contemporary Educational Psychology*, *26*, 291–310. doi:10.1006/ceps.2000.1052
- Osborne, J. W., & Walker, C. (2006). Stereotype threat, identification with academics, and withdrawal from school: Why the most successful students of colour might be most likely to withdraw. *Educational Psychology*, *26*, 563–577.
- Page-Gould, E., Mendoza-Denton, R., & Tropp, L. (2008). With a little help from my cross-group friend: Reducing anxiety in intergroup contexts. *Journal of Personality and Social Psychology*, *95*, 1080–1094. doi:10.1037/0022-3514.95.5.1080
- Paluck, E. L. (2009). Reducing intergroup prejudice and conflict using the media: A field experiment in Rwanda. *Journal of Personality and Social Psychology*, *96*, 574–587. doi:10.1037/a0011989
- Park, J., Suaalii-Sauni, T., Anae, M., Lima, I., Faumatu, N., & Mariner, K. (2002). Late twentieth-century perspective on Samoan masculinities. In H. Worth, L. Allen & A. Paris (Eds.), *The life of Brian: Masculinities, sexualities and health in New Zealand*. (pp. 43–55). Dunedin, New Zealand: University of Otago Press.
- Patton, M. Q. (1987). *How to use qualitative methods in evaluation*. Newbury Park, CA: Sage.
- Patton, M. Q. (1989). *Qualitative evaluation methods*. (First ed.). Beverly Hills, CA: Sage.
- Patton, M. Q. (1990). *Qualitative evaluation methods*. Thousand Oaks, CA: Sage.
- Phillips, J. (1987). *A man's country? The image of the pakeha male - A history*. Auckland, New Zealand: Penguin.

- Phillips, K. H. (1995). Recruiting and retaining males. *Teaching Music*, 2, 28. Retrieved from <http://www.menc.org/resources/view/menc-journals>
- Piaget, J., & Weil, A. M. (1951). The development in children of the idea of the homeland and of relations to other countries. *International Social Science Journal*, 3, 561–578.
- Powney, J., & Watts, M. (1987). *Interviewing in educational research*. London, England: Routledge and Kegan Paul.
- Quintana, S. M., & McKown, C. (Eds.). (2008). *Handbook of race, racism and the developing child*. Hoboken, NJ: John Wiley and Sons.
- Raab, V. C. (2001). Multiple risk factors in adolescent suicide: A meta-analysis of the published research. *Dissertation Abstracts International Section B: The Sciences and Engineering*, 61, 6719.
- Ranganath, C., Johnson, M. K., & D'Esposito, M. (2003). Prefrontal activity associated with working memory and episodic long-term memory. *Neuropsychologia*, 41, 378–389.
- Regueiro, P. D. (2000). An analysis of gender in a Spanish music text book. *Music Education Research*, 2, 57–73. doi:10.1080/14613800050004431
- Ridgeway, C. L., & Correll, S. J. (2004). Unpacking the gender system: A theoretical perspective on gender beliefs and social relations. *Gender and Society*, 18, 510–531. doi:10.1177/0891243204265269
- Rosenkrantz, P., Vogel, S., Bee, H., Broverman, I., & Broverman, D. (1968a). Sex-role stereotypes and self-concepts in college students. *Journal of Consulting and Clinical Psychology*, 32, 287–295.
- Rosenkrantz, P., Vogel, S., Bee, H., Broverman, I., & Broverman, D. (1968b). *Sex Role Stereotype Questionnaire*. Unpublished manuscript, Santa Barbara: CA.

- Rosenthal, R., & Jacobson, L. (1968). *Pygmalion in the classroom: Teacher expectations and pupils' intellectual development*. New York, NY: Holt, Rinehart.
- Roulston, K. (2001). Data analysis and 'theorising as ideology'. *Qualitative Research, 1*, 279–302. doi:10.1177/146879410100100302
- Roulston, K., & Mills, M. (1998, November). *Music and male teachers: Marching to the beat of the men's movement*. Paper presented at the Australian Association for Research in Education Conference, Adelaide.
- Rout, B. (1997). Being 'Staunch': Boys Hassling Girls. In S. Middleton & A. Jones (Eds.), *Women and education in Aotearoa 2* (pp. 169–180). Auckland, New Zealand: Auckland University Press with Bridget Williams Books.
- Rubie-Davies, C. M. (2006). Teacher expectations and student self-perceptions: Exploring relationships. *Psychology in the Schools, 43*, 537–552. doi:10.1002/pits.20169
- Rubie-Davies, C. M., Hattie, J., & Hamilton, R. (2006). Expecting the best for students: Teacher expectations and academic outcomes. *British Journal of Educational Psychology, 76*, 429–444. doi:10.1348/000709905X53589
- Ryan, K. E., & Ryan, A. M. (2005). Psychological processes underlying stereotype threat and standardized math test performance. *Educational Psychologist, 40*, 53–63. doi:10.1207/s15326985ep4001_4
- Rydell, R. J., Beilock, S. L., & McConnell, A. R. (2009). Multiple social identities and stereotype threat: Imbalance, accessibility, and working memory. *Journal of Personality and Social Psychology, 96*, 949–966. doi:10.1037/a0014846

- Sackett, P. R., Hardison, C. M., & Cullen, M. J. (2004). On interpreting stereotype threat as accounting for African American-White differences on cognitive tests. *American Psychologist, 59*, 7–13. doi:10.1037/0003-066X.59.1.7
- Sackett, P. R., Hardison, C. M., & Cullen, M. J. (2005). On interpreting research on stereotype threat and test performance. *American Psychologist, 60*, 271–272. doi:10.1037/0003-066X.60.3.271
- Sarason, I. G. (1972). Experimental approaches to test anxiety: Attention and the uses of information. In C. D. Spielberger (Ed.), *Anxiety: Current trends in theory and research*. (Vol. 2, pp 383–403). New York, NY: Academic Press.
- Sarason, I. G. (1978). The test anxiety scale: Concept and research. In C. D. Spielberger & I. G. Sarason (Eds.), *Stress and anxiety* (Vol. 5, pp. 193–216). Washington, D.C. : Hemisphere.
- Sarason, I. G. (1980). *Test anxiety: Theory, research and applications*. Hillsdale, NJ: Erlbaum.
- Schlenker, B. R., & Leary, M. R. (1982). Social anxiety and self-presentations: A conceptualization and model. *Psychological Bulletin, 92*, 641–669.
- Schmader, T. (2002). Gender identity moderates stereotype threat effects on women's maths performance. *Journal of Experimental Social Psychology, 38*, 194–201. doi:10.1006/jesp.2001.1500
- Schmader, T. (2010). Stereotype threat deconstructed. *Current Directions in Psychological Science, 19*, 14–18. doi:10.1177/0963721409359292
- Schmader, T., & Johns, M. (2003). Converging evidence that stereotype threat reduces working memory capacity. *Journal of Personality and Social Psychology, 85*, 440–452. doi:10.1037/0022-3514.85.3.440

- Schmader, T., Johns, M., & Forbes, C. (2008). An integrated process model of stereotype threat effects on performance. *Psychological Review*, *115*, 336–356. doi:10.1037/0033-295X.115.2.336
- Schmalz, D. L., & Kerstetter, D. L. (2006). Girlie girls and manly men: Children's stigma consciousness of gender in sports and physical activities. *Journal of Leisure Research*, *38*, 536–557. Retrieved from <http://rptsweb.tamu.edu/Journals/JLR/>
- Shapiro, J., & Neuberg, S. (2007). From stereotype threat to stereotype threats: Implications of a multi-threat framework for causes, moderators, mediators, consequences and interventions. *Personality and Social Psychology Review*, *11*, 107–130. doi:10.1177/1088868306294790
- Shaw, M. E., & Wright, J. M. (1967). *Scales for the measurement of attitudes*. New York, NY: McGraw-Hill.
- Sherman, J. W., Stroessner, S. J., Conrey, F. R., & Azam, O. A. (2005). Prejudice and stereotype maintenance processes: Attention, attribution and individuation. *Journal of Personality and Social Psychology*, *89*, 607–622. doi:10.1037/0022-3514.89.4.607
- Shih, M., Pittinsky, T., & Ambady, N. (1999). Stereotype susceptibility: Identity salience and shifts in quantitative performance. *Psychological Science*, *10*, 80–83. Retrieved from <http://www.blackwellpublishing.com/journal.asp?ref=0956-7976>
- Shore, B. (1981). Sexuality and gender in Samoa. In S. B. Ortner & H. Whitehead (Eds.), *Sexual meanings: The cultural construction of gender and sexuality* (pp. 192–215). Cambridge, England: Cambridge University Press.

- Smith, J. L. (2004). Understanding the process of stereotype threat: A review of mediational variables and new performance goal directions. *Educational Psychology Review, 16*, 177–206. Retrieved from <http://www.springerlink.com.ezproxy.auckland.ac.nz/home/main.mpx>
- Smith, J. L., Sansone, C., & White, P. H. (2007). The stereotyped task engagement process: Role of interest and achievement motivation. *Journal of Educational Psychology, 99*, 99–114. doi:10.1037/0022-0663.99.1.99
- Spence, J. T. (1985). Gender identity and its implications for the concepts of masculinity and femininity. In T. B. Sondregger (Ed.), *Nebraska symposium on motivation: Psychology of gender* (pp. 59–96). Lincoln, NB: University of Nebraska Press.
- Spencer, S., Steele, C. M., & Quinn, D. M. (1999). Stereotype threat and women's maths performance. *Journal of Experimental Social Psychology, 35*, 4–28.
- Spielberger, C. D. (1980). *Test Anxiety Inventory*. Palo Alto, CA.: Mind Garden.
- Spielberger, C. D., & Sarason, I. G. (Eds.). (1989). *Stress and Anxiety* (Vol. 12). Washington, DC: Hemisphere.
- Spradley, J. P. (1979). *The ethnographic interview*. New York, NY: Holt, Rinehart and Wilson.
- SPSS for Windows, v 16. (2007). Chicago, IL: SPSS Inc.
- Stangor, C., Carr, C., & Kiang, L. (1998). Activating stereotypes undermines task performance expectations. *Journal of Personality and Social Psychology, 75*, 1191–1197.
- Steele, C. M. (1997). A threat in the air: How stereotype threat shapes the intellectual identities and performance. *American Psychologist, 52*, 613–629.

- Steele, C. M. (2003). Through the Back Door to Theory. *Psychological Inquiry*, *14*, 314–317. Retrieved from <http://www.erlbaum.com/Journals/journals/PI/pi.htm>
- Steele, C. M. (2010). *Whistling Vivaldi and other clues to how stereotypes affect us*. New York, NY: Norton.
- Steele, C. M., & Aronson, J. (1995). Stereotype threat and the intellectual test performance of African Americans. *Journal of Personality and Social Psychology*, *69*, 797–811.
- Steele, C. M., & Aronson, J. (2005). Stereotypes and the fragility of academic competence, motivation, and self-concept. In A. J. Elliot & C. S. Dweck (Eds.), *Handbook of competence and motivation* (pp. 436–455). New York, NY: Guilford Press.
- Steele, C. M., & Aronson, J. A. (2004). Stereotype Threat Does Not Live by Steele and Aronson (1995) Alone. *American Psychologist*, *59*, 47–48. doi:10.1037/0003-066X.59.1.47
- Steele, C. M., Spencer, S. J., & Aronson, J. (2002). Contending with group image: The psychology of stereotype and social identity threat. *Advances in Experimental and Social Psychology*, *34*, 379–440.
- Stewart, D. W., & Shamdasani, P. N. (1990). *Focus groups: Theory and practice*. Newbury Park, CA: Sage.
- Stone, J., & McWhinnie, C. (2008). Evidence that blatant versus subtle stereotype threat cues impact performance through dual processes. *Journal of Experimental Social Psychology*, *44*, 445–452. doi:10.1016/j.jesp.2007.02.006
- Stricker, L. J., & Ward, W. C. (2004). Stereotype threat, inquiring about test takers' ethnicity and gender, and standardised test performance. *Journal of Applied Social Psychology*, *34*, 665–693. doi:10.1111/j.1559-1816.2004.tb02564.x

- Tajfel, H. (1978). Social categorization, social identity and social comparison. In H. Tajfel (Ed.), *Differentiation between social groups: Studies in the social psychology of intergroup relations* (pp. 61–76). London, England: Academic Press.
- Tajfel, H., & Turner, J. C. (1979). An integrative theory of group behavior. In W. G. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33–48). Monterey, CA: Brooks/Cole.
- Tajfel, H., & Turner, J. C. (1986). The social identity theory of intergroup behavior. In S. Worchel & W. G. Austin (Eds.), *The social psychology of intergroup relations* (pp. 7–24). Chicago, IL: Nelson-Hall.
- Turner, J. C. (1985). Social categorization and the self concept. In E. J. Lawler (Ed.), *Advances in group processes*. (Vol. 2, pp. 71–121). Greenwich, CT: JAI Press.
- Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987). *Rediscovering the social group: A self-categorization theory*. Oxford, England: Blackwell.
- Vandello, J. A., Bosson, J. K., Cohen, D., Burnaford, R. M., & Weaver, J. R. (2008). Precarious Manhood. *Journal of Personality and Social Psychology*, *95*, 1325–1339. doi:10.1037/a0012453
- Van Laar, C., Levin, S., & Sinclair, S. (2008). Social identity and personal identity stereotype threat: The case of affirmative action. *Basic and Applied Social Psychology*, *30*, 295–310. doi:10.1080/01973530802502200
- Vaughan, L. (1999, July). *The missing males: low participation of adolescent boys singing in secondary school*. Paper presented at the Australian Society for Music Education XII National Conference, Sydney, Australia.

- Verkuyten, M., & Thijs, J. (2001). Peer victimization and self-esteem of ethnic minority group children. *Journal of Community and Applied Social Psychology, 11*, 227–234. doi:10.1002/casp.625
- Vick, S. D., Seery, M. D., Blascovich, J., & Weisbuch, M. (2008). The effect of gender stereotype activation on challenge and threat motivational states. *Journal of Experimental Social Psychology, 44*, 624–630. doi:10.1016/j.jesp.2007.02.007
- von Hippel, W., von Hippel, C., Conway, L., Preacher, K. J., Schooler, J. W., & Radvansky, G. A. (2005). Coping with stereotype threat: Denial as an impression management strategy. *Journal of Personality and Social Psychology, 89*, 22–35. doi:10.1037/0022-3514.89.1.22
- Vorauer, J. D., & Sakamoto, Y. (2008). Who cares what the outgroup thinks? Testing an information search model of the importance individuals accord to an outgroup member's view of them during intergroup interaction. *Journal of Personality and Social Psychology, 95*, 1467–1480. doi:10.1037/a0012631
- Walker, J. C. (1988). *Louts and legends: Male youth culture in an inner city school*. Sydney, Australia: Allen & Unwin.
- Walser, R. (1993). *Running with the devil: Power gender and madness in heavy metal music*. Hanover, NH: University Press of New England.
- Walton, G. M., & Cohen, G. L. (2003). Stereotype lift. *Journal of Experimental Social Psychology, 39*, 456–467. doi:10.1016/S0022-1031(03)00019-2
- Wegner, D. M., & Giuliano, T. (1980). Arousal-induced attention to self. *Journal of Personality and Social Psychology, 38*, 719–726.
- Weiss, R. S. (1994). *Learning from Strangers: The art and method of qualitative interview studies*. New York, NY: Free Press.

- Wigfield, A., & Wagner, A. L. (2005). Competence, motivation, and identity development during adolescence. In A. J. Elliot & C. S. Dweck (Eds.), *Handbook of competence and motivation* (pp. 222–239). New York, NY: Guilford Press.
- Wilder, D. A., & Shapiro, P. (1991). Facilitation of outgroup stereotypes by enhanced ingroup identity. *Journal of Experimental Social Psychology, 27*, 431–452.
- Williams, J. E., & Best, D. L. (1976). *Sex Stereotype Measure II and Sex Attitude Measure: General information and manual of directions*. Unpublished manuscript, Winston-Salem: NC.
- Williams, J. E., & Best, D. L. (1990). *Measuring sex stereotypes: A multination study*. Newbury Park: CA: Sage.
- Wills, T. A. (1981). Downward comparison principles in social psychology. *Psychological Bulletin, 90*, 245–271.
- Wine, J. (1971). Test anxiety and direction of attention. *Psychological Bulletin, 76*, 92–104.
- Wolfe, C. T., & Spencer, S. (1996). Stereotypes and prejudice: Their overt and subtle influence in the classroom. *American Behavioral Scientist, 40*, 176–185.
doi:10.1177/0002764296040002008
- Wout, D., Danso, H., Jackson, J., & Spencer, S. (2008). The many faces of stereotype threat: Group and self threat. *Journal of Experimental Social Psychology, 44*, 792–799. doi:10.1016/j.jesp.2007.07.005

Appendices

Appendix A 1: example of Participant Information Sheet for Studies 1 and 2

Appendix A 2: example of Consent Form for Studies 1 and 2

Appendix B 1: example of Participant Information Sheet for Study 3

Appendix B 2: example of Consent Form for Study 3

Appendix C: Table 14 *Categories, Examples of Responses and Percentage of Males and Females Who Responded to Each Category*

Appendix A.1



THE UNIVERSITY OF AUCKLAND
FACULTY OF EDUCATION

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Participant Information Sheet: Principal/Board of Trustees Performance Observation, Questionnaire, Focus Group

Title: Breaking the mould? Boys in secondary school choirs.

To: The Principal/Board of Trustees

My name is Penelope Watson and I am currently undertaking a Master of Arts in Education, at the University of Auckland, under the supervision of Dr Christine Rubie-Davies. I am writing to invite you, your choir directors and choir students to participate in a research project.

I want to find out if boys have a different experience of singing in choirs, to girls. I will measure the group performance quality of the boys in your choir and that of a group of girls in your choir/s (or an associated sister school) in two situations: at a school assembly and during a performance in front of arts peers (fellow music and drama students), for example an arts evening.

Before the assembly performance, the boys will be asked to sing to their best ability in order to help me understand better why boys sing differently to girls. The girls will be told to sing to their best ability with the knowledge that for girls, singing in choirs is traditionally supported. Before the arts performance, both groups would be told that they should do their best in front of a supportive arts-oriented audience who will thoroughly applaud them as young singers. A questionnaire filled out by the student participants immediately after each performance, in a quiet classroom, will also contribute to the measure of performance quality. The Choir Director will be asked to supervise this process. Once the completed questionnaires have been collected they cannot be withdrawn.

I will use focus groups at some schools to find out about boys' experiences as choristers in more detail e.g. whether or not there are reasons some boys may not join choirs, if there are certain factors that motivate boys to join choirs, and whether or not their friends and families approve of them singing in the choir.

So, your choir directors and students would participate by:

- Giving two performances taking about 10 minutes each: one will be in front of the school assembly, and one will be in front of arts peers.
- The students would fill out a questionnaire, which should take about 5 minutes.
- Some of the students may be invited to participate in a focus group. This would take about an hour and would take place in a quiet classroom at the school, during a lunch time.

If you agree, I would like to watch and mark the performances, and also audio record the focus groups. The students can request that the recorder be turned off, or quit the group at any time, but their information cannot be withdrawn. Focus group members will be urged to maintain confidentiality, but this cannot be guaranteed, given the nature of the focus group setting. I will transcribe the recordings. Transcripts, audio recordings and consent forms will be stored separately and securely for six years in Dr Rubie-Davies' office at the Epsom campus, and then destroyed.

Since the performances will not clash with scheduled lessons the research should not intrude on curricular activities. Preparation for the performances should cause your Choir Director and students no extra time and effort on top of their normal rehearsal schedule.

The participants can only be part of the study if they freely give consent. I seek your assurance that the decision to participate or not by any teacher, student or parent, will not affect them in any way. If students choose not to consent they will not perform with the choir, but could perhaps sit in the audience if convenient. They will not be invited to be part of the focus group unless they have given consent. They will be assured that this is perfectly acceptable.

The study will generate findings of interest to all those involved with choral music for boys. It will explore explanations as to why boys are reluctant to sing in choirs and investigate barriers which inhibit their choral performance.

The information collected will be analysed and made into a report and you will receive a summary of the main findings. The final report will be submitted for assessment for the Master of Arts degree from the University of Auckland. A copy of the thesis will be available for you to read at the University of Auckland library. The findings will also be presented in a public seminar to which you and your Choir Director will be invited, and may be used for publication and conference presentations.

Thank you in anticipation for your time and help in making this study possible. If you would like more information about the proposed research project please email me at big_pennw@hotmail.com.

The Head of Faculty is:
Dr John Langely
Epsom Campus
Faculty of Education
The University of Auckland
Private Bag 92601
Symonds Street
Auckland

My supervisor is:
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School of Teaching, Learning and Development
Faculty of Education
The University of Auckland
Private Bag 92601
Symonds Street
Auckland
Telephone (09) 373 7599 ext 82974
c.rubie@auckland.ac.nz

Yours sincerely,

Penelope Watson

For any inquiries regarding ethical concerns please contact: The Chair, University of Auckland Human Participants Ethics Committee, The University of Auckland – Office of the Vice Chancellor, Private Bag, 92019, Auckland. Tel (09) 373 7599 ext 87830

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS
ETHICS COMMITTEE on 13/02/08 for a period of 3 years from 13/02/08 to 13/02/11
Reference 2007/446

Appendix A 2



THE UNIVERSITY OF AUCKLAND
FACULTY OF EDUCATION

Te Kura Akoranga o Tamaki Makaurau
INCORPORATING THE AUCKLAND COLLEGE OF EDUCATION

Epsom Campus
Gate 3, 74 Epsom Avenue
Auckland, New Zealand
Telephone 64 9 623 8899
Facsimile 64 9 623 8898
www.education.auckland.ac.nz

The University of Auckland
Private Bag 92601, Symonds Street
Auckland 1035, New Zealand

CONSENT TO PARTICIPATE IN RESEARCH: PRINCIPAL/BOARD OF TRUSTEES

Performance observation, questionnaire, focus group interview
(This consent form will be held for a period of six years)

Title: Breaking the mould? Boys in secondary school choirs.

Researcher: Dr Christine Rubie-Davies

I have been given and have understood an explanation of this research project. I have had an opportunity to ask questions and have them answered.

I agree that if participants give their consent:

Choir performances may be observed and marked on two occasions.

Choir students may fill out questionnaires after both performances and that once the questionnaires have been filled out and collected, no information can be withdrawn.

Choir students may participate in a focus group, if invited.

The focus group may be audio recorded and transcribed by the researcher with the understanding that the audio recorder can be turned off at any time, and that whilst a participant may leave the focus group at any time, information cannot be withdrawn.

I understand that the researcher will do everything possible to ensure confidentiality in the focus group interviews, but that this cannot be entirely guaranteed.

I give my assurance that the participation/non participation of teachers, parents and students of the school will not affect their relationship with the school in any way.

I understand that the names of the school, Choir Director or students will not be identifiable in any written or oral presentation. I understand that the school's privacy, and that of my students will be respected. I understand that the findings will be used for publication and conference presentations.

I agree to participate in the research.

Signed: _____

Name: _____

School: _____ **Date:** _____

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS
ETHICS COMMITTEE on 13/02/08 for a period of three years from 13/02/08 to
13/02/11Reference 2007/446

Appendix B 1



THE UNIVERSITY OF AUCKLAND
FACULTY OF EDUCATION

Te Kura Akoranga o Tamaki Makaurau
 INCORPORATING THE AUCKLAND COLLEGE OF EDUCATION

Epsom Campus
 Gate 3, 74 Epsom Avenue
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 www.education.auckland.ac.nz

The University of Auckland
 Private Bag 92601, Symonds Street
 Auckland 1035, New Zealand

PARTICIPANT INFORMATION SHEET: PRINCIPAL/BOARD OF TRUSTEES

Questionnaire.

Title: Beliefs and expectations about gender-role and about gender-role conformity: Boys in choirs in secondary schools.

To: The Principal/Board of Trustees

My name is Penelope Watson and I am currently undertaking a PhD in Educational Psychology, at the University of Auckland, under the supervision of Dr Christine Rubie-Davies and Professor John Hattie. I am writing to ask if you might grant me permission to invite your choir director, choristers, and a sample of students and teachers at your school to answer a questionnaire which addresses the topic stated above. The questionnaire is attached, and is a confidential document for your information only.

In a previous study for my PhD I investigated whether boys had a different experience of singing in choirs to girls. In this final study I want to find out if beliefs and expectations about gender role and gender-role conformity are related to the experience of being a boy in a choir.

With your permission, I would like to invite your choir director, your choristers (either boys and/or girls), a sample of 20 teachers on your staff, and one class from each year level at your school, to fill out an anonymous questionnaire. The questionnaire would be completed in 15 minutes, in a quiet classroom or workroom, at a time which would not impinge on teaching and learning, e.g. form period, rehearsal break, or interval. Once these questionnaires have been collected they cannot be withdrawn as I will be unable to identify who has filled in each questionnaire.

If you agree, I would like to issue Participant Information Sheets to all proposed participants informing them of the study and inviting them to participate. The parents

and guardians of student and chorister participants would also receive Participant Information Sheets, and the parents and guardians of any student and chorister participants under the age of 16 years would receive a Consent Form as well. This would enable them to decide whether or not to allow their son or daughter to choose if they would like to be involved in the study.

Once the participants were fully informed, and the relevant parental consent forms had been collected, I would invite the participants to complete the questionnaire which I would administer myself. Permission would be sought from the form teachers concerned, to hand out Participant Information Sheets and Consent Forms to their students, and administer the questionnaire within form period. In the case of choristers, the choir director would be asked if the choristers could fill out the questionnaires in a rehearsal break.

The questionnaires and any consent forms will be stored separately and securely for six years in Dr Rubie-Davies' office at the Epsom campus of The University of Auckland, and then destroyed. As well, the anonymity of your school, teaching staff, choir director and students will be preserved and confidentiality is guaranteed.

The participants can only be part of the study if they freely choose to fill out the questionnaire. Those students and choristers who choose not to participate will be issued with a puzzle to do, unless they opt to engage in their own school work, while the questionnaires are being completed by the participants. I seek your assurance that the decision to participate or not by any teacher, choir director, student or parent, will not affect them in any way. The study will generate findings of interest to all those involved with choral music for boys. It will explore explanations as to why boys are reluctant to sing in choirs and investigate barriers which inhibit their choral performance.

The information collected will be analysed and made into a report and you will receive a summary of the main findings. The final report will be submitted for assessment for the degree of PhD from the University of Auckland. A copy of the thesis will be available for you to read at the University of Auckland library. The findings will also be presented in a public seminar to which you and your Choir Director will be invited, and may be used for publication and conference presentations.

Thank you in anticipation for your time and help in making this study possible.

The Head of Faculty is:
Assoc. Prof. Graeme Aitken
Epsom Campus
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My supervisor is:
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Faculty of Education
The University of Auckland
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Auckland
Telephone (09) 373 7599 ext 82974
c.rubie@auckland.ac.nz

Yours sincerely,

Penelope Watson

For any queries regarding ethical concerns you may contact: The Chair, University of Auckland Human Participants Ethics Committee, The University of Auckland, Office of the Vice Chancellor, Private Bag, 92019, Auckland 1142.
Tel (09) 373 7599 extn. 837 11

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS
ETHICS COMMITTEE on 10/02/10 for a period of 3 years from 10/02/10 to 10/02/13
Reference number 2009/497.

Appendix B 2



THE UNIVERSITY OF AUCKLAND
FACULTY OF EDUCATION

Te Kura Akoranga o Tamaki Makaurau
 INCORPORATING THE AUCKLAND COLLEGE OF EDUCATION

Epsom Campus
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The University of Auckland
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 Auckland 1035, New Zealand

CONSENT TO PARTICIPATE IN RESEARCH: PRINCIPAL/BOARD OF TRUSTEES

Questionnaire.

(This consent form will be held for a period of six years)

**Title: Beliefs and expectations about gender-role and about gender-role
 conformity: Boys in choirs in secondary schools.**

Researcher: Penelope Watson.

I have been given and have understood an explanation of this research project. I have had an opportunity to ask questions and have them answered.

I agree that if chorister, student, choir director, and teaching staff participants give their consent:

They may fill out a confidential questionnaire.

They may not withdraw their questionnaire once it has been collected.

I give my assurance that the participation/non participation of teachers, parents and students of the school will not affect their relationship with the school in any way.

I understand that the names of the school, choir director, choristers, teaching staff or students will not be identifiable in any written or oral presentation. I understand that the school's privacy, and that of my students and staff, will be respected. I understand that the findings will be used for publication and conference presentations.

I agree to participate in the research.

Signed: _____

Name: _____

School: _____ **Date:** _____

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS
ETHICS COMMITTEE on 10/02/10 for a period of three years from 10/02/10 to
10/02/13 Reference number 2009/497.

Appendix C

Table 19

Categories, Examples of Responses and Percentage of Males and Females Who Responded to Each Category

Category and Examples	Females	Percentage Males
Attractiveness	17	3.9
<i>Appearance</i> : Make up. (F) Length of hair. (M/F) Clothes. (F). Handsome. (M) Buff. (M) Pink. (F) Pretty. (F) No tattoos or excess piercings. (F) Ugly. (M) <i>Personality</i> : Fun (F) Ladylike. (F) Inner beauty. (F) Grace. (F). Elegance. (F) Allure. (F) Perfection. (F)		
Androgyny	.13	2
Christian values. (M)		
Biological sex	12	10
Boobs. (F) Vagina. (F) Penis/cock/wood/dick. (M) Testes. (M) Adam's apple. (M) Beard. (M) Chromosomes. (F) Hormones: testosterone (M); oestrogen. (F) Making babies. (F/M) Puberty. (F/M) Periods. (F) Voice pitch. (F/M)		
Forceful/assertive	1	47
<i>Mental strength</i> : Decision-maker. (M) Secure. (M) <i>Superiority</i> : Stronger. (M) The dominant gender. (M) Leader. (M) <i>Physicality</i> : Powerful. (M) Physically tough. (M) Warrior at heart. (M) Macho. (M) Braveness. (M) Sports. (M) <i>Competence</i> : Able. (M), provider/protector (M), paternal (M), practical (M) <i>Emotional capacity</i> : Anger/violence. (M) Doesn't cry/staunch. (M) <i>Other practices and traits</i> : Fart/toilet humour. (M) Impresses the boys. (M) Risk-taking. (M) Cars. (M) Doesn't read. (M) Chivalry. (M) Honour. (M) Freedom. (M)		
Expressive/relational	10.5	.2
<i>Nurturing</i> : Caring. (F) Kind. (F) <i>Relational</i> : Cliques. (F) Snobby. (F) <i>Passivity/gentleness</i> : Weak. (F) Delicate. (F) Trusting. (F) Polite. (F) Pure. (F) Self- conscious. (F) Needs a man/needs to be taken care of/vulnerable. (F) Inferiority/less than guys. (F) <i>Creative</i> : Arts/cultural. (F) Singing. (F) Dancing. (F) Flowers. (F) Literature. (F) Mate-ship. (M)		
Gender self-acceptance	6	4
I like being a male/female. (F/M) It is good/great to be a girl/guy. (F/M)		

Category and Examples	Percentage	
	Females	Males
Gender self-confidence Pride/confidence as a male/ female. (F/M) Esteem. (F)	4	2
Gender self-definition Not caring what others think...being a guy. (M) I feel like being a female means that it's being your own self and comfortable. (F).	2.4	1.4
Not based on stereotypes Being a female means you can do whatever you want. (F)	6	3
Opposite sex Being a girl not being a boy. (F) Opposite of femininity. (M)	4	5
Personal feeling/"a sense" Being a female. (F) Maleness (M)	13.5	12
Sexual orientation Not acting homosexual/gay. (M) Liking/pursuing boys. (F) Liking/ pursuing girls. (M) Being straight. (M)	1.7	5
Self-reliance Responsibility. (F/M) Empowerment. (F/M) Brains/smart. (F/M) High ideals. (F)	3	5
Societal standards Girly. (F) Female traits, characteristics, behaviour, attitudes or mannerisms. (F) Being a guy's guy/doing the man jobs of society. (M) The feeling of expectation to be a stereotypical boy...rugby, sports. (M)	16	3
*Expressive/relational and self-reliance Empathetic, understanding, strong, patient, individual, confident. (F)	4.4	3
*Attractive, expressive/relational, and gender self-acceptance Beauty, strong, equal with males. (F)	1	.6

Note. *Single responses containing a blend of two or more categories.