

Abstract

The purpose of this study was to collect consensual stereotypes about traditional and popular music instruments and roles and to measure the effects of stereotype content priming on gender-role associations with fourth and fifth grade students. In the first experiment with traditional band and orchestra instruments, fifth grade students ($N = 126$) perceived every instrument to have a gender and chose instruments that aligned with their sex. Affecting stereotype content by priming students with pictures of both boys and girls playing each instrument had a small effect on gender-instrument associations. In a second experiment with popular music instruments and roles, fourth and fifth grade students ($N = 376$) perceived every instrument and role to be prescribed for a particular gender and chose instruments and roles that aligned with their sex. Affecting stereotype content by priming students with pictures of only girls in each role or only boys in each role had large significant effects. In the condition with only pictures of girls, boys appeared to experience stereotype threat while girls appeared to experience stereotype lift. Conclusions are drawn from social role theory as to how classroom stereotype content influences future role choice. Implications are made for thoughtful classroom interventions.

Keywords: social role theory, stereotypes, prescribing, essentialism, popular music education, role choice, priming, music education

The association between student sex and preference for instrument choice and musical genres has been well studied (for a full literature review on gender-instrument associations, see: Wych, 2012). The findings point to musical environments in which male students choose to play instruments such as tuba, trumpet, and string bass, while female students choose to play the flute and violin (Abeles & Porter, 1978). In an attempt to discover the underlying mechanisms behind these choices, researchers have often adopted a “masculine” or “feminine” framework to elicit perceptions individuals have about playing a particular instrument (Cramer, Million, & Perreault, 2002; Powell, 2015). It was found that men playing masculine instruments were seen as dominant, active, and capable of leadership positions, while men playing feminine instruments were perceived to be less competent than females playing feminine instruments (Cramer, Million, & Perrault, 2002). In an Australian high school context, it was found that male students were avoidant of participating in a choir because it was seen as a feminine activity. Such barriers can have adverse effects on students’ musical futures when they are pressured to specialize on an instrument that can only perform with a limited range of groups (McKeage, 2004). More recently, researchers have begun to explore how race and gender are portrayed in the classroom. The consensus from such studies suggest that music teachers have the power to influence sex-based instrument choices in such a way that male and female students develop preference for particular instruments less along traditional sex-based lines (O’Neill & Boulton, 1996; Harrison & O’Neill, 2000; Eros, 2008).

While research has uncovered baseline consensual stereotypes about traditional instruments and choral singing, little to no empirical research has looked at popular music instruments and roles. Additionally, interventions in past studies have focused on manipulating preference without explicit attention to the underlying stereotype mechanisms which may drive

preference and choice. The present study aimed to evaluate the effects of two stereotype mechanisms from social role theory, prescription and essentialism, and to extend the breadth of consensual stereotype research to the domain of popular music education.

Prescription

Social role theory (Eagly, 1987) builds upon the work of Allport (1954) in describing the process of intergroup relations. Individuals compare similarities and differences about themselves and what they perceive around them as a mechanism to drive behavior when confronted with an unfamiliar situation (Tajfel, 1982). The cognitive demands needed to make sense of one's own environment means that stereotypes are relied on to make decisions when information is lacking or overwhelming (Allport, 1954; Macrae, Milne, & Bodenhausen, 1994). Social role theory specifically relies on the idea that stereotype content is generated socio-culturally by perceivers in an environment repeatedly witnessing identified individuals in a particular role (Koenig & Eagly, 2014; Miller, Eagly, & Linn, 2015). The generated stereotypes can be based on social norms prescribed to certain activities, such as who is normally seen playing a particular musical instrument. If a student is presented with an unfamiliar situation, such as choosing to play an instrument for the first time, they may rely on socially prescribed group stereotypes about instruments to make their selection. Students as young as three have been found to accentuate certain genres with person-types (Marshall & Shibazaki, 2011), suggesting that music-stereotype associations begin to form at a young age. An important aspect of social role theory framework with regards to the present study is that presenting individuals with future projected roles should affect prescriptions of previous group stereotypes (Koenig & Eagly, 2014).

The present study incorporates the findings of Koenig & Eagly (2014) to develop a content priming intervention designed to project particular musical instruments and roles as gender-neutral (study one) or gender-specific (study two). Significant findings would support previous research in a new domain while advancing the understanding of cognitive stereotype mechanisms that drive instrument selection or musical career choice in students. A strength of the present study is capturing these beliefs and the potential magnitude of effects at an age (fourth and fifth grade) in which music soon becomes an elective choice for students. How students perceive their future music education choices may be a result of how past stereotype content has shaped their understanding of what is prescribed as socially normal. These beliefs are important to consider as backlash may result for students, especially females, who violate social prescriptions (Rudman, 1998; Rudman & Glick, 2002). The effects of backlash on students do not need to be witnessed action. The psychological fear experienced by students who recognize they might not be following social norms is one way in which rigid social structures are maintained. Those that feel a space is “for them” will protect their resources through social dominance, willing to bully and harm those that threaten their status (Crandall, Eshleman, O’Brien, 2002). Interventions that reduce the fear of social judgement in the music classroom could be considered inclusive techniques to help teachers with students that feel spaces are “not for them.”

Essentialism

Social role theory traditionally looks at roles or jobs within a field (e.g. in science: pharmacist, lab technician, astrophysicist, microbiologist) and asks individuals to assess the frequency of which they would expect a certain identity of people to compose the body of that group. Previous research has shown that this method of consensual stereotyping is accurate when

comparing consensual estimates to the actual prevalence of individuals in a field, specifically in science fields (Miller, Eagly, & Linn, 2015). However, little to no research has looked at symbols or “tools of the trade” in terms of essentialist stereotype content. In the essentialist context, an object or job may have an “essence” or “nature” about it (Haslam, Rothschild, & Ernst, 2010). When a guitar player refers to their instrument as “he” or “she,” they are giving an essentialist association to that object. It stands to reason in the science field that many tools such as beakers, test tubes, or soil samples, would not elicit any type of essentialist gender association. However, in a field as entwined with personal expression as is music performance, it may be hypothesized that there could exist essentialist gender associations with particular instruments, which in turn drive instrument choice. These associations would likely align with a student’s own sex, as they would be driven by fear to choose an object they felt was more like themselves, or else be subjected to backlash in the form of social ridicule or physical aggression for violating a norm.

Study One - Method

Participants and design

The participants were 126 fifth grade students (50.8% female) at a single elementary school in the southeastern United States. Data were collected using Google Forms in the spring of 2017 with three fifth grade classes randomly assigned to a control group ($N = 62$) and three fifth grade classes randomly assigned to an experimental group ($N = 64$). All students had the same male music teacher.

Students were first asked to make essentialist stereotype ratings for four orchestra instruments (bass, cello, viola, violin) and six band instruments (clarinet, flute, percussion, saxophone, trumpet, tuba). Students were asked to rate each instrument on a scale of 1 to 7, such

that a 1 meant they felt an instrument was “most like a boy,” a 4 meant an instrument was “neither like a boy or a girl,” and a 7 meant an instrument was “most like a girl.” In the control group, students were simply presented with the name of each instrument. In the experimental group, students saw a picture of a boy and a girl playing each instrument, priming gender-neutral content for each role.

On a new page, students were then asked to select which orchestra and which band instrument they would be most interested in playing in middle school if given the chance. Neither group had pictures of instruments next to a potential choice. The control group relied on previous group stereotypes to make their choices while the experimental group was primed with gender-neutral future choices from the previous page. Students reported their sex last.

The authors wish to point out that in the United States, it is not permissible to ask a participant under the age of 18 to identify their gender without special permissions. In this study, the sex of the student refers to their biological sex assigned at birth. Gender throughout this study refers to perceptions about an identity. They are two separate constructs and should not be considered interchangeable for the purpose of this study.

Results

To analyze the consensual stereotypes of each instrument, the scale of 1 (most like a boy) to 7 (most like a girl) was centered around the gender-neutral rating of 4, such that each rating then calculated the distance from 0 (gender neutral) an instrument was perceived to be. The data were analyzed on the new scale of -3 (most like a boy) to +3 (most like a girl). The grand means, standard deviations, skewness, and kurtosis were calculated (Table 1). The data were normally distributed and no rating violated Levene’s test of equal variances (all $p > .05$). A one-sample t-test set to 0 showed that every instrument was perceived to have a gender, with orchestra

instruments on the whole being perceived as “more like girls” and band instruments on the whole being perceived as “more like boys” (all $p < .001$). The ratings for every instrument aggregated and averaged did not elicit a gender association, $M = .02$, $SD = .44$, $t(1, 125) = .55$, $p = .59$.

Table 1 Descriptive Statistics for Traditional Instrument Consensual Stereotypes

Direction of Stereotype	Role	Grand Mean ($N = 126$)*	Standard Deviation	Skewness	Kurtosis
Most “like a Boy”	Tuba	-1.06	1.65	.55	-.36
-	Trumpet	-1.01	1.47	.18	-.47
-	Bass	-.86	1.49	.28	.10
-	Saxophone	-.59	1.56	.20	-.10
-	Percussion	-.56	1.44	.26	-.53
Least “like a Boy”	<i>Band Instruments Total</i>	-.30	.64		
No Gender Association	<i>All Instruments Total</i>	.02	.44		
Least “like a Girl”	<i>Orch. Instruments Total</i>	.50	.87		
-	Cello	.54	1.68	-.36	-.25
-	Clarinet	.86	1.67	-.30	-.20
-	Flute	.91	1.55	-.25	-.51
-	Viola	1.14	1.70	-.80	-.12
Most “like a Girl”	Violin	1.15	1.69	-.76	.12

*All instrument grand means statistically different from 0 at .001 level, one-sample t-test.

Results of a chi-square test of significance showed that male and female students chose different pictures regardless of condition, band $\chi^2(5, N = 126) = 38.52$, $p < .001$, $V = .55$; orchestra $\chi^2(3, N = 126) = 13.50$, $p = .004$, $V = .33$. Students did not choose different pictures by condition. By using the consensual stereotypes found above, it was possible to find the frequency of which students chose an instrument that aligned with their sex. For the hypothetical band class, students chose a stereotypical instrument to play 73.8% of the time. For the hypothetical orchestra class, students chose a stereotypical instrument to play 62% of the time. For female students across both classes, a stereotypical instrument was chosen 82.8% of the time, suggesting male students were more comfortable violating consensual stereotypes about instruments. Male students most frequently chose trumpet (32%) and percussion (24%) in band while female students overwhelmingly chose flute (56%). Male students in orchestra most frequently chose bass or violin (38.7% each) while female students overwhelmingly chose violin (68%). Across

both classes, female students tended to choose one “girl” instrument as a majority (flute and violin) while the choices of male students tended to be distributed among multiple instruments within a class.

To analyze the effects of gender-neutral content priming, a MANOVA was conducted to look for statistically significant differences between groups on consensual stereotype ratings. The difference in means on the set of ratings was statistically significant with a large effect size, $\Lambda = .409$, $F(10, 113) = 16.36$, $p < .001$, $\eta^2 = .59$. The main effect of condition was not statistically significant, though there was a medium effect size, $\Lambda = .891$, $F(10, 113) = 1.38$, $p = .19$, $\eta^2 = .11$. The main effect of student sex was found to be statistically significant with a large effect size, $\Lambda = .82$, $F(10, 113) = 2.57$, $p < .01$, $\eta^2 = .19$, such that male students rated boy instruments as “more like a boy” and female students rated girl instruments as “more like a girl.” As a post-hoc curiosity, the researchers were interested if there were any group differences between students who chose stereotypical instruments and those who did not. A MANOVA was conducted and it was found that students who violated stereotypes with their choices rated the set of instruments as more gender-neutral than did those who picked only stereotypical instruments, $\Lambda = .497$, $F(10, 113) = 11.451$, $p < .001$, $\eta^2 = .50$, representing the largest effect size for any categorical independent variable.

Discussion

Study one was useful in providing consensual stereotypes of traditional instruments and identifying essentialism as an underlying mechanism for how gender stereotypes drive instrument choice for students. Male and female students in this study perceived each band and orchestra instrument to have a gender. Social role theory typically looks at future jobs and not the “tools of the trade.” The essentialist stereotype assigned to each instrument and the proclivity

of students to pick an instrument that aligned with their sex may suggest that choosing an instrument may be an emerging form of identity expression for students. When choosing a “tool” that can be accentuated to an emerging identity, the majority of students appeared to pick safe choices that would not leave them susceptible to backlash (Rudman, 1998). Perhaps the most interesting finding was that students who violated stereotypes with their instrument choice had no conception of essentialist gender-instrument associations to begin with. This suggests that those who most openly recognized stereotypes were also more likely to follow them. The idea that male and female students choose different instruments to play is not new. However, the association between essentialism and instrument choice had yet to be investigated and with students that will actually have the choice to play an ensemble instrument in the following school year.

Limitations to this study included a small sample size that precluded the intervention from reaching statistical significance despite small effect sizes. Based on the findings from study one, the researchers hypothesized that effects are present for certain conditions, such as for male students seeing pictures of only boys in boy-prescribed roles and vice versa. It may be that when students make ratings based on only gender-neutral priming, the effects of stereotype lift and threat cancel each other out from a statistical standpoint. Because this hypothesis is based on the findings from study one, a follow up study was needed to create the conditions in which it would be possible to tease out these effects. The methodology was improved in the second study by increasing the sample size, controlling for more intentional gender priming, and more directly aligning the design with typical social role theory studies that look at future career choices rather than essentialist associations with the tools of the trade.

Study Two - Method

Participants and design

The participants were 374 fourth and fifth grade students (50.3% female) at a four elementary schools in the southeastern United States. Data were collected using Google Forms in the spring of 2018 with three fourth and three fifth grade classes randomly assigned to a control group ($N = 119$), three fourth and fifth grade classes randomly assigned to a “girl-pictures only” experimental group ($N = 114$), and three fourth and four fifth grade classes randomly assigned to a “boys-pictures only” experimental group ($N = 141$). The teachers of the students in the sample included two male music teachers and two female music teachers. No students in the first study participated in the second study. An influx of displaced students from Puerto Rico resulted in an above average amount of Latino students in the sample for study two compared to the national average. While the exact rate is not yet available for the districts included in the sample, it is safe to assert that study two contained a higher percentage of Latino students than did study one.

Students were first asked to make stereotype ratings prescribing nine popular music instruments and roles (back-up singer, bass guitar player, DJ/Electronic musician, drummer, electric guitar player, keyboard player, rapper, rock star, singer) as “more for boys” or “more for girls.” Students were asked to rate each instrument and role on a scale of 1 to 7, such that a 1 meant an instrument or role was “more for boys,” a 4 meant an instrument or role was “neither for boys or girls,” and a 7 meant an instrument or role was “more for girls.” In the control group, students were presented only with the name of each instrument or role. In the “girl-pictures only” experimental group, students saw pictures of adult women only in that role. In the “boy-pictures only” experimental group, students saw pictures of adult men only in that role.

On a new page, students were then asked to select which popular instrument or role they would be most interested in pursuing as a career. No groups had pictures next to a potential

choice. The control group relied on previous group stereotypes to make their choices while the experimental groups were primed with prescribed future choices based on gender from the previous page. Students reported their sex last.

Results

To analyze the consensual stereotypes of each instrument, the scale of 1 (most for boys) to 7 (most for girls) was centered around the gender-neutral rating of 4, such that each rating then calculated the distance from 0 (gender neutral) an instrument or role was perceived to be. The data were analyzed on the new scale of -3 (most for boys) to +3 (most for girls). The grand means, standard deviations, skewness, and kurtosis were calculated (Table 2). The data were normally distributed and no rating violated Levene's test of equal variances (all $p > .05$). Because the data did not violate normality assumptions, a multiple group MANOVA should be considered robust to violations of equal sample sizes, noting that one group had a slightly larger number of participants. A one-sample t-test set to 0 showed that every instrument and role was perceived to be for a gender, with six popular instruments and roles being rated as "for boys" (rapper, drummer, electric guitar player, rock star, DJ/Electronic musician, bass guitar player) and three popular instruments and roles being rates as "for girls" (singer, back-up singer, keyboard player) (all $p < .001$). In addition to six of nine ratings as being "more for boys," the ratings for every instrument and role aggregated and averaged suggested that the sample of popular music instruments and roles overall were perceived as future careers "more for boys" ($p < .001$).

Table 2 Descriptive Statistics for Popular Instrument and Role Consensual Stereotypes

Direction of Stereotype	Role	Grand Mean (<i>N</i> = 374)*	Standard Deviation	Skewness	Kurtosis
Most "for Boys"	Rapper	-1.53	1.54	.77	-.07
-	Drummer	-1.36	1.50	.55	-.21
-	Electric Guitar Player	-1.33	1.51	.64	.00
-	Rock Star	-1.16	1.58	.35	-.53
-	DJ/Electronic	-1.09	1.63	.48	-.29
Least "for Boys"	Bass Guitar Player	-.82	1.44	.15	.05
Avg. more "for Boys"	<i>"Total" variable</i>	-.51	.73		
Least "for Girls"	Keyboard Player	.54	1.51	-.02	.01
-	Back-Up Singer	.94	1.60	-.38	-.14
Most "for Girls"	Singer	1.10	1.41	.07	-.78

*All grand means statistically different from 0 at .001 level, one-sample t-test.

Results of a chi-square test of significance showed that male and female students chose different pictures regardless of condition with a large effect size, $\chi^2(8, N = 374) = 111.05, p < .001, V = .55$. Students also chose different instruments between all three groups by condition with a medium effect size, $\chi^2(16, N = 374) = 38.10, p = .001, V = .32$, and between both experimental groups with a medium effect size, $\chi^2(8, N = 255) = 23.44, p = .003, V = .30$. By using the consensual stereotypes found above, it was possible to see the frequency of which students chose an instrument or role that aligned with their sex. Overall, students chose a stereotypical future instrument or role to pursue 75.4% of the time. For female students, a stereotypical instrument or role was chosen 66.0% of the time, recognizing only three of nine choices aligned with their sex. For male students, a stereotypical instrument or role was chosen 84.9% of the time, recognizing six of nine choices aligned with their sex. A full breakdown of choice by student sex and condition is provided in table 3.

Table 3 Frequency of Response (%) by sex and condition: Which future role would you like to have?

	Back Up Singer	Bass Guitar Player	DJ/ Electronic Musician	Drummer	Electric Guitar Player	Keyboard Player	Rapper	Rock Star	Singer	Total (N)
Female	4.26	3.19	8.51	10.11	3.72	10.11	6.38	2.13	51.60	188
Male	2.15	4.30	14.52	19.35	11.29	5.91	29.57	5.38	7.53	186
Control	4.20	5.88	11.76	15.13	9.24	13.45	11.76	1.68	26.89	119
BoyPics	3.55	0.71	6.38	12.77	7.80	7.80	18.44	7.09	35.46	141
GirlPics	1.75	5.26	17.54	16.67	5.26	2.63	23.68	1.75	25.44	114

Between Sex, Chi-Square Test of Significance, $\chi^2(8, N=374) = 111.05, p < .001, V = .55$.

Between all Conditions, Chi-Square Test of Significance, $\chi^2(16, N=374) = 38.10, p = .001, V = .23$.

Between BoyPics and GirlPics, Chi-Square Test of Significance, $\chi^2(8, N=255) = 23.44, p = .003, V = .21$.

To analyze the effects of gender-specific content priming, a MANOVA was conducted to look for statistically significant differences between groups on consensual stereotype ratings. The difference in means on the set of ratings was statistically significant with a large effect size for the overall multivariate statistic, $\Lambda = .287, F(10, 359) = 89.89, p < .001, \eta^2 = .71$. The difference in means on the set of ratings was also statistically significant with a medium effect size by condition, $\Lambda = .854, F(20, 718) = 2.94, p < .001, \eta^2 = .08$, and with a large effect size by student sex, $\Lambda = .843, F(10, 359) = 6.71, p < .001, \eta^2 = .16$ (Table 4). There was not a significant difference in stereotype ratings between students that did or did not choose stereotypical instruments, nor were there any significant interaction effects between condition, sex, or stereotypical role choice.

Table 4 Mean Stereotype Ratings by Gender and Condition

Direction of Stereotype	Role	Males (<i>N</i> = 186)	Females (<i>N</i> = 188)	Boy Pictures (<i>N</i> = 141)	No Pictures (<i>N</i> = 119)	Girl Pictures (<i>N</i> = 114)
Most "for Boys"	Rapper	-1.89*	-1.12	-1.83 [^]	-1.59 [^]	-1.09
-	Drummer	-1.58*	-1.10	-1.57 [^]	-1.27	-1.18
-	Electric Guitar Player	-1.67*	-1.00	-1.42	-1.32	-1.26
-	Rock Star	-1.34*	-.95	-1.41 [^]	-1.32 [^]	-.69
-	DJ/Electronic	-1.32*	-.85	-1.06 [^]	-1.59 [^]	-.60
Least "for Boys"	Bass Guitar Player	-.95	-.67	-.94	-.81	-.69
Avg. more "for Boys"	"Total" variable	-.74*	-.27	-.63 [^]	-.54 [^]	-.33
Least "for Girls"	Keyboard Player	.16*	.89	.39	.59	.60
-	Back-Up Singer	.96	.94	.82	1.18	.86
Most "for Girls"	Singer	.95	1.22	.96	1.26	1.05

*Significant contrast with females at the .05 level, [^]Significant contrast with Girl Pictures at the .05 level.

Overall Multivariate Test (Wilks' Lambda), $\Lambda = .287$, $F(10, 359) = 89.89$, $p < .001$, $\eta^2 = .71$,

Multivariate Test of Sex (Wilks' Lambda), $\Lambda = .843$, $F(10, 359) = 6.71$, $p < .001$, $\eta^2 = .16$,

Multivariate Test of Condition (Wilks' Lambda), $\Lambda = .854$, $F(20, 718) = 2.94$, $p < .001$, $\eta^2 = .08$.

A Bonferroni adjustment would suggest the most conservative researcher consider an alpha level of .005 (alpha = .05 / 10 dependent variables = .005) the threshold for statistical significance. Each traditional level of significance will be reported for the reader to apply their own level of tolerance. Between male and female students, significant differences in ratings existed for ratings of electric guitar, keyboard, drummer, DJ/Electronic musician, rapper and the "total" variable at the .005 level, and for rock star at .01 level. No significant differences existed for bass guitar player ($p = .06$), singer ($p = .09$) or back-up singer ($p = .90$). Overall, male students rated "for boy" roles as more "for boys" than did female students, including the "total" variable.

Between all three conditions, significant differences in ratings existed for ratings of DJ/Electronic musician, rock star, rapper, and the "total" variable at the .005 level. Between girl-pictures only and boy-pictures only experimental groups, significant differences existed for rapper, rock star, and the "total" variable at the .005 level, and for DJ/Electronic musician and drummer at the .05 level.

Discussion

Study two was useful in providing consensual stereotypes of popular music instruments and roles. Additionally, study two provided additional data for how stereotype content shapes future role choice within social role theory framework. The key finding from study two was that altering future projected roles affected consensual stereotype ratings and actual student choice quite significantly. The baseline consensual stereotypes suggested that the set of popular music instruments and roles surveyed were seen as a space more “for boys.” As music education moves towards including more popular music in the classroom, it is important that the consensual content of popular culture is seen as inclusive through the eyes of students. If spaces are seen as more for one type of individual, students who reject group norms may be subjected to backlash, perhaps providing impetus for the high rate of bullying and in-school aggression experienced by high school ensemble students in the United States (Elpus & Carter, 2016). Based on the present study, it may follow that female students in a popular music education classroom could feel pressured into being singers only. Several other examples could be drawn based on the data, such as a male student feeling pressured to play an instrument when he wishes to sing. If it is to be believed that instrument and role choices are facets of identity expression, then any interventions which might reduce subjective social pressures leading to reducing the anxiety of musical expression should be pursued.

As hypothesized, there appear to be tangible effects on students when altering stereotype content, which could be parsed more readily in study two by setting up boy-favorable and girl-favorable conditions. An interesting and potentially powerful finding can be posited by scrutinizing the condition which violates the most stereotypes, in this sample the girl-pictures only condition. Six of the nine roles were seen as “for boys” in every group, so providing pictures of girls only in these roles were priming more counter-stereotypical information than

stereotypical information. When female students saw pictures of adult women in every role, they chose stereotypical roles only 53.8% of the time. Instead of choosing primarily singer, far more female students chose DJ/Electronic musician or drummer, two roles which were rated significantly different between conditions. This might be considered stereotype lift, such that female students had their fear of choosing the wrong role reduced and felt more comfortable choosing a role or instrument that truly interested them. The male students in the girl-pictures only condition may have experienced stereotype threat. The male students chose a future role along a stereotype 92% of the time when shown pictures of girls in every role. Confronted with the fear of choosing a role that was actually for girls, male students predominately chose rapper, another role in which the ratings differed significantly by conditions and the role which happened to be rated as most “for boys” overall.

Consensual stereotypes exist about instruments and musical roles at an age when students will soon make elective choices about participation in music programs. Study two represents a more ideal methodology for conducting stereotype research within social role theory, although study one did elucidate an interesting essentialist mechanism behind instrument choice. The two studies combined suggest essentialism and future projected content are two mechanisms which educators may be able to influence in their classrooms to paint a more gender-inclusive portrait of music learning. How stereotype content is presented to students appears to prime their future choices as a result of augmenting the appropriateness of roles and instruments based on gender. In reality, these are socially constructed norms for which the teacher bears responsibility for allowing students to safely reject. Interventions as simple as showing female students pictures of girls in a space “more for boys” had immediate effects on which roles they were interested in pursuing. In the quest for making inclusive music spaces, future research projects might utilize a

similar methodology to evaluate the consensual stereotypes of various musical roles (e.g. conductor, concert master, composer, folk musician, etc.) and to evaluate the effectiveness of various interventions to make roles and instruments appear less prescribed by gender for students. The importance of such findings are to reduce the potential for backlash and to allow students the social mobility to choose any method of musical expression they should desire. These issues could easily be examined through the lens of ethnicity, sexuality, or ability as well.

Limitations to this study were that the researchers did not collect from which school each response came from as a result of using Google Forms, limiting the researchers to analysis of variance when the design could ultimately be conducted with hierarchical linear modeling to analyze teacher sex as a level-two variable. As mentioned before, sex and gender are treated as two constructs intentionally for legal reasons. The researchers cannot claim that students' reported sex align with desired gender roles. An admittedly heteronormative association of boy-male and girl-female is suggested throughout this study. Using gender-only terms with adult populations would be desirable in future studies.

References

- Abeles, H. F., & Porter, S. Y. (1978). The sex-stereotyping of musical instruments. *Journal of Research in Music Education, 26*, 65–75.
- Allport, G. W. (1954). *The nature of prejudice*. Cambridge, MA: Psychology Press.
- Cramer, K. M., Million, E., & Perreault, L. A. (2002). Perceptions of musicians: gender stereotypes and social role theory. *Psychology of Music, 30*, 164-174.
- Crandall, C. S., Eshleman, A., O'Brien, L. (2002). Social norms and the expression and suppression of prejudice: the struggle for internalization. *Journal of Personality and Social Psychology, 82*(3), 359-378.
- Eagly, A.H. (1987). *Sex differences in social behavior: A social-role interpretation*. Hillsdale, N.H.: Erlbaum.
- Elpus, K., & Carter, B. A. (2016). Bullying victimization among music ensemble and theatre students in the United States. *Journal of Research in Music Education, 64*(3), 322-343.
- Eros, J. (2008). Instrument selection and gender stereotypes: A review of recent literature. *Update, 27*(1), 57–64.
- Harrison, A. C., & O'Neill, S. (2000). Children's gender-typed preferences for musical instruments: An intervention study. *Psychology of Music, 28*, 81–97.
- Haslam, N., Rothschild, L., and Ernst D. (2000). Essentialist beliefs about social categories. *British Journal of Social Psychology, 39*(1), 113-127.
- Koenig, A. M., & Eagly, A. H. (2014). Evidence for social role theory of stereotype content: observations of groups' roles shape stereotypes. *Journal of Personality and Social Psychology, 107*(3), 371-392.

- Macrae, C. N., Milne, A. B., & Bodenhausen, G. V. (1994). Stereotypes as energy-saving devices: A peek inside the cognitive toolbox. *Journal of Personality and Social Psychology, 66*(1), 37-47.
- Marshall, N., & Shibazaki, K. (2011). Two studies of musical style sensitivity with children in early years. *Music Education Research, 13*(2), 227-240.
- McKeage, K. M. (2004). Gender and participation in high school and college instrumental jazz ensembles. *Journal of Research in Music Education, 52*, 343-356.
- Miller, D. I., Eagly, A. H., & Linn, M. C. (2015). Women's representation in science predicts national gender-science stereotypes: evidence from 66 nations. *Journal of Educational Psychology, 107*(3), 631-644.
- O'Neill, S. A., & Boulton, M. J. (1996). Boys' and girls' preferences for musical instruments: A function of gender? *Psychology of Music, 24*, 171-183.
- Powell, S. J. (2015). Masculinity and choral singing: An Australian perspective. *International Journal of Music Education, 33*(2), 233-243.
- Rudman, L. A. (1998). Self-promotion as a risk factor for women: The costs and benefits of counterstereotypical impression management. *Journal of Personality and Social Psychology, 74*(3), 629-645.
- Rudman, L. A., & Glick, P. (2002). Prescriptive gender stereotypes and backlash toward agentic women. *Journal of Social Issues, 57*(4).
- Tajfel, H. (1982). Social psychology of intergroup relations. *Ann. Rev. Psychol, 33*, 1-39.
- Wych, G. M. F. (2012). Gender and instrument associations, stereotypes, and stratification: a literature review. *Update, 30*(2), 22-31.