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Gender Based Music Instrument Stereotypes and Counter-stereotypes Portrayed in Children's Animated Media

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GENDER BASED MUSIC INSTRUMENT STEREOTYPES AND
COUNTER-STEREOTYPES PORTRAYED IN CHILDREN'S ANIMATED MEDIA

by

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Dedication

To my daddy.

I did something that hasn't been done before.

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Abstract

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This study investigated the appearance of gender based music instrument stereotypes and counter-stereotypes portrayed in children's cartoons. The images that were presented were organized by instrument families (i.e., brass, woodwind and percussion) and quantified to determine the frequency in which young children were exposed to specific music instrument stereotypes and counter-stereotypes.

The results found children's cartoons portrayed both music instrument stereotypes and counter-stereotypes, with certain instrument being shown as more stereotypical than others. The flute was played by only female characters and the majority of all brass instruments were performed by male characters. However, percussion instruments which are typically categorized as a male dominated instrument was portrayed as female preferred instrument in this study.

The identification of the gendered messages transmitted by these images can contribute to a better understanding of the development or and the application of gender stereotypes that appear to occur in music instrument choice and preference.

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Chapter 1

Introduction

In the 1980s, music education began to address issues associated with gender and gender roles in the music classroom (Lamb, 2007). One of the earliest topics of research focused on the influence of gender themes in regard to music instrument selection. Research findings suggested that females are more apt to choose woodwind instruments while males were more inclined to choose brass and percussion instruments to play (Abeles & Porter, 1978; Conway, 2000; Fortney, Boyle, & DeCarbo, 1993). Some researchers suggest that these are student-based decisions that are influenced by families and peers, personal motivation, role models and sound (Abeles & Porter, 1978; Bazan, 2002; Conway, 2000; Fortney et al., 1993; Hallam, Rogers, & Creech, 2008). Other scholars propose instrument selection is based on teacher influence including physical characteristic analysis, input from elementary music teachers and playing tests (Bayley, 2004; Bazan, 2002; Johnson & Stewart, 2005). In order to better understand the role of gender in relation to music instrument stereotypes, clarification of the terms sex and gender will be presented.

Often, the terms gender and sex are used interchangeably. However, since the 1970s, researchers have attempted to provide specific definitions in order to distinguish between the use of the terms sex and gender. However, such a clear distinction is not always appropriate and has been the basis for much discussion among scholars (Unger & Crawford, 1993).

Sex is defined as a biological trait determined by physical characteristics and hormones that classify an individual as male or female (Acker, 1992; West & Zimmerman, 1987). Researchers have extended this definition to include sex as a permanent physical difference between the bodies of male and female individuals as it relates to human reproductive organs and chromosomal make up (Acker, 1992; Money & Ehrhardt, 1972).

Gender, however, is not based on a set of singular characteristics, but is rather a flexible process governed by social means (Acker, 1992; West & Zimmerman, 1987). Gender is socially and culturally constructed and defines what is considered appropriate behavior and attitudes for males and females (Kramer, 2011; Lorber, 2009; Stewart, 2003; Unger, 1979; West & Zimmerman, 1987). During this process, in order to categorize differences between sexes, a label is assigned of male or female based on social cultural expectations. Central to this process of gender is that it assigns a label to categorize the differences between male and females (Acker, 1992; Unger, 1979). In essence, sex is based on nature and gender would be based on nurture.

Sex and gender are inter-correlated in the development of one's identity. Identity is the understanding an individual has of their unique qualities and can be shaped and maintained by social process (Baron, 2001; Bem, 1993). A person's identity is created through various aspects of socialization and the development of one's identity is central to a person's sense of self (Rogers & Rogers, 2001).

Socialization is the process of learning the rules of a specific social group or culture to which one belongs or will belong; it is the process of learning to define oneself within a particular group (Kramer, 2011; Lindsay, 1990; Maccoby, 2008; Stockard, 2007). It is not a static process but a process that continuously evolves, thus, "socialization is never total and never finished" (Berger & Luckmann, 1966, p.137). While an individual will progress through many facets of socialization, primary and secondary socialization are the most critical in a person's development in the early years.

Primary socialization begins at birth there is no definitive age of when it ceases. Hammond and Cheney (2009) postulate that it ends at approximately age 5. At this point it begins to couple with secondary socialization. Primary socialization is considered the most important aspect of the human development and has the most impact on self-identity the future (Kramer, 2011; Maccoby, 2008). During this period, children adopt specific roles and attitudes in regards to functioning in the world. An introduction to socialization begins on the first day of life; for example, parents begin to dress their children traditional gender-based colors such as pink for girls and blue for boys (Lindsay, 1990; Leaper & Friedman, 2008). Primary socialization is guided by influences of parents, siblings, peers or others considered important to the child's life and is critical in the first years of life (Isbell, 2008).

Secondary socialization proceeds primary socialization and refers to the process by which an individual gains a specific knowledge and vocabulary for functioning in a particular subgroup within a culture (Berger & Luckmann, 1996;

Chermack & van der Merwe, 2003). Often, this is related to the learning of roles in a particular career or job; however it is not limited to this definition alone. Young children, once in a school environment, begin to develop specific behaviors that will enable them to adapt to a new culture which requires an "amount of conformity" to "learn to belong and cooperate in large groups" to gain acceptance (Hammond & Cheney, 2009, "Three Levels of Socialization," para.3). Berger and Luckmann (1967) offers an explanation for the unique position of secondary socialization; since it occurs after primary socialization whatever new knowledge is acquired must be combined with the enduring knowledge gained in primary socialization. This combination of primary and secondary socialization creates a new reality for the person experiencing it.

Children can experience positive or negative effects as a result of socialization. For example, inappropriate socialization can influence a child's attitude towards negative behaviors such as violence (Wilson, 2008) and eating disorders (Levine & Murnen, 2009). Also, children can also be socialized in regard to societal norms such as religion (i.e., church attendance, personal beliefs, prayer, religious observances) (Cornwell, 1988), ethnic identity (i.e., academic motivation and attitudes, cultural heritage) (Huynh & Fuligni, 2008).

Socialization also influences gender (i.e., boys play with trucks and girls play with dolls) (Leaper & Friedman, 2008). The combination of primary and secondary socialization may have a strong influence on gender socialization and an individual's acquisition of gender stability, gender identity, the learning of

specific sex roles, and gender stereotypes (Kramer, 2011; Leaper & Friedman, 2008; Rogers & Rogers, 2001).

The influences that guide gender socialization and aid in the creation of gender stereotypes are numerous and include the family, peers and the media. Parents can inform children's developing ideas and values by indirectly expressing their own personal approaches to gender when encouraging specific types of behaviors. Peers also exert a measure of influence on children as many play scenarios of are associated with learned gender roles and peer groups appear to be stricter in the enforcement of traditional gender behaviors (Leaper & Friedman, 2008; Lindsay, 1990; Maccoby, 1988).

It is possible that media has a vast reach across the lives of children in part to the numerous varieties of media that are present in a child's life. The influence of media occurs both consciously and subconsciously as children are inundated with images and messages from a variety of sources as well (Lindsey, 1990).

Theoretical Framework

Cultivation Theory. When televisions entered homes during the middle of the 20th century, researchers questioned the effect media would have on viewers (Belson, 1956; Himmelweit, 1962; Lazarfeld, 1955; Maccoby, 1951). Their research indicated that television was a structured environment of symbols and messages and this realization was paramount to understanding the impact television has on an individual's behavior and beliefs (Shanahan & Morgan, 1999; Signorielli, 2001). To this end, cultivation theory proposes a continual

process between a person and the messages they receive from images found in media. This process depends on the breadth and amount of images and how an individual's life and beliefs intersect with what is found on television (Gerbner, 1998). Moreover, it hypothesizes that the greater a person's television watching, the more likely their beliefs and behaviors will reflect images and messages depicted on television (Morgan & Shanahan, 2010; Signorielli, 2001).

In 1967, Dr. George Gerbner created the Cultural Indicators Project to investigate the most prominent images found on prime time television. The Cultural Indicators Project uses a three-pronged research strategy; an institutional process analysis, a message system analysis and a cultivation analysis (Gerbner, 1970). Institutional Process Analysis considers the various ways and decisions that govern the creation of mass media messages, while Message System Analysis investigates the structure, trends and patterns of the messages and finally the Cultivation Analysis studies the relationship between Institutional Process Analysis, Message System Analysis and societal beliefs that are influenced by the messages seen in mass media (Gerbner, 1970, 1998; Morgan & Shanahan, 2010).

Gerbner (1970) posits that very little was known about the creation and structure of message systems that seemed to exercise a measure of control over society and their thoughts or decisions. He defined these message systems and the communication of these messages as a process of a person's interaction through symbols, message systems and the media used to convey these messages (Gerbner, 1966). The Cultural Indicators Project also explored the

specific themes these images communicated to society. These messages included gender roles, violence, and age, to name a few (Gerbner, 1998; Morgan & Shanahan, 2010).

Two components of cultivation theory are mainstreaming and resonance. Due to television's central role in society, it serves as a primary vehicle for the transmission of cultural views, perceptions and outlooks to society. Mainstreaming is defined as television's role in the creation of a set of beliefs or values (Gerbner, 1998). This theory further suggests that while an individual may hold certain beliefs and exhibit certain behaviors, continual exposure to television images may create a new set of beliefs which may be different from established or learned behaviors (Gerbner, 1998; van Evra, 2004).

Gerbner (1998) defines resonance as a phenomenon where television provides additional messages that are of particular salience to an individual. The extra dose of messages amplifies cultivation within the individual and can be strengthened when there are no other sources of information to compare to television's messages (van Evra, 2004). This lack of competing messages from other sources can mean that television can have a stronger impact.

Need for Study/Purpose

In response to concerns about gender and gender-roles in Music Education, the National Association for Music Education (NAfME) created a Special Research Interest Group (SRIG) through the Society for Research in Music Education (SRME) called *Gender Research in Music Education (GRIME)*.

This group disseminated research addressing gendered differences in the classroom, feminist issues in music, and gender stereotypes (Lamb, 2007).

Numerous studies have investigated musical instrument choices of young students and have proposed that instruments can be characterized as masculine or feminine and individual instruments may governed by gender constructs (Abeles & Porter, 1978; Conway, 2000; Delzell & Leppla, 1992; Eros, 2008; Fortney et al., 1993; Hallam et al., 2008; Lamb, 2007). For example, male students choose more to play the trumpet or percussion and females choose the flute or the clarinet. Although sources of influence on music instrument choice are complex, it is possible that some initial influences may begin during a child's primary development prior to age three through with mass media and more specifically, children's animated media and cartoons. Nielsen ratings for television viewing estimates that children between the ages of 2-11 watch an average of 24 hours of television a week, approximately three hours per day (Nielsen Media Research, 2011). This suggests that children receive thousands of impressions about specific social norms, including music instruments and music instrument playing as portrayed in numerous animated media.

The purpose of this study is to investigate the number of gender based music instrument stereotypes and counter-stereotypes found in children's cartoons. The identification of such images and the messages they convey can contribute to a better understanding of the development of gender stereotypes A young child's belief in these stereotypes could influence future music instrument choice and preference. Guiding research questions include:

1. What gender based music instrument stereotypes and counter-

stereotypes are portrayed in children's animated media?

2. How often do gender based music instrument stereotypes and counter-

stereotypes in children's animated media occur?

Chapter 2

Literature Review

The development of a gender identity occurs during the primary socialization stage of development. In this stage, one begins to understand the physical distinctions that make them either a boy or a girl and that these distinctions of being male or female are permanent (Bussey & Bandura, 1992; Golombok & Fivush, 1994; Kramer, 2011; Leaper & Friedman, 2008; Lindsay, 1990; Stockard, 2007). Once the construction of gender identity has begun, the individual begins to learn specifically about the gender roles they will ascribe through the development of their own identity and the observation of the gender-roles they see around them (Kramer, 2011; Lorber, 2009). Theories such as social learning theories and the cognitive development theories of social cognitive theory and gender schema theory address the socialization process of young children. These theories define children's development of gender, which includes the development of gender identities, gender roles and gender stereotypes.

Social Learning Theory

Albert Bandura developed social learning theory in the 1960s. Central to this theory is the process of identification. Identification is the process in which a person will shape their actions, thoughts and feelings after a model they view as similar to themselves (Bandura, 1969; Rogers & Rogers, 2001). Social learning theory is a gradual process for learning gender and the most important role models during the formative years are those closest to the child including

parents, teachers and peers (Lindsey, 1990; Rogers & Rogers, 2001). It emphasizes the learning of social behaviors through observational learning which includes modeling and reinforcement (Golombok & Fivush, 1994; Lindsey, 1990; Rogers & Rogers, 2001; van Evra, 2004).

Observational learning is the process of imitation in which an individual observes a specific behavior demonstrated by a model and then imitates the exhibited behavior (Bandura, 1969; Baron, 2001). The most salient models are often people who are closest to the child such as parents or peers (Golombok & Fivush, 1994; Lindsey, 1990; Rogers & Rogers, 2001). However, the process of imitation is not limited to human models. Symbolic models, such as images displayed on television or the internet can be observed and imitated in the same manner as a human model (Intons-Peterson, 1988; Stewart, Cooper, & Stewart, 2003). According to van Evra (2004), social learning theory was one of the first theories of development to explain the impact television has on children. In choosing models to imitate, young children typically prefer models that are of the same sex as themselves and to which they feel a connection (Bandura, 1969; Golombok & Fivush, 1994; Intons-Peterson, 1988; Rogers & Rogers, 2001; Stewart et al., 2003). There are four processes that govern observational learning: attention, retention, production and motivation (Bandura, 1969; Baron, 2001; Grusec, 1992; van Evra, 2004).

To begin the observational learning process, an individual has to feel a connection with the model they are observing (Bandura, 1969, Grusec, 1992; van Evra, 2004). This is referred to as attention. The attention one places on a model

is determined by various factors: the power of the model to make an impact on the observer, the characteristics of the model and motivation (Bandura, 1969; Grusec, 1992). In addition, the values and preferences of the observer also dictate how much attention they will give to the model (van Evra, 2004).

Once the person has observed the traits of the model, this information is retained and restructured into a system of verbal and visual symbols that are committed to memory (Grusec, 1992; van Evra, 2004). This is the hallmark of the retention stage. Creating this coding system allows the individual to recall and rehearse information for use at another time.

In the production phase, the symbolic codes created in the retention stage are used as a guide to produce specific actions similar to the original modeled behavior (van Evra, 2004). Production is influenced by a person's ability and their skill set, which will determine whether they will be able to re-enact observed behavior (Bandura, 1969).

Though a person may have progressed through the attention, retention and production phases of observational learning, it will not guarantee that a person will exhibit the observed behaviors (van Evra, 2004). Sufficient motivation is required to perform learned behaviors. This motivation can either encourage or discourage the performance of behavior depending on the need to perform the behavior and the consequence surrounding the performance (Baron, 2001; Grusec, 1992).

In addition to modeling and observation, Social Learning Theory suggests that reinforcement and repetition play an essential role in behavioral learning

(Golombok & Fivush, 1994; Intons-Peterson, 1988; Rogers & Rogers, 2001). The repetition of behavior is dependent on the consequences and reinforcement attached to demonstrated actions and behaviors. As children's knowledge of expected behaviors for their sex increases, they begin to realize that the performance of certain actions results in positive reinforcement and feedback and other actions result in negative reinforcement and feedback (Golombok & Fivush, 1994; Intons-Peterson, 1988; Rogers & Rogers, 2001). For example, behavior deemed suitable for a specific gender (i.e., girls playing with dolls, boys playing with trucks) is rewarded and actions that are inconsistent with expected gender roles (i.e., girls playing with trucks, boys playing with dolls) are negatively punished (Baron, 2001; Golombok & Fivush, 1994; Intons-Peterson, 1988). This awareness leads children to believe positively reinforced behaviors are expected of their gender and they will more frequently exhibit those behaviors (Golombok & Fivush, 1994; Intons-Peterson, 1988; Rogers & Rogers, 2001). The degree of reinforcement of behaviors differs among males and females, as males tend to be held to stricter gender guidelines than females. This is phenomenon is referred to as differential reinforcement (Golombok & Fivush, 1994).

Lindsey (1990) states that while social learning theory's primary focus is the importance of motivation in the repetition of actions; it does not consider that the process of socialization is influenced by many factors. This makes finding consistency within the socialization process difficult. Social learning theory suggests that children take a passive role in the creation of their gender identity

and it is not necessarily dependent on the maturity level of the child (Rogers & Rogers, 2001).

Cognitive Theories of Development

Cognitive theories of development expounded upon the work of social learning theory by not only discussing the role of observation, modeling and reinforcement in gender development but also incorporate the influence of a child's cognitive developmental in the creation of gender (Baron, 2001; Bussey & Bandura, 1984; Golombok & Fivush, 1994; Lindsey, 1990). Expanding his previous work on social development, Albert Bandura proposed that people are agents, which allows them to make things happen purposely due to their greater control in organizing, reflecting and regulating their thoughts and actions (Bandura, 2001a, b). This higher cognitive functioning is termed triadic reciprocal causation. It is a continual contribution of the social environment, cognitive ability and behavior as influences on an individual person (Bandura, 2001; Bussey & Bandura, 1992).

Cognitive theories reference the active role children take in the construction of gender in their understanding the world due to their growing cognitive maturity (Martin & Ruble, 2004; Stewart et al., 2003; Stockard, 2007). Social cognitive theory not only addresses biological influences of development but also outside influences which include those closest to an individual such as parents and peers and more distant influences such as the mass media (Bussey & Bandura, 1992; Rogers & Rogers, 2001).

Swiss psychologist Jean Piaget was one of the first to examine the cognitive development of children and believed children's cognitive development occurs in four specific stages: sensorimotor, preoperational, concrete and formal (Baron, 2001; Blake & Pope, 2008).

Piaget calls the earliest stage of cognitive development the sensorimotor stage (Baron, 2001; Piaget, 1964). The sensorimotor stage is from birth to 18 months, however, other researchers suggest that this stage may extend to 24 months old (Baron, 2001; Blake & Pope, 2008). During the sensorimotor stage, children develop the foundational knowledge needed for future representational thought. An example is object permanence, the idea that an object will continue to exist in the mind of a child even when hidden from view (Baron, 2001; Blake & Pope, 2008; Piaget, 1964). Infants also have developed a concept of cause and effect which allows the child to experiment with a variety of motor activities (Baron, 2001, Piaget, 1964). These motor activities are the method in which they gain knowledge as infants have not yet learned to use symbols to represent objects or events (Baron, 2001).

The pre-operational stage is the beginning of symbolic activity and occurs from approximately age of two until age seven (Baron, 2001; Blake & Pope, 2008). In this stage, children acquire the ability to create mental representations of objects and events-something they were unable to accomplish in the sensorimotor stage (Baron, 2001; Piaget, 1964). Most importantly, the pre-operational period is the time when children begin to develop language (Blake & Pope, 2008; Piaget, 1964). A concept developed in pre-operational stage is

symbolic play in which children pretend one object is another object (Baron, 2001). Cognitive processing during this stage remains rigid and illogical (Baron, 2011; Blake & Pope, 2008; Piaget, 1964).

Logical thought is further developed in the concrete operations stage. During this stage which starts at age seven and progresses until about eleven, children are able to classify and order objects as well as an understanding of conservation (Baron, 2001; Piaget, 1964). According to Baron, conservation is a child's further understanding of object permanence as they realize that even though the outward appearance of an object may change, the object has remained the same (2001).

Lastly, the formal operations stage is the final cognitive stage starting from age 12 and lasting through adulthood. At this stage, there is an understanding of both abstract and real situations (Piaget, 1964). Reasoning is also at its most mature stage as there is the development of hypothetico-deductive reasoning, which is the ability to create, logical thought concerning symbols and the generation of hypothesis (Baron, 2001; Blake & Pope, 2008; Piaget, 1964). This growing cognitive maturity allows children to develop deeper knowledge of the world (Golombok & Fivush, 1994; Intons-Peterson, 1988; Stockard, 2007).

Applying Piaget's theories of cognitive development to the creation of gender, Lawrence Kohlberg suggested the development of gender becomes more complex as children's cognitive abilities mature and their understanding of the world expands. As children take a more active role and gain a sophisticated

understanding of gender, these newly developed concepts have a greater influence on their behavior choices (Lindsey, 1990; Martin & Ruble, 2004; Stewart et al., 2003). Kohlberg defines three concrete stages for gender development: gender identity, gender stability and gender constancy. The timeline for a child to progress through all of these stages begins approximately at age two and continues until five or six (Golombok & Fivush, 1994; Intons - Peterson, 1988; Rogers & Rogers, 2001; Stewart et al., 2003; Stockard, 2007).

The creation of gender identity is dependent on what an individual believes about the relationship between their biological sex characteristics and the social meaning attached to them (Kramer, 2011; Unger, 1979). This belief is an internal expression of an individual's view of himself or herself as either masculine or feminine and is central to a person's sense of self-awareness (Intons-Peterson, 1988; Money & Ehrhardt, 1972; Rogers & Rogers, 2001).

From the ages of three to four, a child will have the capacity to recognize that whatever gender they are presently, they will continue to be that gender throughout their lives. This is the second stage known as gender stability. During this period, children are able to apply this same awareness to other people they encounter (Baron, 2001; Golombok & Fivush, 1994; Intons-Peterson, 1998). However, they do not have the realization that gender is constant throughout various situations (Golombok & Fivush, 1994).

According to Kohlberg, gender constancy occurs in stage three, which is approximately at age five. In this phase, children begin to understand that not only is gender a permanent part of a person, but that gender stays constant

regardless of the situation (Golombok & Fivush, 1994; Intons-Peterson, 1998; Leaper & Friedman, 2008; Rogers & Rogers, 2001). The child accepts that if an individual has an appearance that is contrary to their gender (i.e., a boy wearing a dress), the child will still identify that person as male and not female (Baron, 2001). The child makes decisions based on what they know about gender and will seek out behaviors that are in agreement with their knowledge (Stewart et. al., 2007).

Though many researchers have cited Kohlberg's research as the guide for a child's gender development, they have also determined the exact age in which a child progresses through each stage is debateable and this discussion has yet to be resolved (Golombok & Fivush, 1994; Rogers & Rogers, 2001; Ruble, Martin, & Berenbaum, 2006).

In contrast to Kohlberg's theories of cognitive gender development, gender schema theory concludes that children need only a basic understanding of gender identity and gender stability to guide their decisions regarding thought and behavior (Bussey & Bandura, 1992; Martin & Ruble, 2004).

Gender Schema Theory

Gender schema theory, established by Sandra Bem in the 1980s, combines social learning theory's belief that gender influenced behavior is learned by observation and social cognitive theory's basic tenet that a child's cognitive abilities influence the development of gender (Bem, 1983). According to the theory, as children develop they continuously learn their society's meanings of what it means to be male and female and develop specific schemas based on

that knowledge. These schemas influence their future thinking and actions (Bem, 1981, 1983; Martin & Ruble, 2004).

At its basic definition, a schema is a cognitive structure that organizes knowledge, behavior and perceptions (Golombok & Fivush, 1994; Intons-Peterson, 1988; Stockard, 2007). Thus, gender schemas are multifunctional. They organize knowledge of feminine and masculine conceptions; they assist in the understanding of gender within the social world and guide decision-making (Bem, 1981; Golombok & Fivush, 1994; Martin & Ruble, 2004; Stockard, 2007). According to Baron (2001) "Gender schemas develop in part because adults call attention to gender even in situations where it is irrelevant" (p.323).

Gender schema theory labels persons as gender schematic or gender aschematic. Gender schematic persons act in ways that are in accordance with what society expects them to behave concerning their sex and hold the same standards of masculinity and femininity for others. Those that are gender-aschematic are those who do not conform to hose same gender based cultural standards (Bem, 1983; Intons-Peterson, 1988).

The hallmark of gender schema theory is the process of defining gender and not the actual content of gender (Baron, 2001; Bem, 1981; Bem, 1983). Individuals who are gender- schematic process information with respect to society's definition of what is appropriate behavior for males and females (Intons -Peterson, 1988). For children, in learning their society's specific gender schemas they learn what characteristics are linked with their own sex and hence with themselves (Bem, 1981). The more prominent the schema, the more

individuals are expected to adhere to its prescription and apply the same gender specific information to others (Baron, 2001; Bussey & Bandura, 1992). Having knowledge of these schemas allows the individual to divide of the world into two categorizes- masculine and feminine (Baron, 2001).

However, just because a child has knowledge of various gender schemas; it does not always guarantee that they will abide by the role defined by the schema even though we give more credence to established schemas that conform to our standards of the world (Golombok & Fivush, 1994). Conceptually, it can be said that a gender stereotype and a gender schema are one in the same (Lindsey, 1990).

Gender Stereotypes

This process of labeling a child's sex is influenced by parents and other significant persons in a child's early life (Leaper & Friedman, 2008). Though the terms sex and gender tend to be used interchangeably, there are discernible differences between the two terms. Sex is defined as permanent biological and physical traits while gender is defined as a socially created notion of appropriate behaviors based on sex (Acker, 1992; West & Zimmerman). Once a child's sex has been labeled, the concept of gender is formed. The actions and attitudes of a person that is governed by gendered expectations of a particular culture are called gender roles (Macionis, 2003; Rogers & Rogers, 2001). These expectations control how an individual interacts with others, communication styles and appearance (Kramer, 2011; Macionis, 2003). Gender roles are an outward expression of one's gender identity and showcase to others what gender

category one belongs to (Kramer, 2011; Money & Ehrhardt, 1967). Specific roles include learning what it means to be a father or a mother as these are linked by sex and gender (Kramer, 2011).

In learning about the specifics of one's gender, stereotypes begin to be created and guide decisions for behavior. A stereotype governs beliefs regarding the shared attributes of a particular group (Denmark & Pauldi, 2008; Golombok & Fivush, 1994). Stereotypes function less as a label and more so as an assumption persons make about the specific behaviors and attitudes an individual exhibits (Denmark & Pauldi, 2008). Gender stereotypes are the presumption of expected characteristics of an individual based on their sex. These stereotypes are influenced by cultural values and define specific traits, which govern appropriate behavior for males and females (Denmark & Pauldi, 2008; Golombok & Fivush, 1994; Lindsay, 1990; Rogers & Rogers, 2001).

Gender stereotypes serve a dual purpose as they differentiate between characteristics of males and females and provide guidelines for how men and women should govern themselves (Denmark & Pauldi, 2008, Tobin et. al, 2010). Stereotypes can function as a guide to support assumptions an individual may have about behaviors and traits of a particular person (Denmark & Pauldi, 2008). Young children are constantly exposed to stereotypes at an early age in which they develop an understanding of the stereotypes specific to their culture. These early experiences have an influence on their perceptions of gender throughout their lives (Golombok & Fivush, 1994).

Assigning meaning to prescribed behavior in terms of gender can affect how an individual views the behavior as either positive or negative (Golombok & Fivush, 1994). Lindsey (1990) states that while stereotypes are not inherently negative, they can take a dangerous turn when individuals are grouped in terms of assumed characteristics and are limited in some way by the stereotype. In interactions with strangers, we consciously and subconsciously use gender stereotypes to make assumptions about their likes and dislikes and personality (Denmark & Paludi, 2008). This suggests that while influences of gender stereotypes are pervasive throughout one's life, the prescription of gender stereotypes in a particular situation is controlled by an individual's personal values.

Gender Socialization Influences

Gender socialization, gender development and gender stereotypes are all influenced by the family, teachers, media, peers or others with whom individuals identify emotionally (Bussey & Bandura, 1992; Gooden & Gooden, 2001; Leaper & Friedman, 2008; Woodford, 2002).

Family. The family is one of the most significant factors in socialization. The family has the responsibility for socializing the child during the critical first years of life. Parents can inform children's developing ideas and values by indirectly expressing their own personal approaches to gender when encouraging specific types of behaviors thereby stating or endorsing certain gender stereotypes (Leaper & Friedman, 2008; Lindsay, 1990). Things such as adult interactions and perceptions of children, the color of clothing (i.e., pink for girls

and blue for boys), the selection of children's toys (i.e., stoves and dolls for girls and building blocks for boys) and statements which may seem harmless but are actually transmitting and inadvertently reinforcing gender stereotypes (Leaper 2002; Leaper & Friedman, 2008; Zosuls et al. 2009).

Adults hold preconceived beliefs the sex and gender of children before they are able to form their own personalities. Condry and Condry (1976) studied the responses of adults towards infants. Participants in this study watched a series of videotapes where infants were presented with a teddy bear, a jack in the box, a doll and a buzzer. On the accompanying questionnaire, participants were only informed of the gender of the baby they were observing. The results of this study confirmed that adults have assumptions based on gender about the emotional responses of infants. For example, with respect to the jack in the box, the baby exhibited three emotions, aggression, crying and surprise. Participants who were told the baby was a boy, classified the behavior as anger, a masculine reaction. When advised the infant was a girl, fear was the emotion assigned. Additionally, the results of the study also suggested that males are more inclined to see differences in child reactions and act on them (Condry & Condry, 1976).

In a 1995 study, Karraker, Vogel, and Lake asked 40 pairs of parents to complete three tasks relating to their perceptions of their newborns. They were asked to describe their infant as if they were having a conversation with a friend, rate their child on a 9-point adjective scale and lastly, answer a series of questions concerning their expectations and perceptions of their child. The results of their study indicated that in general, mothers preferred to use neutral

and feminine terms to describe their children. Both mothers and fathers rated girls using words such as "finer featured," "less strong," and "delicate" while labeling their sons as "strong "and "hardy" (Karraker et al., 1995).

In exploring the toy choices of preschool children, Raag and Rackiliff (1998) found that children chose toys based on the expectations of their parents. In this study it was found that girls selected more feminine toys such as dishes and boys selected a tool set. The results also indicate that children are attuned what their parents believe to be appropriate play choices. Children believed that mothers would think that cross gendered play as good or indifferent. In contrast, they believed fathers would rate cross gendered play as bad (Raag & Rackliff 1998). Raag and Rackliff found, however, that such a correlation was more pronounced between father and son than mother and daughter or mother and son (1998).

Findings such as those described above were also found in research by Weinraub et al. (1984). An aspect of their study looked at the correlation between children's gender labeling and parental influence and found that fathers and mothers who adhere to more traditional male and female roles (i.e., fathers work outside of the home and mother's do not) had children who were more stringent in their labeling of toys by gender. Leaper (2002) also concurred stating that fathers are more apt to adhere to traditional gender roles, are more likely to encourage specific gender play than are mothers and in general both fathers and mothers are more likely to strictly enforce gender conformity in their sons.

Peers. Peers also exert a measure of influence on the socialization of young children. After the family, peers have the second most powerful influence on children as many play scenarios of children are associated with learned gender roles (Lindsey, 1990). Peer groups appear to be stricter in the enforcement of traditional gender behaviors and all in combination have a major impact on the development of gender roles (Leaper & Friedman, 2008; Lindsay, 1990; Maccoby, 1988). Children from preschool through middle childhood show a tendency to separate themselves by gender in social groupings as well and cross gendered social and play groups are not readily accepted (Leaper & Friedman, 2008; Maccoby, 1988).

Neppl and Murray (1997) found that in pairings of children into different groups, each gender demonstrated certain trends within the context of play. In their study, children were paired in one of two groupings, either girl-girl or girl-boy. Each pairing engaged in either masculine typed free play which consisted of playing with a pirate ship and figurines or feminine free play consisting of a doll house and doll figurines. The results of the study found that there was a shift of dominance in the pairing based on gender and the type of activity. In the girl-boy pairing, girls were reluctant to follow the lead of the boys during feminine play and this was vice versa for the boys during masculine play, suggesting each gender's dominance in gender typed play. In addition, there was very little cooperative play seen in the heterogeneous pairing in comparison to the homogenous girl-girl pairing. The engagement of dramatic play was also seen on a gender continuum as boys were more engaged during masculine play and girls

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during feminine play hinting at a reluctance of both genders to participate in cross gendered play.

This same reluctance has been illustrated in a study by Epstein, Kehily, Mac-an-Ghaill, and Redman (2001) who investigated the structure of play on playgrounds in London. Their findings showed that during school break time, the boys were hesitant to allow girls to participate in school yard football (soccer). They found not only the social environment to be non-conducive to cross gendered play but also the physical environment. The soccer pitch (field) was set up so that it took up most of the playground space, thereby relegating those who were not playing, mainly girls to the perimeter. In their interviews with the students, a girl expressed her desire to play, but explained that "boys never let you join in" and even if the girls start their own game "the boys come along and join in and the then girls are pushed out" (p.162). She mentions that a male teacher stated once that "boys play rougher" (p.162). Another school yard studied yielded similar results, while girls at this school were allowed one day a week to play football, the boys still thought it to be unfair because not only did the girls get to play with them, though sparingly, they also got a day to themselves (Epstein et al., 2001).

Children and Television Media

The combination of the socialization factors of family, peers and the media, specifically television in socialization are instrumental in the creation of as well as the perpetuation of gender stereotypes. Gender stereotypes have an effect on many aspects of life including future career choice (Correll, 2001;

McWhirter, 1997; Steele & Barling, 1996), governmental roles (Dolan, 2005; Huddy & Terkilsden, 1993; Sanbonmatsu, 2002), and the arts (Cramer, Million, & Perreault, 2002; Hanley, 1998). Television can be viewed as a pictorial representation of our world, depicting the people in our world, how they interact with one another which can give insight to the inner workings of our culture (Golombok & Fivush, 1994; Lindsay, 1990; Signorielli, 2001; van Evra, 2004). Of all the forms of media, television is the most influential on children due to their increased exposure to it. In a study reported in *Pediatrics*, a household media survey was conducted of 180 parents and their children and found the majority of homes had four televisions; almost 100% of respondents had a television in the living room with an additional two-thirds reporting a television in their child's room and children spent over 3 hours a day watching television (Jordan, Hersey, McDivitt, & Heitzler, 2006).

Another study completed by Rideout, Foehr, and Roberts (2010) found that children watched over an average of 4 hours of television a day, which is more than the 2 hour recommendation given by the American Academy of Pediatrics. This study found television consumption was higher among children who had a television in their room. This increase in television watching can further broadcast gender stereotypes for children as the same characters are presented consistently from week to week. This may encourage the modeling of certain stereotypes, can alter self-images and mold a child's view of what a man or woman should be (Golombok & Fivush, 1994; Lindsay, 1990; Signorielli, 2001).

In regards to the actual content found on television, Thompson and Zerbinos (1997) found that children are aware of the gender differences found in cartoons on television. Seventy-eight percent of the children in their study reported that there were more boy characters in cartoons than girls (p.423). The study also suggested that the more that a child watches and recognizes gender stereotypes; it is more likely that the child will choose a gender stereotyped future profession such as fire-fighting or police officer for boys and girls choosing professions such a teaching or nursing.

Durkin and Nugent (1998) observed that children ages four and five showed specific expectation of gender based on representations in television. In their study, children viewed 12 scenes of a task, six feminine oriented tasks and six masculine oriented tasks. The children were asked to predict the gender of the person performing each task, to rate the ability level of someone who could perform the task and to rate their personal ability in completing the task. Results concluded that both boys and girls exhibited strong traditional stereotypes in regard to masculine and feminine genders, with masculine activities having more stereotyped responses. This can be due to familial socialization where fathers hold stereotypes more stringently than mothers. Most interestingly, in the self-confidence rating task, while girls rated their competence on female tasks highly, they felt masculine activities were not within their reach. This is in contrast to results reported by boys who felt they could do both male and female tasks, even though they rated the male task stronger (Durkin & Nugent, 1998).

Gender Stereotypes in Music

Gender stereotypes in music are not a new phenomenon. For decades, women were excluded from participation in collegiate marching bands and were unable to secure employment as band directors based on the perceptions of what women were capable of accomplishing as compared to men (Foster, 2002; Sperry, 1954). Musicians in western culture believe music transcends the boundaries of politics and culture. As a result of this belief, music education is behind other fields in education when it comes to applying gender theories to pedagogical practices, student learning, and education, while these theories have been applied to research in other areas. The issue, however, is the difficulty that educators have in seeing that music itself is a gendered entity. For example, music is culturally perceived as a "feminine" subject in Western society in comparison to "masculine" subjects like science or math (Lamb, 2007).

McKeage (2004) studied ensemble participation in high school and college instrumental jazz ensembles. The study discovered that a larger portion of males participated in high school jazz ensembles with 80% male participation and 52% of female participation. Though there was a decline in membership at the collegiate level, similar trends were seen as 50% of males continued to perform in jazz bands while only 14% of women continued. In citing the reasons for discontinuing their participation in jazz, women rated needing to focus on classical playing, feeling more comfortable in traditional ensembles than in jazz and being unable to envision jazz career goals higher in their decision to quit playing jazz (McKeage, 2004).

Other studies, focusing on vocal music suggest that low participation by boys in choirs is a symptom of gender stereotypes. Typically, females outnumber males in choir participation (Green, 2001; Moore, 2008). This trend can be attributed to such things as the belief that singing is a girl's activity and in one study, 82% of teachers reported that girls were more successful at singing (Moore, 2008).

Gender Stereotypes in Music Instrument Choice

In the study *The Sex-Stereotyping of Musical Instruments* by Abeles and Porter (1978), the researchers found that the association of gender with musical instruments limits the range of musical experiences available to male and female musicians in numerous ways. Prior assignment of gender to a musical instrument seems to be an important factor in a child's choice of instrument. The first in the series of four studies done by Abeles and Porter, the question presented "Does the association of gender with musical instruments exist in the general population?" In their study they discovered that the answer to that question is yes. Another question asked was "At what age does sex-stereotyping of instruments begin?" There are marked difference between the stability of choice from boys and girls. As time progressed, girls seemed to gravitate towards more feminine instruments while boys' selection remained relatively stable at the masculine end of the scale from kindergarten through the eventual selection of an instrument, usually the start of the middle school years.

Secondary school students in the United States often enroll in elective courses beginning at the middle school level. In addition to choosing to enroll in

band, these students further identify themselves through musical choices. Adria

Hoffman (2008) explored sixth grade band students' development of an identity

in music within their middle school social and academic communities. She noted

in her study that simply by entering a band classroom one may observe larger

numbers of female flutists than male flutists (Hoffman, 2008). While each student

interacts with the musical content and social context in unique ways, music

teachers may base pedagogical decisions on assumptions about what band

students find meaningful. Hoffman noted that participants introduced the topic of

gender without any prompts. The students' interviews also made connections

between gender and the personality of their section. The students were also able

to accurately describe social interaction within sections of an instrumental

ensemble. As one student noted, the only two girls in the percussion section

spent most of their time standing near each other. In summary, Hoffman noted

that gender preceded other descriptive characteristics of peer perceptions,

instrument choices and musical associations.

Recently, many dissertations have investigated gender bias in

instrumental music instruction. Researchers discovered that gender played a

part in the instrument selection whether it was chosen by the student, teacher, or

parent. Students still perceive the flute as the most "feminine" instrument

(Harrison & O'Neill, 2003; O'Neill & Boulton, 1996).

One variable that may affect instrument preference is the association of

gender with musical instruments. In various cultures around the world, certain

instruments are restricted by law to only one gender; flutes are mostly regarded

as a male instrument, for example in New Guinea, "holy" flutes were only played by males and females were not allowed to look at them (Kunst, 1956). Continued research by Kunst found that the musical bow is considered a male instrument by the Bunum people of Formosa and a female's instrument by the Big Namba of New Hebrides. Across the board, drums are regarded as male instrument. In Surinam, women are relegated to singing and if they play drums, cultural myth has it that their breasts will grow to the ground. However, in areas such as Indonesia and the surrounding islands, it is not uncommon to find women playing the drums.

An international study of musical instrument distribution by gender found that on almost every continent males outnumbered females in wind ensemble participation, except in Asia. Instrument trends by gender were also consistent as females were more likely to play woodwinds and males performed on brass and percussion instruments (Sheldon & Price, Sex and instrumentation distribution in an international cross-section of wind and percussion ensembles, 2005).

Chapter 3

Methodology

Purpose

This study investigates the appearance of gendered music instrument stereotypes found in children's animated media because research suggests that children engage in approximately three to four hours of television viewing a day (Nielsen Media Research, 2011). In order to determine the number of music instrument gender stereotypes found in children's animated media, this study utilized a content analysis approach. A content analysis "is a research technique for making replicable and valid inferences from text (or other meaningful matter) to the contexts of their use" (Krippendorff, 2004, p. 21). Animated episodes of children's cartoons were viewed to determine if specific gender-based stereotypes for music instruments were portrayed in children's media.

Data Collection

Series Selection. The data used in this study was children's animated cartoon shows from various television networks. In 2007, Baker and Rainey conducted a content analyses on children's media use. A result of this study was the development of a guide that provided a list of television networks which cater to children's programming. This guide was used to determine eligible networks for the study. The result of this study suggested the most prominent networks that provide the most children's programming include Public Broadcasting Service (PBS), Nickelodeon, Cartoon Network, Warner Bros. (no longer airing) and Disney.

Each network's mission statements and channel history was analyzed to determine eligibility for this study. After researching the mission statements and histories of each channel, PBS Kids (a subsidiary of the parent network, PBS) was selected due to its strong reputation as a resource for educational children's programming states:

> *PBS KIDS is committed to making a positive impact on the lives of children through curriculum-based media, using new and traditional platforms to support children in their acquisition of knowledge and critical thinking skills while empowering their imagination and curiosity of the world. Providing the highest-quality programming and learning environment for children, PBS' children's media invites kids on a journey to explore the world around them with non-violent, age-appropriate content that offers positive role models for children to learn from and grow with (PBS Kids, 2012).*

Relevance or purposive sampling was used to determine the images used in the study. This type of sampling allows the researcher to pre-examine potential subjects in an effort to eliminate subjects that may not exhibit the desired characteristics relevant to answering stated research questions (Creswell, 2008; Krippendorff, 2004). Using this method, the researcher excluded series and television shows that did not meet criteria to be classified as animated.

The PBS Kids Television Show Library contained two separate series lists and each list was reviewed for duplicate titles. Once duplication was eliminated, there were 39 television series eligible for this study. Each series was

categorized as either fully animated or non-fully animated. Only fully animated series were used in this study. Non-animated or partially animated series that included live action or real life actors that interact with animated characters within the story line were excluded. Series that utilized puppets or a combination of live and animated content, webisodes, which are shows that are shown exclusively on the internet and series that were no longer aired were also excluded. Using these criteria, 18 television shows were eliminated from the study, leaving 21 series.

The remaining 21 series were examined for consideration in this study as a fully animated series. In order for a television series to be classified as "fully" animated, the series had to meet the following criteria: the series had to utilize animated characters a majority of the running time, computer generated images for a majority of the series, traditional animation for a majority of the series or any combination thereof. A television series that used interstitial programming (live action stories) between animated episodes was included, as the majority of the episode was still animated. Shows that use interstitial programming typically have two animated stories within a set time frame (i.e., 2-12 minute episodes in a 30 minute show). An example of this type of show is *Arthur*. Using this criterion, a total of 21 television series were eligible for inclusion in the study.

Episode selection. Once eligible series were determined, episodes that were music specific or contained music inclusion were selected. The series selected for the study were researched for individual episode summaries. These summaries and descriptions were obtained through *TV Guide, PBS Kids,* and

PBS Kids Parents. A total of 1,934 episode descriptions were read. A keyword search of the show titles and corresponding episode descriptions was performed to identify episodes with possible music instrument inclusion. Words such as *music, band, instrument*, and *names of band instruments* were used in the keyword search. Episode descriptions including words that implied a musical event: *parade*, *concert, variety show*, *musical, talent show* and *recital* were also used. Using these terms, 106 episodes suggesting a musical topic were considered for the study. A secondary keyword search using words such as *choral*, *voice* and *singing* served to identify episodes that would be excluded from the study. This search resulted in the elimination of 42 episodes. The combination of both keyword searches produced 64 episodes that met the criteria for inclusion in the study.

Cartoon episodes that were eligible for the study were accessed using Netflix, Hulu, iTunes, YouTube, and individual series websites. An effort was made to locate all episodes eligible for inclusion in the study; however, not all episodes were readily available for viewing. Of the 64 episodes that were eligible for the study, 38 episodes were viewed for images to be used in the study. The only images that were used for the study were those that show actual images of a character playing an instrument.

Instrument Classification. Instruments were classified as either female-gender specific or male gender specific. The flute and clarinet were classified as female gender based instruments and saxophone, French horn, trumpet, trombone, tuba, and percussion were classified as male gender based

instruments (Abeles & Porter, 1978; Conway, 2000; Fortney et al., 1993; Hallam et al., 2008).

Coding Frame. A researcher-designed coding frame was used to code each eligible image for the study (see Appendix A). To create the coding frame, previous research was consulted to determine specific instrument stereotypes and counterstereotypes for each gender. Female stereotypes included instruments in the woodwind family (flute and clarinet) and female counter-stereotypes included the saxophone, the brass family (trumpet, French horn, trombone, tuba) and the percussion family. Male stereotypes included instruments in the brass and percussion families and male counter-stereotypes included instruments in the woodwind family (Eros, 2008; Lamb, 2007).Another function of the coding frame was to organize the number of appearances of male and female characters, the number of times masculine and feminine instrument stereotypes and the number of time counter-stereotypes were portrayed.

A specific set of characteristics were outlined to determine the gender of each character viewed as either female or male. A character's gender was determined by the character's name, pronouns used in referring to that particular character (i.e., him, her, she, etc.), and the appearance and dress of the character. The first two criteria were especially important in categorizing cartoons that used anthropomorphic characters. Anthropomorphic characters are cartoon characters that have been given human attributes but are not human themselves. This study focused on the number of impressions (263) included in this study and each instance of a character appearing playing an instrument was tallied on the

coding frame. However, if a character played the same instrument more than once in a scene but each appearance was interrupted by the appearance of another character, each appearance was counted separately. A total of 263 (N = 263) images were included in the study.

Data Analysis

All images were recorded into the coding frame using a series of numbers in order to conduct a statistical analysis of the data. Codes included were the following: gender (male =1, female =2); instruments (flute = 1 clarinet = 2, Saxophone = 3, trumpet = 4. French horn = 5. Trombone = 6, tuba = 7 and percussion = 8). Data was analyzed using descriptive statistics in Statistical Package of the Social Sciences (SPSS) to determine the result of the study. Initial data processing included frequencies of gender of the characters and the instruments the played. Subsequent analysis included cross tabulation of gender and instrument to determine the percentage of music instrument stereotypes and counter-stereotypes presented in the study.

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Chapter 4

Results

The purpose of this study was to determine the number of stereotypical and counter stereotypical portrayals of music instruments in children's cartoons. A total of 263 images of male and female character were viewed playing a musical instrument in the various cartoons. Overall gender impressions included 118 (44.9%) female characters and 145 (55.1%) male character images.

Table 1

Frequencies of Musical Instruments

Instrument	No. of images	% of images ($n = 263$)
Flute	17	6.5
Clarinet	37	14.1
Saxophone	16	6.1
Trumpet	21	8
French Horn	7	2.7
Trombone	9	3.4
Tuba	35	13.3
Percussion	121	46.0

Although a variety of instruments were represented in this study, they were primarily from three instrument families: woodwind (flute, clarinet, and

saxophone) which had 70 impressions, brass (trumpet, French horn, trombone, and tuba), which had 72 impressions, and percussion (drum set, snare drum, cymbals, tambourine, xylophone, etc.) which had 121 impressions. The findings represented in Table 1 also illustrate the number of times each instrument was portrayed in the study. Additionally, results of this study suggested that pairs of instruments were portrayed at near exact frequency. These instrument pairs include: Flute (6.5%) and Saxophone (6.1%), Clarinet (14.1%) and Tuba (13.3%), and Trombone (3.4%), and French horn (2.7%).

Table 2

Percentage of Female Music Instrument Stereotypes Categorized by Instrument

Instrument	% of all images (*n* = 263)	% of female images (118)	% of specific instrument images
Flute	6.5 (17)	14.4	100
Clarinet	3.8 (10)	8.5	27.0
Saxophone	2.7 (7)	5.9	43.8
Trumpet	0.8 (2)	1.7	9.5
French Horn	0.0 (0)	0.0	0.0
Trombone	1.1 (3)	2.5	33.3
Tuba	1.1 (3)	2.5	8.6
Percussion	28.9 (76)	64.4	62.8

An analysis of the data presented in Table 2 indicates that in comparison to the total number brass instrument portrayals, images of female characters playing a woodwind instrument was four times more likely to be seen than an image of a female character playing a brass instrument.

In this study, female characters were portrayed performing on woodwind instruments 13% of the time. In analyzing the data for only female images, woodwind instruments were depicted 28.8% of the time. As seen in Table 2, the flute was the only played by female characters and was the second most performed instrument among female characters. Though female characters were more frequently portrayed performing on woodwind instruments, female characters did not comprise the majority of individual woodwind instrument images, except the flute.

Brass instruments were the least likely played instrument by female characters resulting in 3% of all instrument images and 6.7% of all female images. Though the trumpet, trombone and tuba were portrayed almost identically, the percentage each was of their individual instrument, varied greatly. As seen in Table 2, there were no instances of a female character playing the French horn. Percussion instruments were the most frequently played instrument by female characters and was the only instrument in which the majority of the images portrayed a female character. Images of a female character playing a percussion instrument was four times that of the next most frequently viewed instrument which was the flute.

In congruency with previously reported studies where researchers found woodwind instruments to be more popular among girls, the images from the cartoons seem to support the same trend, as female characters performing on woodwind instruments outnumbered female characters performing on brass instruments. An anomaly exists, however, as percussion instruments were heavily favored by female characters.

Table 3

Percentage of Male Music Instrument Stereotypes Categorized by Instrument

Instrument	% of all images (*n* = 263)	% of male images (145)	% of specific instrument images
Flute	0.0 (0)	0.0	0
Clarinet	10.3 (27)	18.6	73.0
Saxophone	3.4 (9)	6.2	56.6
Trumpet	7.2 (19)	13.1	90.5
French Horn	2.7 (7)	4.8	100
Trombone	2.3 (6)	4.1	66.7
Tuba	12.2 (32)	22.1	91.4
Percussion	17.1 (45)	31	32.7

The findings presented in Table 3 shows that male characters exhibited stereotypical and counter-stereotypical portrayals of music instrument

performance and a greater, more equal distribution of male character images among all music instruments than what was seen with female characters. Male character images accounted for over 50% of images for each individual music instrument with the exception of the flute and percussion.

The appearance of clarinet images provided data of particular significance due to the high number of counter-stereotypical portrayals in this study. Male clarinet images made up 73% of all clarinet images. Data in Table 3 shows the number of male clarinet images outnumbers the number of images of three out of four brass instruments; trumpet, French horn and trombone images. The clarinet was also the third most frequently seen male character music instrument image.

Male characters were more likely to be portrayed playing brass instruments than woodwind or percussion instruments. The combined total of brass instrument images was 64, which is 24.4% of all male instrument images, while images of percussion instruments were viewed 17.1% of the time and woodwind instruments were seen 13.7% of the time. A further analysis of the data reveals that in regard to each individual brass instrument, over 90% of trumpet, French horn and tuba images were depicted as being played by a male character. All images of French horns had male characters as performers.

Percussion is typically thought of as a male dominated instrument family; however, only about a third of all percussion instruments seen in the study were played by a male character. All of the images of music instruments were performed by an overwhelming majority of either a female or male character. With each individual instrument, the difference in male and female character

image portrayal percentages was at least 33%, with the exception of the saxophone. Though having a greater occurrence of being performed by a male character, the difference in percentage for saxophone images between female character and male character performers was approximately 13%. This was the lowest of any of the instruments as the next closest one, the trombone, had a percentage difference of 33%.

Several trends were evident among the individual cartoon series. Some cartoons portrayed stereotypes more frequently and other cartoons showcased more counter-stereotypes. To see a breakdown of stereotypical and counter-stereotypical images by cartoon, see Appendix B.

Chapter 5

Discussion

The study of gender is not a new area of research. Earliest gender research focused on language (Florer, 1900; Scott, 1986). As time progressed, additional topics of study have included differences in earning potential (Featherman & Hauser, 1976; Manning & Swaffield, 2008), disparities in higher education (Astin & Kent, 1983; Grebennikov & Skaines, 2009; Jacobs, 1996) and differences in subject interest among males and females (Blickenstaff, 2005; Niederle & Vesterlund, 2010) . However, one subject that has lagged behind in gender research is music. Though gender themes and divisions are found in music, the belief that music is not affected by cultural definitions puts music education behind in integrating gender theories in music teaching, learning and educational research (Lamb, 2007).

Over the last 30 years, several studies have provided insight into the music instrument choices and preferences of music students (Abeles, 1978; Byo, 1991; Hallam et al., 2008; Harrison & O'Neill, 2000). These studies have investigated various reasons for instrument selection including the impact of the family, peers, teachers (Bayley, 2000; Bazan, 2002; Frego, 2000) and timbre (Gordon, 1991; O'Neill & Boulton, 1996). Of the many studies conducted on the specific factors which may influence and guide decisions regarding music instrument choice, selection and preference, very few studies have investigated the influence of animated media on instrument selection. Due to the frequency of television media present in children's lives, children are exposed to a higher

frequency of different gender stereotypes (Lindsey, 1990; Signorielli, 2001). Aubrey and Harrison (2004) and van Evra (2004) suggest that children who spend large amounts of time watching television may exhibit more gender stereotypical behavior, which are behaviors that conform to cultural standards of a particular gender. To provide a plausible explanation for the possible influence gender stereotyped music instrument images may provide, this study utilized cultivation theory. Postulated by George Gerbner, at its most basic form, cultivation theory is the intersection of messages gathered from images seen in media and the personal beliefs of an individual. This theory surmises that a higher amount of television viewing will yield behaviors which reflect images represented on television.

Woodwind instrument portrayals occurred in only four of the nine cartoon series included in the study. Additionally, female characters were more likely to be seen performing on woodwind instruments than brass instruments. In support of this trend, previous studies have classified instruments such as the flute, clarinet and saxophone as preferred by females (Byo, 1991; Eros, 2008; Harrison & O'Neill, 2003).

From these media messages, children may deduce that woodwind instruments do not have the popularity or prestige of brass and percussion instruments. In addition, studies have indicated that females are more apt to play woodwind instruments and the lack of woodwind instrument images could suggest to young girls that pursuing participation in instrumental musical ensembles may be less preferred. A study completed by Elpus and Abril (2011)

found that 61% of musical ensemble participants in the United States were female, however, given research on choral ensemble participation done by Freer (2010), Elpus and Abril suggested in their study that this high number of female participants could be attributed to choral ensembles. In contrast, however, Sullivan (2008) reported that in 1990, 1992 and 2002, girls outnumbered boys in participation in instrumental ensembles. Even still, historically, women have been instrumental in securing their own participation in bands by forming their own marching bands during war-time and concert ensembles at the collegiate level (Sullivan, 2008).

Due to the higher frequency of female performers, young boys may feel that woodwind instruments are not an appropriate choice for instrument playing. In this study, the flute was the most highly stereotyped woodwind instrument, and was the most popular woodwind choice among female characters. To young girls viewing these images, it would seem that the flute is the most appropriate choice for music instrument playing. In contrast, the lack of male characters performing on the flute may influence young boys' thinking that the flute is not a desired instrument for performance. In a 2009 study, Taylor reported that male flute players experienced a higher level of teasing and their identity as a man questioned because of their decision to play the flute

Images of characters performing on the clarinet provided data which displayed an interesting trend. While there were images of girls playing the clarinet, three-quarters of all clarinet images portrayed a male character. These findings propose that the clarinet may be becoming a less gendered instrument.

However, all male clarinet images were seen in one animated series and in one particular character, thus, the claim for less gendering may be premature.

The singular character portraying clarinet counter-stereotypical images is Binky Barnes in the cartoon *Arthur*. Binky is portrayed as a bully among the other children in his third grade class. He is older and bigger than the other children and is a member of the Tough Customers, a group of older children who boss around the younger students. These descriptive characteristics are at odds with other stereotypical portrayals of clarinet players found in *Curious George* and *Caillou*. In these animated series, clarinet players were viewed as girls or adult women displaying feminine characteristics such as dresses and ponytails. Despite this description, his character biography on the PBS Kids website states that his interests include monster flicks and classical ballet.

The use of Binky's character may have further implications. Binky's character is a dichotomy of extremes. Binky as the bully displays the masculine side, and Binky as the clarinet player and lover of classical ballet shows the feminine side. It can be argued that one side cannot exist without the other. It appears that Binky portrays the bully to not seem overly effeminate, as if to "beat his bully's to the punch"; bully them before they can bully him. Young boys may feel the same inclination as the character of Binky if they choose to play the clarinet.

Recently, studies have been conducted to address the subject of bullying in the music classroom. This focus on bullying echoes the studies of bullying that occur within the larger school setting. Taylor (2011) states that music classrooms

may become havens of harassment rather than an open and inviting environment due in part to a child's music instrument choice. This can have a great impact on a child's self-esteem and self-worth. To combat this, Taylor suggests that music teachers work to present counter-stereotypical portrayals of music instrument performers, create a classroom where children feel safe and continue to be supportive of their students' instrument choices.

In comparison to other woodwind instruments, saxophone images were the closest of equal representation among male and female characters possibly suggesting that the saxophone is the most gender neutral. Still, a disparity exists as there were a higher number of males performing on the saxophone than females. This trend has been echoed in other studies that have found that while the saxophone is performed primarily by males, the gap between male and female performers is smaller than any other woodwind instrument (Abeles, 2008; Sheldon & Price, 2005). To further make the case for the saxophone's growing gender neutrality, three of the four cartoons which depicted saxophone playing featured both male character images and female character images. Individually, three cartoons, *Arthur, George Shrinks,* and *Curious George* provided more male images than female images. *Caillou* contributed more female saxophone illustrations. As the saxophone appeared more frequently across cartoons in comparison to other woodwind instruments, young children may perceive it as a favorable choice for both boys and girls.

Brass instruments (trumpet, French horn, trombone, tuba) were portrayed more regularly in this study than woodwind instruments and were seen more

frequently by male performers possibly indicating that males prefer brass instruments (Hallam et al., 2008; Harrison & O'Neill, 2005). This slight increase may not be a significant indicator of any specific trend and this closeness in frequency of appearance may demonstrate a growth in popularity of woodwind instruments. As the amount of brass instrument impressions is higher in both the number of male portrayals (64) and number of animated series presenting brass images (6 series out of 9 series), it may indicate a more positive opinion of brass instruments overall especially with respect to young boys. The lack of female brass instrument portrayals may send the message that girls do not play these instruments. Because of the higher number of male portrayals, the message can be sent that instrumental ensembles are an appropriate choice for music participation for boys. It has been long studied about the lack of males in choral ensembles and the portrayals of males in instrumental ensembles may contribute to this phenomenon (Koza, 1993; Moore, 2008).

Less than 10% of the trumpet images displayed a female character. This could serve as a model to young children that the trumpet is not an appropriate choice for young girls but is a great choice for boys. Among the cartoon series that showed an image of a male playing the trumpet, the ensembles shown were traditional musical ensembles such as a marching band or a jazz band. *Caillou*, which had the highest numbers of male character trumpet players, utilized a marching band. Another example of gender bias was found in a *George Shrinks* episode entitled "On the Road." Trumpet images contained in this episode were

in the depictions of the jazz band which was 80% male. For boys, these images portray an image that trumpet playing is acceptable and encouraged.

Not only does this have implications for instrument choice as girls may not view the trumpet as a desirable instrument, but they also may develop the opinion that jazz bands and marching bands (two ensembles in which the trumpet plays a prominent role) may not be activities in which a girl should participate. Traditionally, women have had less participation or have been completely excluded from jazz bands and marching bands (Foster, 2002; McKeage, 2004; Sperry, 1954).

The French horn was only played by male characters in this study. Overall, French horn images were the least seen instrument (fewer than 3%). These findings suggest that the French horn, though clearly portrayed as more popular among males than females, may convey the message that it is not a very attractive instrument choice among either gender. Specifically, images of the French horn were seen in only one animated series, *Curious George* and in only one episode "George Strikes Up the Band," which features a full orchestra, not band. While the data in this study would suggest that the French horn is overwhelmingly preferred by males, there may not be enough evidence to make a more general statement about gendered attitudes regarding the French horn. Hallam, Rogers and Creech (2008) reported that among music students ranging from 7 to 16, the French horn was almost equally played between females and males.

The trombone was another instrument seemed to be used infrequently in the cartoons. It was the second least popular instrument depicted. Though there were images of both male and female characters, male characters performed on the trombone 67% of the time while the remaining 33% of images were female. All of the female trombone images were found in one series, *Arthur*. *Arthur,* which has already shown counter-stereotypes in regard to the clarinet and saxophone, demonstrates another counter-stereotype with trombone images. The presence of female trombone players in the cartoon *Arthur* seems to solidify its status as a cartoon that seeks to portray counter-stereotypes. Cartoons depicting more traditional images of the trombone included *George Shrinks* (again represented by a majority male jazz band) and *Curious George,* which used the full orchestra. The amount of trombone images presented may dictate, much like the French horn, a lack of acceptance of the trombone as an instrument. However, it is still portrayed as a positive choice for boys.

With over 91% of tuba images displaying a male character, it was the most preferred brass instrument among male characters. With these results, it can be inferred that young men may view the tuba as an acceptable instrument for performance, but the same conclusion may not hold true for girls. *Caillou* represented the most traditional depiction of the tuba in a marching band and almost all, save for one image was of a male tuba player. *Curious George* continued to show stereotypical portrayals by use of the orchestra and through one of the main characters, the Man with the Yellow Hat. The Man with the Yellow Hat is a tuba player. He is the quintessential male character. He's tall,

wears a hat, is a leader and his name, which uses the word "man" furthers his status as a male. This prominent portrayal of a tuba player further solidifies for young boys that the tuba is an appropriate instrument, especially if they want to continue to play the tuba as an adult.

Of all the instruments and instrument families represented in the study, percussion was the only one represented in all nine animated series. Percussion instruments, which are some of the first instruments played in elementary general music classes, are easily recognizable and familiar to young children. This could explain why percussion instruments were most frequently displayed. The popularity of percussion instruments was evident for both male and females as it was the most frequently performed instrument for both genders.

Stereotypically, eight of the nine cartoons in the study portrayed a male character performing on a percussion instrument, equating to almost a third of all male instrument images and a third of all percussion instruments. These stereotypical percussion images send messages to boys that percussion is an appropriate choice for them to play.

Conversely, eight of the nine cartoons in the study showed a counter-stereotype of a female performing on a percussion instrument as 64% of all female images and over 63% of all percussion instrument images. This ranks percussion instruments as the overwhelming favorite among instrument choices for females, as it was more frequently portrayed than woodwind and brass instruments combined. These findings are completely against any previously reported studies of music instrument choice and preferences amongst children

as all studies have shown that percussion instruments are favored by males (Abeles & Porter, 1978; Byo, 1991; Conway, 2002; Eros, 2008).

Among the individual cartoons, *Arthur* again displayed the most counter-stereotypical images. These images were relegated to one particular character, Francine. In comparison to other female characters on the show, Francine displays the least stereotypical portrayal of a girl. Her hair is not in ponytails. She does not wear clothes typically perceived as feminine; she does not wear dresses but wears blue jeans, a red sweater and sneakers. In her character biography, she is described as an explorer who has a love for sports. Her instrument of choice is the drum set.

Most other counter-stereotypical representation of females playing percussion instruments included the tambourine and keyboard instruments such as marimba and xylophone. Since they were counted as percussion instruments, this could be a reason for the high percentage percussion instruments shown.

Further Considerations

Though data gathered in this study suggests that the gender stereotypes and counter-stereotypes presented in children's cartoons may provide images that could influence future musical instrument choice and selection, the study does not take into account other factors. These influences include: self-motivation of the child to play a particular instrument, including belief in physical capabilities and personal preferences of timbre (Byo, 1991; Harrison & O'Neill, 2003; Hoffman, 2008) financial factors (Chen & Howard, 2007), peer influences

(Bazan, 2005; Hoffman, 2008), teacher influences (Bayley, 2004; Johnson & Stewart, 2005) or parental involvement (Abeles & Porter, 1978).

Secondly, this study only focused on the images shown in animated television episodes on PBS Kids. Other networks such as Nickelodeon, Disney and Cartoon Network also include animated series that are geared towards young children and shows on these networks may also transmit gendered messages. The study did not take in to account live action television shows which may display gender stereotypes and these types of shows are also shown on the various networks. In addition, it is possible that young children could be receiving a higher amount gender stereotyped and counter-stereotyped image messages due to the prevalence of media technology in their lives. This study did not consider other means of media transmission such as videos shown on an iPad, iPod, smartphones or on personal computers (Nielsen Media Research, 2012).

This study found that certain cartoon series portrayed more counter-stereotypical portrayals than others. For example, *Arthur* had a high incidence of counter-stereotypical images. A possible explanation for this can be that of all the series used in this study, *Arthur* has been on the air the longest, thus giving it more time for the evolution of its subject matter. Something else to consider is many of the cartoon series, such as *Angelina Ballerina, Arthur*, *Caillou*, *Curious George*, *Franny's Feet, George Shrinks*, and *Martha Speaks* have illustrated children's books from which many of the storylines of the animated series are taken. In some cases, the books predate the animated series and many of these

books can still be found in libraries and bookstores. It is possible that the stereotypical and counterstereotypical images observed in this study could occur in the book illustrations. While this study did not cover the potential messages illustrations in the printed books may transmit, children reading these books and viewing the cartoons can possibly receive a double dose of impressions.

The researcher hopes that this study will illustrate another reason for instrument choice and preference among children. By having this knowledge, music educators can ensure that all music students have equal opportunities to participate and enjoy being involved in music. An understanding of the problem means that music educators can provide alternate images and combat stereotypes seen by music students in their formative years. This information can have a positive impact on recruitment and retention for instrumental programs and the creation of balanced instrumentation in instrumental ensembles (Albert, 2006; Bayley, 2004; Bazan, 2005; 2009; Conway, 1999; McNeal, 1998). The understanding of the music instrument gender stereotypes and counter-stereotypes presented in the cartoons can also have further reaching implications in regard to future employment choices in music. The earliest musical experiences a child has can shape their identity as a future musician or a music educator (Dawe, 2007; Hellman, 2008; Isbell, 2008; Jones & Parkes, 2010). Typically, men pursue careers as band directors at the high school and collegiate level. Women, on the other hand tend to choose choir directing, general music and elementary music (Kertz-Welzel, 2009; Teachout, 2004). Researchers have tried to determine reasons for the limited number of women specifically in the

band profession and other genres of music such as jazz and rock (Clawson, 1999; Gould, 2001; 2003; Howe, 2009; Sheldon & Hartley, 2012). it is possible that the outcomes of this study can offer another explanation for these trends. Hopefully, these results can start conversations and continue the discourse between music educators and their students which will ensure a positive life long relationship with music.

Bibliography

Abeles, H. (2009). Are musical instrument gender associations changing? *Journal of Research in Music Education, 57*(2), 127-139. doi:10:1177/0022429409335878

Abeles, H. F., & Porter, S. Y. (1978). The sex-stereotyping of musical instruments. *Journal of Research in Music Education, 26*(2), 65-75.

Acker, J. (1992). From sex roles to gendered institutions. *Contemporary Sociology, 21*(5), 565-569.

Albert, D. (2006). Strategies for the recruitment and retention of band students in low socioeconomic school districts. *Contributions to Music Educations, 33*(2), 53.

Astin, H. S., & Kent, L. (1983). Gender roles in transition: Research and policy implications for higher education. *The Journal of Higher Education*, 309-324.

Aubrey, J. S., & Harrison, K. (2004). The gender-role content of children's favorite television programs and its links to their gender-related perceptions. *Media Psychology, 6*, 111-146.

Baker, K., & Raney, A. A. (2007). Equally super?: Gender-role stereotyping of superheroes in children's animated programs. *Mass Communication and Society, 10*(1), 25-41.

Bandura, A. (1992). Social Cognitive Theory of Social Referencing. In S. Feinman, *Social Referencing and the Social Construction of Reality in Infancy* (pp. 175-208). New York, NY: Plenum Press.

Bandura, A. (2001a). Social Cognitve Theory of Mass Communication. *Media Psychology, 3*, 265-299.

Bandura, A. (2001b). Social Cognitve Theory: An Agentic Perspective. *Annual Review of Psychology, 52*, 1-26.

Barner, M. R. (1999). Sex-role stereotyping in FCC-mandated children's educational television. *Journal of Broadcasting & Electronic Media, 43*(4), 551-564.

Baron, R. A. (2001). *Psychology.* Needham Heights, MA: Allyn & Bacon.

Bayley, J. G. (2004). The procedure by which teachers prepare students to choose a musical instrument. *Update: Applications of Research in Music Education*(Spring/Summer), 23-34.

Bazan, D. E. (2005). An investigation of the instrument selection process used by directors of beginning band. *Contributions to Music Education, 32*(1), 9-31.

Belson, W. A. (1956). A technique for studying the effects of a television broadcast. *Applied Statistics*, 195-202.

Bem, S. L. (1981). Gender schema theory: A cognitive account of sex-typing. *Psychological Review, 88*(4), 354-364.

Bem, S. L. (1983). Gender schema theory and its implications for child development: Raising gender-aschematic children in a gender-schematic society. *Signs, 8*(4), 598-616.

Berger, P. L., & Luckman, T. (1966). *The social construction of reality.* New York, NY: Doubleday.

Blackmore, J. E., & Centers, R. E. (2005). Characteristics of Boys' and Girls'

    Toys. *Sex Roles, 53*(9/10), 619-633. doi:10.1007/s11199-005-7729-0

Blake, B., & Pope, T. (2008). Developmental psychology: Incoporating Piaget's

    and Vygotsky's theories in classrooms. *Journal of Cross-Discplinary*

    Persepectives in Education, 1(1), 59-67.

Blickenstaff, J. (2005). Women and science careers: leaky pipeline or gender

    filter? *Gender and Education, 17*(4), 369-386.

Boeree, C. G. (2006). *Albert Bandura*. Retrieved March 8, 2011, from Personality

    Theories: http://webspace.ship.edu/cgboer/bandura.html

Bussey, K., & Bandura, A. (1984). Influence of gender contancy and social power

    on sex-linked modeling. *Journal of Personality and Social Psychology,*

    47(6), 1292-1302.

Bussey, K., & Bandura, A. (1992). Self-regulatory mechanisms governing gender

    development. *Child Development, 63*(5), 1236-1250.

Byo, J. (1991). An assessment of musical instrument preferences of third-grade

    children. *Bulletin of the Council for Research in Music Education, 110*, 21-

    32.

Carli, L. L. (2001). Gender and social influence. *Journal of Social Issues, 57*(4),

    725-741.

Chen, S. M., & Howard, R. W. (2004). Music instrument choice and playing

    history in post-secondary level music students: Some descriptive data,

    some causes and some background factors. *Music Education Research,*

    6(2), 217-230. doi:10.1080/1461380042000222609

Clawson, M. A. (1999). When women play bass: Instrument specialization and

gender interpretation in alternative rock music. *Gender and Society, 13*(2),

193-210.

Condry, J., & Condry, S. (1976). Sex differences: A study of the eye of the

beholder. *Child Development*, 42, 812-819.

Conway, C. (2000). Gender and musical instrument choice: A phenomenological

investigation. *Bulletin of the Council for Research in Music Education, 146*,

1-17.

Correll, S. (2001). Gender and the Career Choice Process: The Role of Biased

Self-Assessments. *American Journal of Sociology, 106*(6), 1691-1730.

Cramer, K. M., Million, E., & Perreault, L. A. (2002). Perceptions of musicians:

Gender stereotypes and social role theory. *Psychology of Music, 30*(2),

164-174.

Creswell, J. W. (2008). *Educational research: planning, conducting and

evaluating quantitative and qualitative research.* Upper Saddle River, NJ:

Pearson Education Inc. .

Cunningham, S. J., & Macrae, C. N. (2011). The colour of gender stereotyping.

British Journal of Psychology, 102, 598-614. doi:10.1111/j.2044-

8295.2011.02023

Dawe, N. (2007). Identity and borderland discourse: Bridging the personal and

professional in music teacher identity research. *The Canadian Music

Educator, 49*(2), 39-42.

Delzell, J. K., & Leppla, D. A. (1992). Gender associations of musical instruments and preferences of fourth-grade students for selected instruments. *Journal of Research in Music Education, 40*(2), 93-103.

Dolan, K. (2005). Do women candidates play to gender stereotypes? Do men candidates play to women? Candidate sex and issues priorities on campaign websites. *Political Research Quarterly, 58*(1), 31-44.

Durkin, K., & Nugent, B. (1998). Kindergarten children's gender-role expectations for television actors. *Sex Roles, 38*(5/6), 387-402.

Epstein, D., Kehily, M., Ghaill, M. M., & Redman, P. (2001). Boys and girls come out to play: making masculinities and femininities in school playgrounds. *Men and Masculinities, 4*(2), 158-172. doi:10.1177/1097184x01004002004

Eros, J. (2008). Instrument selection and gender stereotypes: A review of recent literature. *Update: Applications of Research in Music Education, 27*(1), 57-64. doi:10.1177/8755123308322379

Evra, J. V. (2004). *Television and Child Development.* Mahwah, NJ: Lawrence Erlbaum Associates.

Fagot, B. I. (1978). The influence of sex of chlild on parental reactions to toddler children. *Child Development, 49*(2), 458-465.

Featherman, D. L., & Hauser, R. M. (1976). Sexual inequalities and socioeconomic achievment in the US, 1962-1973. *American Sociological Review*, 462-483.

Fivush, R., Brotman, M. A., Buckner, J. P., & Goodman, S. H. (2000). Gender differences in parent-child emotion narratives. *Sex Roles, 42*(3/4), 233-253.

Florer, W. (1900). Gender-change from middle high German to Luther, as seen in the 1545 edition of the bible. *Publications for the Modern Language Association of America*, 442-491.

Fortney, P. M., Boyle, J., & DeCarbo, N. J. (1993). A study of middle school band students' instruments choices. *Journal of Research in Music Education, 41*(1), 28-39.

Foster, R. E. (2002). Opening the band room door. *The Instrumentalist, 56*(12), 96.

Gelman, S. A., Taylor, M. G., Nguyen, S. P., Leaper, C., & Bigler, R. S. (2004). Mother-child conversations about gender: Understanding the acquistion of essentialist beliefs. *Monographs of the Society for Research in Child Development, 69*(1), 33-63.

Gerbner, G. (1966). On defining communication: Still another view. *Journal of Communication, 16*(2), 99-103.

Gerbner, G. (1970). Cultural indicators: The case of violence in television drama. *Annals of the American Academy of Political and Social Science, 388*, 69-81.

Gerbner, G. (1998). Cultivation analysis: An overview. *Mass Communication & Society, 1*(3/4), 175-194.

Golombok, S., & Fivush, R. (1994). *Gender Development.* New York: Cambridge University Press.

Gooden, A. M., & Gooden, M. A. (2001). Gender representation in notable children's picture books: 1995–1999. *Sex Roles, 45*(1), 89-101.

Gould, E. S. (2001). Identification and application of the concept of role model perceptions of women college band directors. *Update: Applications of Research in Music Education, 20*(1), 14-18.

Gould, E. S. (2003). Cultural contexts of exclusion: Women college band directors. *Research and Issues in Music Education, 1*(1).

Grebennikov, L., & Skaines, I. (2009). Gender and higher education experience: a case study. *Higher Education Research & Development, 28*(1), 71-84.

Green, L. (2001). *Exposing the gendered discourse of music education.* London.

Hallam, S., Rogers, L., & Creech, A. (2008). Gender differences in musical instrument choice. *International Journal of Music Education, 26*(7), 7-19. doi:10.1177/0255761407085646

Hanley, B. (1998). Gender in secondary music education in British Columbia. *British Journal of Music Education, 15*, 51-70.

Harrison, A. C., & O'Neill, S. (2003). Preferences and children's use of gender-stereotyped knowledge about musical instruments: Making judgements about other children's preferences. *Sex Roles, 49*(7/8), 389-400.

Hartman, H. (1996, May 3). *Social Learning Theory.* Retrieved February 8, 2011, from Overview of Bandura's Theory:

http://condor.admin.ccny.cuny.edu/~hhartman/Overview of Bandura's Theory.htm

Hellman, D. (2008). Do music eduation majors intend to teach music? An exploratory survey. *Update: Applications of Research in Music Education, 27*(1), 65-70.

Himmelweit, H. T. (1962). A theoretical framework for the construction of the effects of television: A British report. *Journal of Social Issues, 18*(2), 16-28.

Hoffman, A. R. (2008). Gender, identity and the sixth grade band classroom. *Gender, Education, Music, and Society, 4*.

Howe, S. W. (2009). A historical view of women in music edcuation careers. *Philosophy of Music Education Review, 17*(2), 162-183.

Huddy, L., & Terkildsen, N. (1993). Gender stereotypes and the perception of male and female candidates. *American Journal of Political Science*, 119-147.

Huynh, V. W., & Fuligni, A. J. (2008). Ethnic socialization and the academic adjustment of adolescents from Mexican, Chinese, and European backgrounds. *Developmental Psychology, 44*(4), 1202-1208. doi:10.1037/0012-1649.44.4.1202

Intons-Peterson, M. J. (1988). *Children's concepts of gender.* Norwood, NJ: Ablex Publishing Corporation.

Isbell, D. S. (2008). Musicians and teacher the socialization and occupational identity of preservice music teachers. *Journal of Research in Music Education, 56*(2), 162-178.

Jacobs, J. A. (1996). Gender inequality and higher education. *Annual Review Sociology*, 153-185.

Johnson, C. M., & Stewart, E. E. (2005). Effect of sex and race identification on instrument assignment by music educators. *Journal of Research in Music Education, 53*(4), 348-357.

Jones, B. D., & Parkes, K. A. (2010). The movtivation of undergraduate music students: The impact of identification and talent beliefs on choosing a career in music education . *Journal of Music Teacher Education, 19*(2), 41-56.

Jordan, A. B., Hersey, J. C., McDivitt, J. A., & Heitzler, C. D. (2006). Reducing children's television-viewing time: a qualitative study of parents and their children. *Pediatrics, 118*(5), 1303-1311. doi:10.1542/peds.2006-0732

Kane, E. W. (2006). "No way my boys are going to be like that!" Parents responses to children's gender nonconformity. *Gender and Society, 20*(2), 149-176.

Karraker, K. H., Vogel, D. A., & Lake, M. A. (1995). Parents' gender-stereotyped perceptions of newborns: The eye of the beholder revisited. *Sex Roles, 33*(9/10), 687.

Kearsley, G. (2011). *Social Learning Theory.* Retrieved February 18, 2011, from

    Explorations in Learning & Instruction: The Theory into Practice Database:

    http://tip.psychology.org/bandura.html

Kertz-Welzel, A. (2009). Philosophy of music education and the burnout

    syndrome: Female viewpoints on a male school world. *Philosophy of*

    Music Education Review, 17(2), 144-161.

Klein, H., & Shiffman, K. S. (2006). Messages about physical attractiveness in

    animated cartoons. *Body Image, 3*, 353-363.

    doi:10.1016/j.bodyim.2006.08.001

Koza, J. E. (1993). The "missing males" and other gender issues in music

    education: Evidence from the Music Supervisors' Journal, 1914-1924.

    Journal of Research in Music Education, 41(3), 212-232.

Kramer, L. (2011). *The sociology of gender: A brief introduction* (3rd ed.). New

    York, NY: Oxford University Press.

Krippendorff, K. (2004). *Content analysis: An introduction to its methodology* (2nd

    ed.). Thousand Oaks, CA: Sage.

Kunst, J. (1956). Some sociological aspects of music. (pp. 1-25). Washington

    DC: Library of Congress.

Lamb, R. (2007). Music. In B. J. Bank (Ed.), *Gender and education: An*

    encyclopedia (pp. 309-314). Westport, CT: Praeger Publishers.

Leaper, C., Breed, L., Hoffman, L., & Perlman, C. A. (2002). Variations in the

    gender-stereotyped content of children's television cartoons across

    genres. *Journal of Applied Social Psychology, 32*(8), 1653-1662.

Levine, M. P., & Murnen, S. K. (2009). Everybody knows that mass media

    are/are not [pick one] a cause of eating disorders": A critical review of

    evidence for a causal link between media, negative body image, and

    disordered eating in females. *Journal of Social and Clinical Psychology,*

    28(1), 9-42.

Lindsey, L. L. (1990). *Gender roles: A sociological perspective.* New Jersey :

    Prentice Hall.

Lorber, J. (2009). The social construction of gender. In E. Disch (Ed.),

    Reconstructing Gender A Multicultural Anthology (5th ed., pp. 112-119).

    New York, NY: McGraw-Hill.

Maccoby, E. E. (1951). Television: Its impact on school children. *Public Opinion*

    Quarterly, 15(3), 421-444.

Maccoby, E. E. (2008). Historical overview of socialization research and theory.

    In J. E. Grusec, & P. D. Hastings (Eds.), *Handbook of socialization:*

    Theory and research (pp. 13-41). New York, NY: The Guilford Press.

Macionis, J. (2009). *Sociology* (12th ed.). Upper Saddle River, NJ: Prentice Hall.

Manning, A., & Swaffield, J. (2008). The gender gap in early-career wage growth.

    The Economic Journal, 118(530), 983-1024.

Martin, C. L., & Ruble, D. (2004). Children's search for gender cues: Cognitive

    perspectives on gender development. *Current Directions in Psychological*

    Science, 13(2), 67-70.

McKeage, K. M. (2004). Gender and participation in high school and college instrumental jazz ensembles. *Journal of Research in Music Education, 52*(4), 343-356. doi:10.1177/002242940405200406

McWhirter, E. (1997). Perceived barriers to education and career: Ethnic and gender differences. *Journal of Vocational Behavior, 50*(1), 124-140.

Million, E. (2002). Perceptions of musicians: Gender stereotypes and social role theory. *Psychology of Music, 30*(2), 164-174.

Money, J., & Ehrhardt, A. A. (1972). *Man & Woman Boy & Girl.* Baltimore, MD: Johns Hopkins University Press.

Moore, J. L. (2008). The impact of participation in school choirs on the construction of gender identity: An autobiographical narrative. *Gender, Education, Music & Society, 4*, 1-8.

Morgan, M., & Shanahan, J. (2010). The state of cultivation. *Journal of Broadcasting & Electronic Media, 54*(2), 337-355. doi:10.1080/08838151003735018

Neppl, T. K., & Murray, A. D. (1997). Social dominance and play patterns among preschoolers: gender comparisons. *Sex Roles, 36*(5/6), 381-393.

Niederle, M., & Vesterlund, L. (2010). Explaining the gender gap in math test scores: The role of competition. *The Journal of Economic Perspective, 24*(2), 129-144.

Nielsen Media Research. (2011). *Television Audience 2010 & 2011.*

Nielsen Media Research. (2012). *Digital Consumer Report Q3-Q4 2011.*

Oliver, M. B., & Green, S. (2001). Development of gender differences in

children's responses to animated entertainment. *Sex Roles, 45*(1/2), 67-

88.

O'Neill, S. A., & Boulton, M. J. (1996). Boys and girls preferences for musical

instruments: a function of gender. *Psychology of Music, 24*(2), 171-183.

Paik, H. (2001). The history of children's use of electronic media. In D. G. Singer,

& J. L. Singer, *Handbook of Children and the Media* (pp. 7-27). Thousand

Oaks, CA: Sage.

Parents Television Council. (2006). *Wolves in sheep's clothing: A content

analysis of children's television.*

Paugh, A. (2008). Language socialization in working families. *Encyclopedia of

Language and Education, 8*, 101-113.

Picariello, M. L., Greenburg, D. N., & Pillemer, D. B. (1990). Children's sex-

related stereotyping of colors. *Child Development, 61*(5), 1453-1460.

Pike, J. J., & Jennings, N. A. (2005). The effects of commercials on children's

perceptions of gender appropriate toy use. *Sex Roles, 52*(1/2), 83-91.

doi:10.1007/s11199-005-1195-6

Raag, T., & Rackliff, C. L. (1998). Preschoolers' awareness of social expectations

of gender: relationships to toy choices. *Sex Roles, 38*(9/10), 685-700.

Rideout, V. J., Foehr, U. G., & Roberts, D. F. (2010). Media in the lives of 8 to 18

year olds. *Kaiser Family Foundation*.

Rogers, W. S., & Rogers, R. S. (2001). *The psychology of gender and sexuality.*

Buckingham: Open University Press.

Ruble, D., Martin, C., & Berenbaum, S. (2006). Gender development. In N. Eisenberg (Ed.), *Handbook of child psychology: Vol. 3, Personality and Social Development (6th edition).* New York, NY: John Wiley & Sons, Inc.

Sanbonmatsu, K. (2002). Gender stereotypes and vote choice. *American Journal of Political Science*, 20-34.

Scott, J. W. (1986). Gender: A useful category of historical analysis. *The American Historical Review*, 1035-1075.

Scott, K. (1986). Learning sex equitable social skills. *Theory Into Practice, 25*(4), 243-249.

Sheldon, D. A., & Hartley, L. A. (2012). What color is your baton, girl? Gender and ethnicity in band conducting. *Bulletin for the Council for Research in Music Education, 192*, 39-52.

Sheldon, D. A., & Price, H. E. (2005). Sex and instrumentation distribution in an international cross-section of wind and percussion ensembles. *Bulletin for the Council of Research in Music Education, 163*, 43-51.

Signorielli, N. (2001). Television's gender role images and contribution to stereotyping. In D. G. Singer, & J. L. Singer, *Handbook of Children and the Media* (pp. 341-358). Thousand Oaks, CA: Sage.

Sperry, G. L. (1954). Women are here to stay. *The Instrumentalist*(8), 30-31.

Steele, J., & Barling, J. (1996). Influence of maternal gender-role beliefs and role satisfaction on daughters' vocational interests. *Sex Roles, 34*(9), 637-648.

Stewart, L. P., Cooper, P. J., & Stewart, A. D. (2003). *Communication and gender* (4th ed.). Boston, MA: Allyn and Bacon.

Stockard, J. (2007). Sex role socialization. In B. Blank (Ed.), *Gender and education: An encyclopedia* (Vol. 1, pp. 79-85). Westford, CT: Praeger Publications.

Taylor, D. (2009). Support structures contributing to instrument choice and achievement. *Bulletin of the Council for Research in Music Education, 179*, 45-60.

Taylor, D. (2011). Bullying: What can music teachers do? *Music Educators Journal, 98*(1), 41-44. doi:10.1177/0027432111411717

Teachout, D. J. (2004). Incentives and barriers for potential music teacher education doctoral students. *Journal of Research in Music Education, 52*(3), 234-247.

Thompson, T. L., & Scantlin, R. M. (2007). *Encyclopedia of Children, Adolescents, and the Media.* Thousand Oaks, CA: Sage.

Thompson, T. L., & Zerbinos, E. (1997). Television cartoons: do children notice it's a boy's world? *Sex Roles, 37*(5/6), 415-432.

Tobin, D. D., Menon, M., Menon, M., Spatta, B. C., Hodges, E. V., & Perry, D. (2010). The intrapsychics of gender: A model of self-socialization. Psychological review, 117(2), 601. *Psychological Review, 117*(2), 601.

Unger, R. K. (1979). Toward a redefinition of sex and gender. *American Psychologist, 34*(11), 1085-1094. doi:10.1037/0003-066x.34.11.1085

Weinraub, M., Clemmens, L. P., Sockloff, A., Ethridge, T., Gracely, E., & Myers, B. (1984). The development of sex role stereotypes in the third year:

Relationships to gender labeling, gender identity, sex typed toy preference and family characteristics. *Child Development*, 1493-1503.

West, C., & Zimmerman, D. H. (1987). Doing gender. *Gender and Society, 1*(2), 125-151.

Wilson, B. J. (2008). Media and children's aggression, fear and altruism. *The Future of Children, 18*(1), 87-118.

Witt, S. D. (2000). The influence of television on children's gender role socialization. *Childhood Education, 76*(5), 322-324.

Zerbinos, T. L. (1995). Gender roles in animated cartoons: Has the picture changed in 20 years? *Sex Roles, 32*(9/10), 651-673.

Zervoudakes, J., & Tanur, J. M. (1994). Gender and musical instruments: Winds of change? *Journal of Research in Music Education, 42*(1), 58-67.

Zosuls, K. M., Ruble, D. N., Tamis-LeMonda, C. S., Shrout, P. E., Bornstein, M. H., & Greulich, F. K. (2009). The acquisition of gender labels in infancy: Implications for gender-typed play. *Developmental Psychology, 45*(3), 688-701.

Coding Frame

Instrument Stereotypes
Female Characters

Instrument	Number
Flute	
Clarinet	

Total

Male Characters

Instrument	Number
Trumpet	
Trombone	
Tuba	
Percussion	
Saxophone	
Horn	

Total

Instrument Counter –Stereotypes
Female Characters

Instrument	Number
Trumpet	
Trombone	
Tuba	
Percussion	
Saxophone	
Horn	

Total

Male Characters

Instrument	Number
Flute	
Clarinet	

Total

Total Images Viewed=

Appendix B

List of Television Cartoon Series with a Breakdown of

Stereotypical and Counter-stereotypical Images

	Angelina Ballerina	Arthur	Caillou	Curious George	Cyberchase	Franny's Feet	George Shrinks	Martha Speaks	Super Why!
Female Stereotypes									
Flute	0	6	2	9	0	0	0	0	0
Clarinet	0	3	2	1	0	0	0	0	0
Male Stereotypes									
Saxophone	0	4	1	2	0	0	2	0	0
Trumpet	0	1	9	2	0	0	3	0	3
French horn	0	0	0	7	0	0	0	0	0
Trombone	0	0	0	3	0	0	3	0	0
Tuba	0	11	14	7	0	0	0	0	0
Percussion	7	5	6	8	11	3	4	1	0
Female Counter-stereotypes									
Saxophone	0	2	4	0	0	0	1	0	0
Trumpet	0	0	1	1	0	0	0	0	0
French horn	0	0	0	0	0	0	0	0	0
Trombone	0	3	0	0	0	0	0	0	0
Tuba	0	0	1	1	0	0	1	0	0
Percussion	6	27	8	12	3	0	2	16	1
Male Counter-stereotypes									
Flute	0	0	0	0	0	0	0	0	0
Clarinet	0	27	0	4	0	0	0	0	0
Image Totals	13	89	48	57	14	3	16	17	3

List of Included Animated Series with Percentages

Channel	Television Series Title	Date of 1st Show	# of Seasons	Total # of Episodes	Implied Musical Episodes	# of Eligible Episodes	# of Episodes Studied	% of Total Episodes (Implied)	%of Total Episodes (Eligible)	% of Total Episodes (Studied)
PBS Kids	Angelina Ballerina	2002	5	97	13	9	1	13.40%	9.28%	1.03%
PBS Kids	Arthur	1996	15	376	21	11	11	5.59%	2.93%	2.93%
PBS Kids	Caillou	2000	4	164	13	7	6	7.93%	4.27%	3.66%
PBS Kids	Curious George	2006	6	180	8	5	4	5.15%	4.44%	2.78%
PBS Kids	Cyberchase	2000	8	94	3	2	2	3.19%	3.19%	2.13%
PBS Kids	Franny's Feet	2006	4	104	5	4	2	4.81%	3.85%	1.92%
PBS Kids	George Shrinks	2000	1	40	5	4	4	12.50%	10.00%	10.00%
PBS Kids	Martha Speaks	2008	4	140	6	4	2	4.29%	2.86%	1.43%
PBS Kids	Super Why!	2007	2	80	4	2	1	5.00%	2.50%	1.25%