

CHILDREN'S PERCEPTIONS OF PERSONAL ATTRIBUTES OF FEMALE TEACHERS
WITH A TATTOO

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ABSTRACT

CHILDREN'S PERCEPTIONS OF PERSONAL ATTRIBUTES OF FEMALE TEACHERS WITH A TATTOO

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Tattooing is becoming part of mainstream culture and there are indications that perceptions of people with tattoos are changing. As the number of people with tattoos increases, the likelihood of a child having a teacher with a visible tattoo also increases. How a child perceives a teacher influences how he or she feels about and ultimately responds to that teacher. There is a significant gap in research that focuses on children's perceptions of people with tattoos, especially children's perceptions of teachers with tattoos and the possible impact tattoos can have on the educational environment. Results from this study indicated that, in general, students did not perceive the female teacher with a tattoo differently than the female teacher without the tattoo, nor was their performance on a measure of achievement significantly impacted by the presence of the tattoo. Additionally, exposure to parental tattoos did not result in more positive ratings of the teacher with a tattoo by students. Limitations of this research and implications for future research will be discussed.

INTRODUCTION

Tattooing is becoming part of mainstream culture and there are indications that perceptions of people with tattoos are changing. Celebrities and TV shows such as *Miami Ink* and *LA Ink* have popularized tattoos, making them more acceptable. Mattel has even produced a *Totally Tattoo Barbie*. Whether it is done as a rite of passage, an act of rebellion or statement of personal expression, getting a tattoo is a symbolic representation of the self. While some view tattooing as artistic expression, others continue to view it as a form of deviant behavior (especially older generations) (Dean, 2010). With the potential of negative attitudes, there may be social conflict surrounding the practice of tattooing. For example, some individuals get tattoos to express themselves, but feel the need to hide their tattoos in fear of negative judgment and prejudice. Others may be required to conceal their tattoo as a matter of employment.

An extreme outcome of these negative attitudes or judgments about individuals or group of individuals without sufficient information is termed prejudice. Some would argue that prejudice is automatic, while others might say it is learned (Degner & Wentura, 2010). There are many theoretical perspectives that support each side. The Social-Cognitive Theory suggests that attitudes, stereotypes, and prejudice is learned from the social environment (Bergen, 2001; Gerrig, 2012), while the Social Identity Theory suggests that negative evaluations, stereotyping and prejudice results from the process of social categorization, group identification, and the development of social identity (Augoustinos, Walker & Donaghue, 2014; Rutland, Killen, & Abrams, 2010). People internalize the values, attitudes and norms of the group they identify with, which could be a tattoo or nontattoo group. With tattoos increasing in popularity, a child's

exposure to individuals with visible tattoos increases as does their exposure to what attitudes people in their environment have about tattoos.

Attitudes are developed from exposure to the attitudes of a child's social environment, including parents, community and peers (Gerrig, 2012). Home environments are strong influences on children's beliefs and perceptions of others. Socialization agents, such as parents, are important in shaping children's attitudes. Negative attitudes, such as those directed at individuals with tattoos, can be transmitted to children through verbal and nonverbal behavior (Vezzali, Giovannini & Capozza, 2012). Research suggests that by the age of six children display implicit bias towards social groups. This bias could be the result of exposure to biased attitudes displayed in the home environment.

Most states have laws that prohibit minors from getting tattoos and tattooing being performed on minors without parental consent, although this varies considerably by state (National Conference of State Legislatures, 2015). Since tattooing is not typically practiced on children in the United States, children do not directly identify with either the tattooed or nontattooed social group from the personal experience of having a tattoo.

The following literature review will discuss how perceptions of people with tattoos have changed over time, the current prevalence of tattoos and the impact a tattoo can have on employment. It will also discuss the cognitive and social processes that contribute to the development of attitudes that influence social perception, as well as research that has been conducted in the area of tattoos with adults, adolescents and children. This study has particular relevance for the education system. If a student has negative attitudes towards tattoos or is uncomfortable with a teacher who has visible tattoos, his or her effectiveness as a teacher could be cause for concern. Having a visible tattoo could impact a young teacher's future career and

employability. As a new generation of teachers enters the workforce (many with tattoos), the issue of teachers with tattoos has become more salient.

LITERATURE REVIEW

Tattoo Prevalence and Attitudes

The Popularity of tattoos has dramatically risen over the past few decades. The 2012 Harris Poll surveyed 2,016 adults online to look at the number of Americans with tattoos and attitudes towards people with tattoos, by those with and without (Harris Interactive, 2012). According to this poll, one in five adults, or 21%, in the United States have at least one tattoo. In 2008, the percentage of Americans with a tattoo was 14%. Twenty years ago that number was only three percent and 50 years ago the prevalence rate of tattoos was only 0.5% (Martin & Dula, 2010). Tattoos were most prevalent in the western states and for adults between the ages of 30 and 39, followed by adults between the ages of 25 and 29 (Harris Interactive, 2012). An earlier study conducted in 2010 by the Pew Research Center found that almost four in ten young adults between the ages of 18 and 29 have at least one tattoo (Pew Research Center, 2010). According to the Harris Poll, women were slightly more likely than men to have a tattoo, which is the first time women have outnumbered men in this poll, 23% versus 19% (Harris Interactive, 2012). Those who had at least one tattoo reported feeling more attractive (21%) and more intelligent (8%) than they did before having a tattoo. Those without a tattoo reported that those with a tattoo are less attractive (45%) and less intelligent (27%). Results of this survey suggest that attitudes about people with tattoos are changing. A smaller percentage of people in 2012 versus 2008 believe that having a tattoo makes an individual more likely to commit a deviant act. Although attitudes about people with tattoos and perceptions of deviance have lessened over the past four years, negative attitudes continue to exist as evidenced by the percentage of people that

still believe that people with tattoos are less intelligent, less attractive and more likely to commit a deviant act (Harris Interactive, 2012).

Historical Perspective

Tattooing has been part of almost every culture that has existed across time (Sanders & Vail, 2008). Historically, many attitudes about people with tattoos have been negative and usually related to social class and deviant behavior and associated with prisoners, gangs, armed forces and criminals (Swami & Furnham, 2007). There appears to be a consistent cyclical popularity in tattoos across time. Tattoos became a fad among the elite members of European society in the late 18th century, however lost their appeal when tattoos were exhibited in circus sideshows (Miller, 2004). People with tattoos were then viewed as “unsavory types”. Even though negative associations persist, men and women across all age groups, social classes and occupations continue to get tattoos, despite the possible stigma that may accompany them (Martin & Dula, 2010). Today more women, celebrities, middle class and educated professionals are getting tattoos than in previous generations (Colbert, 2008).

Social Perception, Biases, and Stereotyping

Social perception is the process by which people perceive and process social information (Augoustinos et al., 2014). According to these authors, categorizing people and things helps simplify our social realities. Schemas are mental structures that guide what social information people attend to and how that information is perceived, remembered, and interpreted. They help people make judgments and evaluations based on prior knowledge and expectations that were learned or socialized. Stereotypes are a type of schema that help organize knowledge about people that have been categorized in different social groups, which can be positive or negative.

Although people want to express themselves through tattoos, there seems to be a conflict between the desire for self-expression and the fear of judgment. Because there are still negative attitudes attached to tattoos, the act of getting a tattoo is risking public stigmatization (Harris Interactive, 2012; Sanders & Vail, 2008). To avoid this, people often get tattoos in places where they can be easily hidden under clothes.

This fear of judgment is based on others' negative biases and the stereotypes associated with people with tattoos, which tend to be negative. People organize their environments by categorizing people and things into groups (Gerrig, 2012). When it is people that are being categorized, it is often done by putting oneself and those similar to oneself in one category and everyone else in another (Augoustinos et al., 2014). The belief that one's own group is better than or superior to others is having a bias for that group, or in-group bias. A person can also have a bias against those not in one's group. Stereotyping occurs when generalizations are made about an individual or group of individuals that share common characteristics without sufficient information (Gerrig, 2012). There are stereotypes for a variety of people and groups (e.g. bikers, cheerleaders, fraternity boys, environmentalists and blondes are just a few). Stereotypes affect how we perceive and behave towards people within certain social groups (Augoustinos et al., 2014). There are many theories that attempt to explain how and why attitudes, stereotypes and prejudice develop. The following section will discuss two such theories.

THEORETICAL PERSPECTIVES

There are two theoretical perspectives that the present study will examine to help explain the development of attitudes and stereotypes, such as about people with tattoos, as well as group identification, social identity. Both theories have roots in social psychology and address the construction of social realities (Augoustinos et al., 2014). The Social-Cognitive Theory (SCT) helps explain how children learn about their social world through observation and the familial influence on a child's thinking and behavior. The Social Identity Theory (SIT) helps explain how children categorize people and themselves into social groups and the importance group membership has on the development of social identity.

Social-Cognitive Theory

The Social-Cognitive Theory (SCT), based on Albert Bandura's Social Learning Theory (Gerrig, 2012), applies thinking, learning and social interactions in child development (Gerrig, 2012; Weinstein, 1983). According to SCT, people are not helpless victims of their environment, nor are they controlled by inescapable inner forces. Individuals learn by observing others and make choices based on perceived consequences. Interactions between individual, behavioral, and environmental factors influence learning.

Learning occurs within a social context through modeling, observation and reinforcement (Gerrig, 2012). Children learn information about their social environment through experience and by observing others' behavior and the consequences that follow a behavior. Observational learning, or social learning, occurs without the child having learning from direct personal experience. Children can learn what behavior is desired and reinforced and what behavior is not desired and punished. The ability to learn vicariously through other's experiences with

reinforcement and punishment is dependent on the individual's cognitive capacity for memory and reasoning. Remembering this information can help a child foresee possible consequences in the future and behave in a way that is reinforced or not punished, thus learning from others' mistakes.

Observational learning can occur from three types of modeling: live modeling, in which an individual demonstrates a behavior; verbal instruction, in which a desired behavior is learned from direct instruction; and symbolic modeling, in which media forms such as television, internet and movies model behavior (Gerrig, 2012). Modeled behavior is most influential when the observer is attentive, which occurs more often when the observer perceives similarities between himself and the model. The observer must also be able to store the event in memory and reproduce the modeled behavior. Lastly, the observer must have a reason to repeat the modeled behavior, such as gaining a reward or avoiding punishment. In addition to behavior, attitudes and beliefs can be modeled as well. Modeling attitudes about a particular group of people can result in the development of stereotypes about that social group.

The social environment has a strong influence on the development of a child's values, behavior, and attitudes (Gerrig, 2012). Family is the first social group that a child identifies with and is the strongest influence in shaping attitudes and behavior (Gerrig, 2012; Morland, 1963). It isn't until adolescence that the familial influence changes. During adolescence, a child seeks independence and peer groups begin to compete with familial influence (Gerrig, 2012).

In addition to the development of attitudes, children can also learn and assimilate stereotypes from their environment (Bigler & Liben, 2007). The first and closest relationship a child has is typically with a parent (Bergen, 2001). Children look to their parents for guidance and model themselves based on the behavior and beliefs of the family, including stereotypes.

Parents sometimes unintentionally give off cues or send their children mixed messages, telling children that everyone is equal, but avoiding someone because of race or religion. Children learn biased beliefs, attitudes, and stereotypes through observation and exposure (Degner & Wentura, 2010). They copy what they see and hear (Carter & Lynn, 1997). They can pick up on even subtle feelings of bias and internalize that stereotype (Bigler & Liben, 2007). If a family member displays negative attitudes and antipathy towards a particular social group, such those with tattoos, those messages can be intentionally or unintentionally transferred to the child, which the child adopts.

Research in the area of parent-child similarities has shown a significant similarity between parent and children's attitudes and beliefs (Miller & Glass, 1989). In a three generation longitudinal study that spanned 14 years, and included 2,044 participants, Miller and Glass explored the similarity in attitudes of parent-child pairs over time. Of the 1,159 people who participated in the second phase of the study, 484 were grandchildren (average age=33), 481 were parents (average age=57) and 194 were grandparents (average age=78). The results of the study indicated that the attitudes of the older parent-child pairs changed over time while the attitudes of the youngest parent-child pairs remained stable. This indicates that parents' attitudes are shared more with their children during earlier years and tend to change as the pair grows older.

The social-cognitive model suggests that children are active participants in their social world, capable of interpreting this world and making inferences about it based on observation (Weinstein, 1983). Within a classroom setting, children learn about their social world by observing teacher-student and peer-peer interactions. Children notice differences in how a teacher treats certain groups of students, such as boys and girls or low and high achieving

students. They can see patterns in behavior and nonverbal cues. They use these observations to make inferences about teacher expectations and demands. If a teacher holds higher expectations and demands for higher achieving students, a child can infer whether or not he is a high achieving, or smart, student based on how the teacher interacts with him. If a teacher provides a lot of negative feedback and correction to the low achieving students, a child might infer that if he receives a lot of negative feedback that he must not be as smart as his classmates. Teachers can unintentionally send messages to students through social interaction. For example, if a teacher ignores incidences of prejudice, he or she is giving off the appearance of “silent approval” (Carter & Rice, 1997). Children figure out which group they belong to in the classroom as well as the outside world.

Social Identity Theory

The Social Identity Theory (SIT) helps explain how social categorization, social identity and social comparison lead to stereotyping and prejudicial attitudes. It argues that group membership is an important part of an individual’s self-concept (Augoustinos, 2014). In an attempt to maintain a positive social identity, people favor the group they perceive identification with while developing biases against those they do not identify with. This process begins by categorizing people into groups.

Children can see individual differences between people early in their development and learn to categorize and group people depending on those differences (Degner & Wentura, 2010; Rutland, Killen & Abrams, 2010). For example, at age two, a child can point out people who are black and white and identify as being black or white, while at age three, children can identify social categories (Degner & Wentura, 2010).

By the age of five, a child knows the he or she belongs to a particular group (Carter & Rice, 1997). As children enter school, they become part of a new group and are influenced by others outside their family, such as peers and teachers. It is during this time that children begin to move away from a “me” versus “not me” orientation and develop an “us” versus “them” orientation (Bergen, 2001).

Between the ages of seven to eight, children shift away from an egocentric view and are better able to describe people based on observable behavior or traits as opposed to descriptions based on physical attributes (Weinstein, 1983). Between the ages of seven and nine children are able to verbalize these distinctions. When a child is 10, he can distinguish between groups (Carter & Rice, 1997). The group a child identifies with is the ideal group, the in-group, and any group that he does not identify with is the out-group. It is during this time that a child’s group identity is internalized (Degner & Wentura, 2010). Group identity plays a large role in a child’s developing social skills, self-concept, and sense of belonging (Carter & Rice, 1997).

As children get older, their group expands and their identity becomes more strongly linked to the social group they identify with (Rutland et al., 2010). A child’s sense of self is intermingled with his group identity. In regards to tattoos, a young child cannot be a member of the tattoo social group directly; however, that child can identify with it as a reference group if his parent is a member (Augoustinos et al, 2014). As discussed previously, family is the most influential source for attitudes and beliefs in young children. If a child’s family group identifies with the tattoo group, the influence this group has on the child could be more positive. A teacher with a tattoo may receive a more positive response from the child if his/her family group has a positive attitude towards people with tattoos.

Shared attitudes and beliefs can bind individuals together as a social group (Augoustinos et al., 2014). This could include attitudes and beliefs about tattooing and people with tattoos. Identifying with a certain social group usually means conforming to the norms and attitudes of that group (Augoustinus et al., 2014; Gerrig, 2012). According to SIT, people compare their in-group to out-groups in order to elevate the in-group's status, thus elevating individual social identities (Augoustinos et al., 2014). Perceived similarities within groups and differences between groups are often exaggerated. Social comparisons can create in-group bias and favoritism and/or out-group derogation, resulting in stereotyping and prejudice.

Integrating the Social-Cognitive Theory and the Social Identity Theory helps explain how children develop attitudes, biases, and stereotypes and the role group identification and social identity formation plays on maintaining those attitudes, biases and stereotypes.

PERCEPTIONS OF TATTOOS

Perceptions of Tattoos: Adults and Young Adults

In general, current research on adults' perceptions of people with tattoos indicates that even though there has been an increase in the popularity of tattoos, attitudes continue to be negative. A study conducted by Swami and Furnham (2007) examined people's perceptions of tattooed women with different hair color and varying degrees of tattooing. Participants were shown line drawings of female figures with either blonde or brunette colored hair and tattoos or not having tattoos. Their findings were that women with tattoos were rated as heavier drinkers, more promiscuous and less attractive than nontattooed women. The more tattoos the woman had, the more negative the rating was.

Similarly, Wohlrab, Fink, Kappeler and Brew (2009) found that virtual human characters with tattoos were rated as having more sexual partners, less inhibited, more susceptible to boredom, more thrill, sensation and experience seeking. The participants in their study were shown pictures of virtual characters. These two studies are problematic in that they did not use "real people" so generalizing their results to the population is limited.

Martin & Dula (2010) reported that a study by Howell et al. indicated that people with tattoos were significantly higher in impulsivity and sensation seeking behavior than nontattooed people. Wohlrab, Stahl, Rammsayer and Kappeler (2007) also found high ratings of people with tattoos and high sensation seeking in self-reporting. Additionally, participant with tattoos rated themselves higher in promiscuity.

In Degelman and Price's (2002) study, 196 high school and university students rated perceptions of a female model in a photo. In one photo, the female had a tattoo and in the second

photo, the female did not have a tattoo. Students were randomly assigned one of the two photos. The results of their study indicated that the female with a tattoo was rated more negatively than the female without a tattoo on the following personal attributes: athletic, attractive, motivated, honest, generous, mysterious, religious, intelligent and artistic. There was no significant difference in ratings for fashionable, caring, creative or determined. Ratings were consistent between both male and female participants, high school and university students and participants with or without personal tattoos.

Similarly, Rosenhoeft, Villa and Wiseman (2008) found that college students rated a photo of a female without a tattoo as more fashionable, more athletic, more attractive, more caring, more intelligent, but less artistic compared to a photo of a female with a tattoo. One hundred fifty eight college students rated a female model with a dragon tattoo more negatively on 5 of the 13 characteristics than the model without a tattoo. A different female model with a dolphin tattoo was rated more negatively on 2 of 13 characteristics than a female without a tattoo. Their conclusion was that tattoos do harm perceptions.

The type of tattoo a person has can also impact perception (Burgess & Clark, 2010). Tattoos categorized as cute were rated similarly to having no tattoo while tattoos categorized as tribal were rated less favorably when an interviewee was considered for a job.

Further research on the effects of tattoos on perceptions of credibility and attractiveness suggested that having a tattoo hurts an individual's image (Seiter & Hatch, 2005). First impressions are often made based on a person's physical appearance. Undergraduate students were asked to rate male and female photos for attractiveness and credibility. The results indicated that regardless of the sex of the person in the photo, students rated people in photos with a tattoo lower in credibility, specifically competence, character and sociability. Seiter and

Hatch (2005) did not find significant results on tattoo presence and attractiveness. However, only 4% of the participants in this study had a tattoo themselves, which could have impacted the results.

An opinion poll was conducted by Northern Illinois University to explore the relationship between tattoos and deviant behavior (Adams, 2009). Adams also was interested in the social characteristics of people with tattoos. Five hundred adults between the ages of 18 and 50 were contacted by phone to participate in the study. Random dialing was used to obtain a diverse sample of participants. Of the participants who participated, 72% were white, 73.7% were employed, 13% were on active military duty, 90% had friends or family with a tattoo and 24% had a tattoo himself. The six categories that the study looked at included marital status, race, employment status, gender, and hepatitis status. Adams found the strongest predictor of having a tattoo was having spent three or more days in prison. The next strongest predictor was having friends or family members with a tattoo. Having a body piercing was also a predictor. Gender, drug or alcohol use was not a predictor of having a tattoo. Adams also found a negative relationship between educational level and tattoo status.

In one study, the relationship between having a tattoo and family and friends also having a tattoo was examined (Roberts, Koch, Armstrong & Owen, 2006). Five hundred and twenty college students from a rural public university in the south west participated in this study. Most of the participants were female (70%), white (80%) and 18.7% of the participants had at least one tattoo. The demographics of the sample limit the degree to which results can be generalized to the general population as the majority of participants were white female college students. Seventy five percent of participants reported having at least one friend with a tattoo and 29% reported having at least one immediate family member that had at least one tattoo. The results

showed a significant and positive correlation between the students having a tattoo and friends and family members also having tattoos. The correlation between the student and friends having a tattoo was stronger than students and family members having a tattoo.

Martin and Dula (2010) were interested in the stigmatization of tattoos. Participants for this study included 210 undergraduate students, some with and some without tattoos. The participants were given the Tiggman Stigma Against Tattoos Survey (MSATS) which measured negative attitudes against people with tattoos. The participants who had at least one tattoo rated themselves significantly lower on the MSATS than those without a tattoo indicating that they had more positive attitudes towards people with tattoos. They found that there was no significant difference in GPA in tattooed and non-tattooed students, indicating that people with tattoos are not less intelligent than people with tattoos. This study was limited in that participants were all from one school and self-reported their GPA.

Research on student perceptions of college professors who had tattoos yielded conflicting results. In one study, a college professor was viewed as more motivating, imaginative with assignments and more likely to be recommended by students (Wiseman, 2010), but in another study, the college professor with a tattoo was viewed as less competent (Goldman, Cranmer & Neville, 2012). More research needs to be done in this area to resolve conflicting results.

Wiseman (2010) examined student perceptions of a college professor who had a tattoo. In this study, 128 undergraduates were asked to rate a female professor on 9 teaching related characteristics. Of the 128 participants, 42 reported having at least one tattoo. In the four conditions, the instructor had either a cross tattoo, a wire tattoo, no tattoo or both a wire and cross tattoos. Wiseman's study reported some positive results for the tattooed instructor on 3 of the 9 teaching characteristics. The instructor with the tattoo was perceived as more capable of

motivating students, more imaginative with assignments and rated more likely to be recommended to peers by students. There were no significant findings for the remaining 6 characteristics: organization, management, rapport, is clear with material, sensitivity and being a good teacher.

A small number of studies have looked at teachers who have tattoos and the impact tattoos have on effectiveness. One study examining college students' perceptions of professors with tattoos indicated that professors without a visible tattoo were perceived as more competent than professors with a tattoo (Goldman et al., 2012). This study included 300 undergraduate students. Six types of tattoos were used in the study: offspring, passion, memorial, military, mantra and no tattoo. There were no significant findings for student motivation or learning.

Perceptions can have real world implications. How a teacher is perceived by students can determine that teacher's success. Promotion and pay raises are often, in part, due to student's evaluations of a teacher (Wiseman, 2010). Physical attractiveness, friendliness and nonverbal cues are all important factors in perception of others. Negative attitudes towards tattoos can impact a teacher's employability and perceived effectiveness.

Impact of Tattoos on Employment

People express gender, social status, lifestyle, values, personal interests and roles we play through appearance (Dean, 2010). Tattoos are a form of social communication. People send messages to express pride, artistic appreciation and affiliation with groups. The danger is in how others perceive this communication. As research has shown, negative perceptions of people with tattoos continue to exist. When interviewing for a job, an employer's first impression is appearance. An employer's attitudes towards tattoos can make or break an interview.

Judgments can be made in any occupational field. Studies show that first impressions and appearance matter (Dean, 2010; Westerfield et al., 2012).

One such study conducted in New Mexico, examined consumers' perceptions of service providers with tattoos (Dean, 2010). The research focused on different types of services provided, the age of the perceivers and whether or not the perceivers had tattoos themselves. Nine occupations were examined and divided into two categories: white collar (bank loan officer, nurse, accountant, dentist and stockbroker) and blue collar (barber/hair stylist, grocery store clerk, auto mechanic and bartender). Quota sampling was used to represent each of three age groups. Participants were recruited from public places. No significant difference was found between the opinions of tattooed or nontattooed participants. Overall, visible tattoos on white collar service providers were viewed as inappropriate, while visible tattoos on blue collar workers were viewed as appropriate. Tattoos on service providers that provided financial services were especially viewed as inappropriate, regardless of the participant's age or whether or not he/she had a tattoo. Older participants had more negative attitudes towards tattoos in general compared to younger participants and they rated service providers with a tattoo as less intelligent and less honest compared to service providers without a tattoo. This study is limited in that only nine occupations were looked at and that there was no variation in the type of tattoos used in this study. Different occupations and visual presentation could elicit different responses.

Burgess and Clark (2010) were interested in the impact the type of tattoo can have on perceptions of people with tattoos. Three hundred university students and volunteers ranging in age from 18-58 participated in this study. Approximately 7.5% of male and 19% of female participants reported having at least one tattoo. Participants were shown a photo of a male or female with either a cute, tribal or no tattoo and asked to consider the individual's suitability for

a position as a child care worker and an office manager. The results indicated that the model with a cute tattoo and the model with no tattoo were viewed similarly; both were viewed as more suitable for the jobs than those with a tribal tattoo. Male participants rated those with a tattoo as less suitable for both jobs. This study supports the position that the type of tattoo a person has makes a difference in how suitable they are perceived for a job, for both men and women.

A similar study examined patient's perceptions of patient care providers with tattoos and/or body piercings (Westerfield et al., 2012). In this study, 150 adult hospital patients were shown 8 pictures of male and female care providers in uniform, some with and some without tattoos and/or non-earlobe piercings. Of these 150 participants, 72% were 46 years of age or older, 68% were female, 77% were white, 22% had a tattoo themselves, half of which were visible. Participants were asked to rate the care providers in the pictures on confidence, reliability, attentiveness, cooperativeness, professionalism, efficiency, and approachability. Female care providers with a tattoo were viewed as less professional than both female care providers without a tattoo and male care providers with a similar tattoo. Providers with a visible tattoo or piercing were never viewed more positively than those without a tattoo or piercing. When comparing workers with a tattoo or piercing, perceptions of body piercings were viewed more negatively than tattoos. Limitations of this study were that variations in tattoo style were not used and that the study was conducted at only one site in a rural community.

Swanger (2006) found similar findings in a study that examined visible body modification, including tattoos, and their effects on potential employment in the hospitality industry. Thirty seven human resource managers and college recruiters participated in an email questionnaire on their companies' perception of applicants with visible body modifications. Eighty one percent of participants stated that applicants with visible tattoos or piercings during

an interview would be viewed negatively by their business. The sample size of this study was small and only included 19 companies, including hotels, restaurants, management services, a theme park and a recreation company. Findings cannot be generalized to all businesses, but one area that is addressing this issue is public education.

As the number of people with tattoos has increased, many school districts have adapted their dress codes to include visible tattoos (Few, 2012). Some districts group tattoos with tight jeans, flip flops and tennis shoes. The issue of professional dress has caused some districts to implement policies requiring teachers to cover their tattoos, as was the case for Savannah-Chatham public schools. Some tattoos can be easily covered with long sleeves, collars and pants, while others are more difficult to hide, such as tattoos on the neck, face and hands. Attitudes and beliefs about tattoos have raised the issue of professionalism and whether or not a teacher with a visible tattoo is a good role model for students.

Perceptions of Tattoos: Adolescents and Children

Very few studies have been conducted on children's perceptions of people with tattoos, especially younger children (Degner & Wentura, 2010). The studies that have been conducted generally indicated that children tend to have negative perceptions of people with tattoos (Degner & Wentura, 2010; Durkin & Houghton, 2000; Houghton, Durkin & Carroll, 1995).

Durkin and Houghton (2000) conducted a study to look at child and adolescent stereotypes of men with tattoos, particularly focusing on the stereotype associating tattoos and delinquent behavior. In the study, 340 children in Australia between the ages of six and 16 were shown illustrations of three male characters, one of which had a nonaggressive tattoo. There were six groups of children in this study; 46 six year olds, 44 eight year olds, 64 ten year olds, 81 twelve year olds, 57 fourteen year olds and 48 sixteen year olds. Participants were recruited

from three primary schools and one high school in a low to middle class area in an Australian city. The male illustrations were dressed differently and had different hair styles. One in three of the illustrations had a tattoo. They were asked to identify the men in the illustrations that best fit a description of an act that was either negative, positive or neutral. Durkin and Houghton examined the children's perceptions of the characters and the age of the participants. Their results suggested that there was an overall negative bias towards the tattooed characters. Some evidence suggested that this negative bias increased for the children in middle childhood, as those participants rated the tattooed character more negatively than either the early school year ages or the older participants. There was no significant difference between gender and ratings. The youngest children in this study were only slightly less likely to associate the tattooed character with a delinquent behavior. This study suggests that the tendency to associate people with tattoos and negative acts is already established in young children. This study limits the generalizing of results to real people as it used illustrations rather than actual photos.

Twenty seven fourth grade students ranging from eight to ten years of age from a public elementary school participated in a study about children's perceptions of people with tattoos (Bouma, Dewit & Lantinga, 2005). The children were shown six color photos of people, some with tattoos and some without. Three of the models in the photos were female and three were male. Models ranged in age, ethnicity and were posed differently in the photos. After viewing the photos, the children were asked to answer negative or positive questions about the individuals in the photos. Gender was the only significant factor in the children's responses. Male participants rated both male and females models more negatively than female participants. There were no significant findings between the tattooed and nontattooed models.

Houghton, Durkin and Carroll (1995) conducted a qualitative study on children's knowledge and attitudes about tattoos by using focus groups. The study focused on the children's knowledge of tattoos and the process of getting a tattoo, the health risks of getting a tattoo, attitudes towards tattoos and the stigmatization tattoos can have. Participants included 80 children ranging in ages from six to 17 and from 1st to 11th grades; 48 students were from a primary school and 32 students were from a high school. Both schools were in a middle class socioeconomic area in Western Australia. Data was collected in small groups of six to eight children at a time. The groups were shown slides of people and were asked for their opinions and some general questions. Overall attitudes about tattoos were negative even though most of the children said they knew someone with a tattoo. The one exception to this was seen in early adolescent aged females who thought small tattoos were fashionable. Overall, children associated people with tattoos as having lower status jobs and being involved in illegal behavior. Most of the children seemed to understand that getting a tattoo came with health risks such as scarring and getting diseases from dirty needles. Older children understood that tattoos are permanent. This study and other studies conducted in other countries cannot be generalized to American children's attitudes since every culture is different and cultural beliefs can vary.

A different type of study was conducted in 2007, not to look at children's and adolescent's perceptions of people with tattoos, but to look at the characteristics of children and adolescents who express no interest or opinion about body art (Cegolon, Xodo & Mastrangelo, 2010). A total of 4,277 students from Italian secondary schools, ages 13 to 21, completed self-report questionnaires about their attitudes of body art. Of the 4,277, 6% had at least one tattoo and 20% had at least one body piercing. Of those with a tattoo, 62% were under 18 when they were tattooed. The children who were indifferent towards tattoos and/or body piercings shared

several common characteristics. Those indifferent to body art tended to have fathers with higher educational levels and increased knowledge about health risks and possible infections that can be contracted by getting body art. They also had a decreased awareness of the tattoo removal process.

Research suggests that children's overall perceptions of people with tattoos are negative (Durkin & Houghton, 2000; Houghton et al., 1995). Durkin and Houghton (2000) found that children associated male tattoo characters with more negative attributes and acts than characters without a tattoo. They also found an increase in negative ratings in middle childhood as those participants rated the male characters more negatively than both the early school age and older participants. Similarly, results from a focus study indicated that children associated tattoos with lower status jobs and involvement in illegal behavior (Houghton et al., 1995). Early adolescent females in this study rated having a small tattoo as fashionable. Most of the children in this study understood the health risks of tattoos. Bouma et al. (2005) found no significant differences between fourth grade students' ratings of tattooed and nontattooed photos. Children who showed an indifference towards tattoos shared several common characteristics, including having fathers with higher educational levels, increased knowledge about health risks and decreased awareness of the tattoo removal process (Cegolon et al., 2010). High school and university students rated a female model with a tattoo as less athletic, attractive, motivated, honest, generous, mysterious, religious, intelligent and artistic. Similarly, Rosenhoeft et al. (2008) found that college students rated a model without a tattoo as more fashionable, athletic, attractive, caring, intelligent, but less artistic.

STATEMENT OF PROBLEM

People are often judged on their physical appearance, and for an increasing number of people visible tattoos are part of that appearance. Having a visible tattoo can have an effect on an individual's employability, perceived effectiveness, and perceived credibility (Seiter & Hatch, 2005). Dean (2012) found that visible tattoos on white collar service providers was viewed as inappropriate, while visible tattoos on blue collar workers was viewed as appropriate. Westerfield et al. (2012) found that female patient care providers with a visible tattoo were viewed as less professional by patients than the same female worker without a tattoo. Goldman et al. (2012) found that college students perceived professors without a visible tattoo as more competent than professors with a tattoo.

Historically, perceptions of people with tattoos have varied, but most have been negative and associated with deviant behavior (Swami & Furnham, 2007). Previous research on tattoos has focused primarily on adult perceptions and attitudes about tattoos and those who have them (Bouma et al., 2005). Research on children's perceptions is not as prevalent. Research that has been conducted suggests that children perceive people with tattoos more negatively or delinquent as opposed to positively or neutral (Durkin & Houghton, 2000). Overall, current research indicates that children, adolescents and adults perceive people with tattoos more negatively than people without tattoos. Results from the 2012 Harris Poll suggest that attitudes towards tattoos may be changing (Harris Interactive, 2012). These results seem to predict that a generation of adolescents who grew up during a shift in perception of tattoos is now entering the work force, many in education, and there may indeed be differences in how they are perceived.

There is a significant gap in research that focuses on children's perceptions of people with tattoos, especially children's perceptions of teachers with tattoos and what possible impact this can have on the educational environment. As was previously mentioned, it appears inevitable that as the number of people with tattoos increases, the likelihood of a child having a teacher with a tattoo also increases. Additional research on children's perceptions of people with tattoos is important in that it provides information on how children develop biases, stereotypes and ultimately discriminatory behavior, such as bullying. The research obtained by this study is important in examining future issues in education. This study examined children's perceptions of a female teacher with a visible tattoo. It also examined the impact home and environmental factors, such as parental tattoos, had on child's perception of a teacher with a tattoo. Lastly, the impact of having a teacher with a tattoo and performance on a measure of achievement was examined.

PURPOSE OF STUDY

The purpose of this study was to examine children's perceptions of a female teacher with a tattoo, specifically characteristics of trustworthiness, attractiveness, friendliness, intelligence, fairness, and caring, compared to the same teacher without a tattoo. It also examined environmental factors on children's perceptions of a female teacher with a tattoo. Lastly, this study examined the difference in information retained by a child if the information was presented by a teacher with a tattoo compared to if the information was presented by a teacher without a tattoo. It was predicted that children presented with the female teacher with a visible tattoo would rate the teacher lower on the following characteristics: trustworthiness, attractiveness, friendliness, intelligence, fairness and caring than the children that were presented with the female teacher without a visible tattoo.

It was also predicted that children who have a parent with at least one tattoo would perceive the female teacher with a visible tattoo as more trustworthy, attractive, friendly, intelligent, fair and caring than the children that do not have a parent with a tattoo. Lastly, children that were presented with the female teacher without a visible tattoo were predicted to perform better on a measure of achievement.

METHOD

Participants

Participants included 128, 4th grade students solicited from four public schools in the southeast. This age group was selected because familial influence on a child's beliefs and attitudes during preadolescence is stronger than during adolescence. A total of 260 parental consent forms were sent home with students. One hundred sixty students returned consent forms, indicating a response rate of 62%. Of the 162 returned consent forms, 14 parents declined their child's participation in the study, 18 students with parental consent were absent the day of the study, and two students declined to participate. There was a total of 128 participants that included both males (N=58) and females (N=70) who participated in the study.

Materials

A number of research instruments were used in this study. A parental consent form and letter explaining the study (see appendix A) were used to obtain parental consent. The letter requested that the parent not speak to the child about tattoos or his/her personal attitudes or beliefs about people with tattoos prior to the study. A parental demographic survey (see appendix B) was used to obtain information about the parent including: education; occupation; relationship to participant; whether they, their spouse, or close family/friend had a tattoo that the child had seen; and the number of tattoos each person had. An open-ended question regarding the parent's opinion about people with tattoos was also included. Space was provided on the consent form for parents to include their mailing or email address if they wanted to receive a summary of the study results. The parental consent form and parental demographic survey were translated into Spanish for Spanish speaking parents by Winston-Salem/Forsyth County Schools'

district-wide bilingual specialist. A student assent form (see appendix C) was used to explain the study to students and obtain participant consent.

Two similar seven-minute video presentations on animal conservation were created to present information for the achievement task (see appendix D). The same confederate “teacher” was used in both videos. She was a school psychologist in the district, but did not work at any of the schools that data was collected from. In one video, the teacher had a visible tattoo (see appendix E) and in the other video, the “teacher” did not have a tattoo. The tattooed teacher had a six-inch temporary tattoo with a series of stars located on the side of her neck, beginning behind her ear and curving around slightly towards the front of the neck. The stars varied in size ranging from approximately one to three centimeters in diameter. Some stars were solid black and some were black outlines. The two video presentations were recorded on the same day back to back to ensure consistency in the teacher’s affect and overall appearance. The nontattoo video was recorded first. Once completed, the tattoo was applied to the teacher’s neck and the tattoo video was recorded.

A 10 question multiple-choice quiz (see appendix F) was used to measure how much information the participants remembered from the video presentation. An 8-point Likert rating scale (see appendix G) was used to measure the participants’ perceived trustworthiness, attractiveness, friendliness, level of caring, intelligence and fairness of the teacher (example: “very friendly”, “a little friendly”, “not friendly”). A higher number correlated with a more negative rating on the scale.

A participant demographic survey (see appendix H) was used to obtain information including: sex, parental tattoos, preferences in music and television, and whether or not

participant wanted to get a tattoo when he/she was older. An open-ended question was included to obtain the participant's opinion about people with tattoos.

Procedure

Approval to conduct this study was received from Western Carolina University's IRB committee and Winston-Salem/Forsyth County Schools Research and Evaluation Department. Principals in the district were solicited by email and phone. Once approval was given by the principal, 4th grade teachers in that school were contacted. The nature of the study was explained to each teacher, as well as a request that the teacher not disclose this information to the students. Parental consent forms and demographic surveys were sent home with each child in an envelope with instructions to return the completed forms to child's teacher sealed in the provided envelope.

A pilot study was conducted to ensure that parent and participant forms were clear, understandable, and obtained the information intended. Five parents were asked to review the parent consent form and demographic study. Additionally, 15 4th grade students were asked to complete all participant forms and identify any words or instructions that were unfamiliar or unclear. No changes were needed or made to any of the parent or participant forms after the pilot study was completed.

A total of 11 fourth grade classes were used in this study. Each fourth grade classroom was randomly assigned to either a tattoo or nontattoo condition. On the day of the study, students with parental consent remained in the classroom while the students without parental consent were removed from classroom until the study was completed. Students with parental consent were given a folder containing four forms, each with a small colored sticker in the upper right corner for easy identification. The student assent form was read orally to participants. Students

that decided not to participate in the study left the classroom and joined their classmates without parental consent. After signing and dating the assent form, students were asked to return it to the folder and close the folder. Participants then viewed a seven-minute video on animal conservation projected on a smart board at the front of the classroom. The participants in the tattoo condition viewed the video presented by the tattooed teacher and participants in the nontattoo condition viewed the video presented by the nontattooed teacher.

Immediately following the video presentation, participants were instructed to open their folder and retrieve the rating scale. Verbal instructions were given to the participants on how to complete the survey, including two examples. They were instructed to circle one of eight numbers that best reflected their opinion about the teacher in the video they watched. The researcher read each item orally.

After returning the rating scale to the folder, the participants retrieved the 10-question quiz from their folder. The questions and four choices were read orally to the participants. Participants were instructed to circle one of the four choices for each question. After completing the quiz, participants were instructed to return the quiz to the folder and to retrieve the student demographic survey. After completing the demographic survey, participants were instructed to return the folder with all of the completed forms to the researcher where they then received a \$5 gift card for their participation.

After completing the study, each participant and parent/guardian was assigned a number for identification purposes. Parental consent and student assent forms, which contained identifying information, were stored separate from all other documents to maintain confidentiality. The identification numbers were used in data analysis, not names. A master list of names and identification numbers were kept in a separate location from all other information.

Two raters reviewed the parent and participant responses regarding their opinion of people with tattoos responses (see appendix B and H). Each response was identified as positive, negative, or neutral/ambiguous. Responses written in Spanish were translated using a translation program on <http://www.spanishdict.com/translation> and with the assistance of the department head of the Modern Foreign Language at Western Carolina University.

RESULTS

Descriptive Statistics

Descriptive information was gathered about participants' parents with regard to education, relationship to participant, and number of tattoos the parent reported having (see Table 1). Seventy nine percent of respondents were mothers. Forty seven percent of respondents reported that one of the participants' parents had at least one tattoo. Of those with a tattoo, 15% reported having between three and five tattoos. Sixty six percent of respondents reported having more than a high school degree.

Table 1

Parent Demographics

Variable	n	%
Relationship to Participant		
Mother	101	79
Father	22	17
Grandparent	1	<1
Stepparent	1	<1
Other	1	<1
Not Reported	2	2
Parent Tattoo		
Yes	60	47
No	64	50
Not Reported	4	3
Number of Tattoos		
0	66	51
1	16	12
2	6	5
3-5	19	15
6-10	5	4
>10	5	4
Not Specified	7	5
Not Reported	5	4
Education		
HS or less	41	32
More than HS	80	63
Not Reported	7	5

Descriptive information was gathered about participants with regard to sex and desire to get a tattoo when older (see Table 2). Fifty five percent of participants was female and 45% was male. Of the 70 female participants, 31% reported desire to get a tattoo when she was older. Of the 58 male participants, 29% reported a desire to get a tattoo when he was older.

Table 2

Participant Demographics

Variable	n	%
Sex		
Male	58	45
Female	70	55
Want Tattoo		
Male	17	29
Female	22	31

Descriptive information regarding parent and participant opinions about people with tattoos was also collected (see Table 3). Ninety four parents and 94 participants expressed a positive, negative, or neutral opinion about people with tattoos. Thirty five parent-child pairs had consistent opinions.

Table 3

Parent/Participant Opinions of People with Tattoos

Variable	Positive	Negative	Neutral
Respondent			
Female Parent	27	20	31
Male Parent	8	4	4
Female Participant	21	20	11
Male Participant	17	19	6
Parent-Child Pair	18	16	1

Parent Education

It was predicted that children who had a parent with greater than a high school education would evaluate the teacher with a tattoo more positively on personal attributes than those who had a parent with a high school education or less. A chi square test of independence revealed no significant difference between the group exposed to the tattooed teacher and the group exposed to the nontattooed teacher with regard to parent education ($\chi^2 = 5.26, p=.26$).

Desire to Get Tattoo When Older

It was predicted that more male participants would want to get a tattoo when older than female participants. A chi square test of independence revealed no significant difference between sexes with regard to participant's desire to get a tattoo when older ($\chi^2 = .098, p=.75$). For the total sample (N=127), 31% of the participants reported wanting to get a tattoo when he/she was older.

It was predicted that participants in the tattoo group would be more likely to report a desire to get a tattoo when older than participants in the nontattoo group. A chi square test of independence revealed a significant difference between the tattoo and nontattoo groups with regard to participant's desire to get a tattoo when older ($\chi^2 = .098, p=.75$). Participants in the tattoos group were more likely to report a desire to get a tattoo when older than participants in the nontattoo group. For the total sample (N=127), 31% of participants reported wanting to get a tattoo when older. For the group exposed to the tattooed teacher (N=61), 39% of participants reported a desire to get a tattoo when older. For the group exposed to the teacher without a tattoo (N=66), 23% of participants reported a desire to get a tattoo when older.

It was predicted that parents with advanced educations would have less tattoos than those without an advanced education. A chi square test of independence revealed no significant

difference between parental education with regard to the number of tattoos parents reported having ($\chi^2 = 29.93, p = .19$). Sixty three percent of this sample were in the same educational category and reported having more than a high school education. For the total sample, 51.2% of parents reporting not having a tattoo, 12.4% reported having one tattoo, 4.7 reported having 2 tattoos, 14.7 reported having 3-5 tattoos, 3.9% reported having 6-10 tattoos, and 3.9% reported having more than 10 tattoos.

Parent-Child Attitudes

To explore the similarity between parent and child attitudes regarding people with tattoos, an open-ended question was included in both demographic surveys. Adult respondents were asked to provide their opinion about tattoos or people with tattoos. Child respondents were asked to describe people with tattoos. Two raters reviewed the parent and child responses and rated the responses as positive, negative or neutral/ambiguous (see Table 3). There was 73% rater agreement. Of that 73% ($N=94$), there was 37% ($N=35$) consistency between parent and child attitudes about people with tattoos. Of the 35 parent-child pairs with consistent attitudes, 51% ($N=18$) of the parent-child responses were positive, 46% ($N=16$) were negative, and 3% ($N=1$) were neutral/ambiguous.

Hypothesis 1

Prior to performing a one-way between-groups multivariate analysis of variance (MANOVA), assumptions were tested for the MANOVA. The sample size, normality, outliers, linearity, and homogeneity of variance-covariance assumptions were all satisfied.

Multicollinearity and singularity assumptions were tested by running correlations to check for dependent variables that may have been correlated too high or not at all (see Table 4). None of the dependent variables (Trustworthy, Attractiveness, Friendliness, Intelligence, Caring, and Fairness) were correlated highly enough to need to exclude them from the analyses. All of the

dependent variables were correlated with each other. Because there was not an individual factor that was not correlated with the remaining factors, a MANOVA was conducted instead of multiple independent analyses of variance (ANOVA).

It was hypothesized that participants presented with the female teacher with a visible tattoo would rate the teacher lower on the following characteristics: trustworthiness, attractiveness, friendliness, intelligence, fairness and caring than the children that were presented with the female teacher without a visible tattoo. A one-way MANOVA was performed to investigate group differences in the dependent variables: trustworthy, attractiveness, friendliness, intelligence, caring, and fairness based on tattoo/nontattoo teacher condition (see Table 5). There was not a statistically significant difference between participants in the tattoo condition and nontattoo condition on the combined dependent variables ($F(1,126) = 2.17, p = .051$). There were no statistically significant differences found between the tattoo and nontattoo groups on participant ratings on any of the personal characteristics.

Table 4

Correlations Between Dependent Variables

	Trustworthy	Attractiveness	Friendliness	Intelligence	Caring	Fairness
Trustworthy	1	.362**	.431**	.333**	.395**	.284**
Attractiveness	.362**	1	.261**	.156	.219*	.154
Friendliness	.431**	.261**	1	.515**	.617**	.559**
Intelligence	.333**	.156	.515**	1	.559**	.312**
Caring	.395**	.219*	.617**	.559**	1	.512**
Fairness	.284**	.154	.559**	.312**	.512**	1

** $p < .01$, two-tailed. * $p < .05$, one-tailed.

Table 5

Means and Standard Deviations of Tattoo/Nontattoo Condition

Dependent Variable	Condition	M	SD	n
Trustworthy	Tattoo	2.77	1.44	61
	Nontattoo	3.16	1.65	67
Attractiveness	Tattoo	5.41	2.27	61
	Nontattoo	4.76	1.97	67
Friendliness	Tattoo	2.46	1.69	61
	Nontattoo	2.66	1.94	67
Intelligence	Tattoo	1.80	1.41	61
	Nontattoo	2.52	2.09	67
Caring	Tattoo	2.31	1.47	61
	Nontattoo	2.76	1.91	67
Fairness	Tattoo	3.05	1.88	61
	Nontattoo	3.24	1.98	67

Hypothesis 2

Prior to performing a two-way between-groups multivariate analysis of variance (MANOVA), assumptions were tested for the MANOVA. The sample size, normality, outliers, linearity, and homogeneity of variance-covariance assumptions were all satisfied. Multicollinearity and singularity assumptions were tested by running correlations to check for dependent variables that may have been correlated too high or not at all (see Table 1). None of the dependent variables (Trustworthy, Attractiveness, Friendliness, Intelligence, Caring, and Fairness) were correlated highly enough to need to exclude them from the analyses. All of the dependent variables were correlated with each other. Because there was not an individual factor

that was not correlated with the remaining factors, a MANOVA was conducted instead of multiple independent analyses of variance (ANOVA).

It was hypothesized that children who have a parent with at least one tattoo would perceive the female teacher with a visible tattoo as more trustworthy, attractive, friendly, intelligent, fair and caring than the children that do not have a parent with a tattoo (see Table 6). A two-way MANOVA ($F(3, 120) = .468, p = .83$) was performed to investigate group differences in the dependent variables: trustworthy, attractiveness, friendliness, intelligence, caring, and fairness based on tattoo/nontattoo condition and parental tattoo status. The interaction between tattoo condition and parental tattoo status was not significant ($F(3, 120) = .468, p = .83$). There was not a statistically significant main effect ($F(3, 120) = .192, p = .979$) for parent tattoo status. There was not a statistically significant main effect ($F(3, 120) = .845, p = .096$) for tattoo/nontattoo condition.

Table 6

Means and Standard Deviation of Tattoo/Nontattoo Condition and Parental Tattoos

Dependent Variable	Parental Tattoo	Condition	M	SD	n
Trustworthy	Yes	Tattoo	2.79	1.54	29
		Nontattoo	3.16	1.83	31
	No	Tattoo	2.81	1.35	31
		Nontattoo	3.06	1.52	33
Attractiveness	Yes	Tattoo	5.45	1.94	29
		Nontattoo	4.61	1.82	31
	No	Tattoo	5.42	2.59	31
		Nontattoo	4.91	2.05	33
Friendliness	Yes	Tattoo	2.35	1.59	29
		Nontattoo	2.65	1.94	31
	No	Tattoo	2.45	1.71	31
		Nontattoo	2.55	1.80	33
Intelligence	Yes	Tattoo	1.93	1.49	29
		Nontattoo	2.65	2.39	31
	No	Tattoo	1.71	1.37	31
		Nontattoo	2.33	1.71	33
Caring	Yes	Tattoo	2.17	1.39	29
		Nontattoo	3.00	2.21	31
	No	Tattoo	2.45	1.57	31
		Nontattoo	2.52	1.54	33
Fairness	Yes	Tattoo	3.00	1.77	29
		Nontattoo	3.16	2.02	31
	No	Tattoo	3.03	2.01	31
		Nontattoo	3.21	2.00	33

Hypothesis 3

It was hypothesized that children that are presented with the female teacher without a visible tattoo would perform better on a measure of achievement. A one-way between-groups Univariate ANOVA was performed to examine the difference in achievement scores based on tattoo/nontattoo condition. Results indicate that there is no statistically significant difference ($F(1, 126) = .818, p = .367$) on achievement based on tattoo ($M=6.28, SD=1.57$) and nontattoo condition ($M=6.54, SD=1.65$). Achievement scores ranged from 1 to 10.

Exploratory Analyses

Additional analyses were conducted to investigate group differences in the dependent variables: trustworthy, attractiveness, friendliness, intelligence, caring, and fairness based on sex. Because a significant difference was found between sexes, male and female participants were examined separately in order to examine the differences further.

Gender Differences

Results from a one-way MANOVA revealed a statistically significant ($F(1, 126) = 4.33, p = .001, \eta^2 = .117$) sex difference in the dependent variables. Male participants rated the teacher as less attractive ($M=5.69, SD=1.97$), more caring ($M=2.21, SD=1.56$), and more fair ($M=2.66, SD=1.67$) than female participants ($M=4.56, SD=2.12$), ($M=2.82, SD=1.80$), and ($M=3.56, SD=2.04$), respectively.

Results from a two-way MANOVA revealed a statistically significant ($F(1, 56) = 2.616, p = .027, \eta^2 = .235$) difference in the dependent variables based on tattoo/nontattoo condition and sex, for male participants only. Male participants rated the teacher with a tattoo as less attractive ($M=6.45, SD=1.96$) than the teacher without the tattoo ($M=4.93, SD=1.69$).

A chi square test of independence revealed no significant difference between participant sex with regard to parental tattoo status ($\chi^2 = .00, p=.74$). For the total sample, 47% of parents reported having at least one tattoo, while 50% reported not having a tattoo.

Parent Education

When parent education was examined in two groups (parents with high school education or less and parents with more than a high school education), there was a significant finding in regard to advanced parental education on achievement scores $F(1, 119)=8.19, p=.005, \eta^2=.064$. Participants that have a parent with more than a high school education ($M=6.73, SD=1.68$), scored higher on a measure of achievement than participants who did not have a parent with more than a high school education ($M=5.86, SD=1.37$).

There was also a significant difference found between the group exposed to the tattooed teacher and the group exposed to the nontattoo teacher with regard to advanced parental education on teacher ratings ($F(1, 78) = 2.99, p=.011, \eta^2=.197$). When the results of the dependent variables were considered separately, the only difference to reach statistics significance was trustworthy ($p=.023$), attractiveness ($p=.049$), and caring ($p=.018$). Further inspection indicated that participants that have a parent with more than a high school education rated the teacher with a tattoo as less attractive ($M=5.79, SD=2.07$), more trustworthy ($M=2.67, SD=1.29$), and more caring ($M=2.09, SD=1.42$) compared to the teacher without a tattoo ($M=4.92, SD= 1.82$), ($M=3.47, SD=1.66$), and ($M=3.06, SD=1.98$) respectively. There was no significant difference between the participants' ratings of the teacher with the tattoo and the teacher without the tattoo when the participants' parents had a high school education or less.

DISCUSSION

Popularity in tattoos has increased in recent decades. As of 2012, one in five Americans has at least one tattoo (Harris Interactive, 2012). Men, women, professionals, and people of all legal ages have tattoos. This increase in popularity may indicate that perceptions of people with tattoos may be changing; however, research suggests that negative perceptions continue to exist. Some schools have adapted their dress code to include tattoos due to concerns regarding the effect teachers with visible tattoos may have on children in the educational setting (Few, 2012). Some school policies may require teachers to keep their tattoos covered so their students cannot see them.

Research suggests that appearance matters and can affect an individual's image and employability (Dean, 2010; Westerfield et al., 2012). Having a visible tattoo can impact an employer's perception of a potential teacher candidate, including his/her credibility and appropriateness. The current study focused on children's perceptions of a female teacher with a tattoo.

Results of this study do not indicate that students perceive a female teacher with a tattoo more negatively than a female teacher without a tattoo; however, gender differences were found. Male participants rated the teacher with a tattoo as less attractive than the teacher without a tattoo. Male students also rated the teacher in general, regardless of tattoo status, as less attractive, more caring and fairer. Boys at this age may have higher expectations for attractiveness than girls. Findings from this study yielded similar results to a study conducted by Bouma et al. (2005). Consistent with the current study, Bouma et al. found that 4th grade male participants rated female models more negatively than 4th grade female participants. They also

found no significant difference in ratings of the tattooed and nontattooed models by male or female participants.

The findings of this study did not support the hypothesis that children who have a parent with at least one tattoo will perceive a female teacher with a visible tattoo as more trustworthy, attractive, friendly, intelligent, fair and caring than the children that do not have a parent with a tattoo. This preadolescent age group was selected for the current study because familial influences are greater at this age than outside influences. Research in the area of parent-child similarities has shown a significant similarity between parent and children's attitudes and beliefs, especially in younger parent-child pairs (Miller & Glass, 1989). It was believed that children would share their parents' attitudes about tattoos and people with tattoos. Results of this study were not consistent with previous research on parent-child attitude similarities and only resulted in 37% consistency between parent and child attitudes about tattoos and people with tattoos. It is possible that with increasing media influences inside the home, familial influence on children's perceptions is not as strong as it previously was on this age group.

For 4th grade students, performance on a measure of achievement was not significantly different when information was presented by a female teacher with a tattoo or without a tattoo. These findings are limited to 4th grade age students. Older or younger students could perform differently in achievement if presented with a teacher with a tattoo.

Several factors could have impacted the results of this study including the age of participants, sex of the teacher, type of tattoo, and number of tattoos. The teacher used in this study was female. Having a male teacher with a visible tattoo might have resulted in different responses by the students and yielded different results. Having older or younger participants might have produced different results. High school aged students for example might be more

easily distracted by a teacher's tattoo because he/she is closer to the age in which he/she could get one. Younger children might find the tattoo more novel and interesting than their 4th grade peers. The tattoo selected for this study was isolated to one location and was a simple design of solid black stars and outlines that was believed to be mild in content and size. It was large enough to be clearly visible, but not large enough to cover the entire neck.

Although the original hypotheses of this study were not supported by the findings, the lack of significant findings produced some interesting results. The need for special dress code policies to conceal tattoos is not supported by the findings in this study. In general, students did not perceive the female teacher with a tattoo differently than the female teacher without the tattoo, nor was their performance on a measure of achievement significantly impacted by the presence of the tattoo. Additionally, a child's exposure to tattoos in the home does not result in more positive ratings of personal characteristics of a teacher with a tattoo in the classroom. A child who has a parent with a tattoo is not more likely to perceive a teacher with a tattoo more positively than a teacher without a tattoo. That child is also not going to rate the teacher with a tattoo more positively than a child who does not have a parent with a tattoo. Again, these results are limited to a certain age group and cannot be generalized to all children.

Further research in the area of children's perceptions of people with tattoos is needed and important to expand on existing research. Varying the content, size, number, or location of the tattoo could produce different results and would potentially be a good follow-up study. A teacher with full body tattoos and a teacher with one medium sized tattoo could elicit different responses from participants. A tattoo of a skull and bones could result in more negative ratings than that of a flower or cartoon character. Comparing three different participant age groups

would also be an interesting follow up study that could provide information about perceptions of people with tattoos at different developmental levels.

REFERENCES

- Adams, J. (2009). Marked difference: tattooing and its associations with deviance in the united states. *Deviant Behavior, 30*, 266-292. doi: 10.1080/01639620802168817
- Augoustinos, M., Walker, I. & Donaghue, N. (2014). *Social Cognition: An Integrated Introduction*. Sage Publications Inc: Los Angeles
- Bergen, T. J. Jr. (2001). The development of prejudice in children. *Education, 122*, 154-162.
- Bouma, K., De Wit, L., & Lantinga, S. B. (2005). The effect of tattoos and piercing on children's perceptions of people. *Psych-E, 4*. Retrieved from <http://www.psychology.siu.edu/psyche/archives/vol4/boundewit.html>
- Burgess, M. & Clark, L. (2010). Do the "savage origins" of tattoos case a prejudicial shadow on contemporary tattooed individuals? *Journal of Applied Social Psychology, 40*, 746-764. doi: 10.1111/j.1559-1816.2010.00596.x
- Bigler, R. S. & Liben, L. S. (2007). Developmental intergroup theory: explaining and reducing children's social stereotyping and prejudice. *Current Directions in Psychological Science, 16*, 162-166.
- Carter, C. & Rice, C. L. (1997). Acquisition and manifestation of prejudice in children. *Journal of Multicultural Counseling & Development, 25*, 185-194.
- Cegolon, L., Xodo, C. & Mastrangelo, G. (2010). Characteristics of adolescents who expressed indifference or no interest towards body art. *BMC Public Health, 10*, 1-6. doi: 10.1186/1471-2458-10-605
- Colbert, R. (2008). Teacher candidate fashion, tattoos and piercings: finding balance and common sense. *Childhood Education, 64*, 158.

- Dean, D. (2010). Consumer perceptions of visible tattoos on service personnel. *Managing Service Quality*, 20, 294-308. doi: 10.1108/09604521011041998
- Degelman, D & Price, N. D. (2002). Tattoos and ratings of personal characteristics. *Psychological Reports*, 90, 507-514.
- Degner, J. & Wentura, D. (2010). Automatic prejudice in childhood and early adolescence. *Journal of Personality and Social Psychology*, 98, 356-374. doi: 10.1037/a0017993
- Durkin, K. & Houghton, S. (2000). Children's and adolescents' stereotyping of tattooed people as delinquent. *Legal and Criminological Psychology*, 5, 153-164.
- Few, J. (2012). Teachers and tattoos don't mix in savannah schools. *Savannah Morning News*. Retrieved from savannahnow.com
- Goldman, Z., Cranmer, G & Neville, E. (2012). Teacher's ink: student's perceptions of teachers with tattoos. *West Virginia University- Department of Communication Studies*.
- Gerrig, R. J. (2013). *Psychology and Life*. Pearson: USA.
- Harris Interactive (2012). *One in five u.s. adults now has a tattoo*. Retrieved from <http://www.harrisinteractive.com/NewsRoom/HarrisPolls/tabid/447/mid/1508/articleId/970/ctl/ReadCustom%20Default/Default.aspx>
- Houghton, S., Durkin, K. & Carroll, A. (1995). Children's and adolescents awareness of the physical and mental health risks associated with tattooing: a focus group study. *Adolescence*, 30. Retrieved from <http://www.questia.com/googleSchlor.qst?docId=5000370405>
- Martin, B. & Dula, C. S. (2010). More than skin deep: perceptions of, and stigma against, tattoos. *College Study Journal*, 44, 200-206.
- Miller, J. C. (2004). *The Body Art Book*. The Berkely Publishing Group: NY.

- Miller, R. & Glass, J. (1989). Parent-child attitude similarity across the life course. *Journal of Marriage and the Family*, 51, 991-997.
- Morland, K. (1963). The development of racial bias in young children. *Theory Into Practice*, 2, 120-127. Retrieved from www.jstor.org/stable/1475638
- National Conference of State Legislatures (2015). Tattooing and body piercing: state laws, statues and regulations. Retrieved from: <http://www.ncsl.org/research/health/tattooing-and-body-piercing.aspx> April, 25, 2015.
- Pew Research Center (2010). Millennials: a portrait of generation next. Retrieved from: <http://www.pewsocialtrends.org/2010/02/24/millennials-confident-connected-open-to-change/> April 24, 2015.
- Resenhoft, A., Villa, J. & Wiseman, D. (2008). Tattoos can harm perceptions: a study and suggestions. *Journal of American College Health*, 56, 593-596.
- Roberts, A., Koch, J., Armstrong, M. & Owen, D. (2006). Correlates of tattoo and reference group. *Psychological Reports*, 99, 933-934.
- Rutland, A., Killen, M. & Abrams, D. (2010). A new social-cognitive developmental perspective on prejudice: the interplay between morality and group identity. *Perspectives of Psychological Science*, 5, 279. doi: 10.1177/17456910369468
- Sanders, C. R. & Vail, D. A. (2008). *Customizing The Body: The Art and Culture of Tattooing*. Temple University Press: Philadelphia.
- Seiter, J. S. & Hatch, S. (2005). Effect of tattoos on perception of credibility and attractiveness. *Psychological Reports*, 96, 1113-1120.
- Swami, V. & Furnham, A. (2007). Unattractive, promiscuous and heavy drinkers: perceptions of women with tattoos. *Body Image*, 4, 343-352.

- Swanger, N. (2006). Visible body modification: evidence from human resource managers and recruiters and the effect on employment, *Hospitality Management*, 25, 154-158.
Retrieved from www.sciencedirect.com
- Vezzali, L., Giovannini, D. & Capozza, D. (2012). Social antecedents of children's implicit prejudice: direct contact, extended contact, explicit and Implicit teacher' prejudice, *European Journal of Developmental Psychology*, 91, 569-581.
- Weinstein, R. (1983). Student perceptions of schooling. *The Elementary School Journal*, 83, 286-312. Retrieved from www.jston.org/stable/1001162
- Westerfield, H., Stafford, A., Speroni, K. & Daniel, M. (2012). Patients' perceptions of patient care providers with tattoos and/or body piercing, *The Journal of Nursing Administration*, 42, 160-164.
- Wiseman, D. (2010). Perceptions of a tattooed college instructor. *Psychological Reports*, 106, 845-850. doi: 10.2466/PR0.106.3.845-850
- Wohlrab, S., Fink, B., Kappeler, P. M. & Brewer, G. (2009). Differences in personality attributions toward tattooed and no tattooed virtual human characters. *Journal of Individual Differences*, 30, 1-5. doi: 10.1027/1614-0001.30.1.1
- Wohlrab, S., Stahl, J., Rammsay, T., & Kapplerm, P. M. (2007). Differences in personality characteristics between body-modified and non-modified individuals: associations with individual personality traits and their possible evolutionary implications. *European Journal of Personality*, 21, 931-951. doi: 10.1002/per.642

APPENDICES

Appendix A: Parental Consent Form/Explanation Letter

Dear parent/guardian,

My name is Melanie Simons. I am a graduate student in School Psychology at Western Carolina University. More and more individuals are getting tattoos now and it is very likely that students will have a teacher with a tattoo. I am conducting a study to examine how children judge people with tattoos, specifically teachers. This research is important in understanding how having a visible tattoo may impact the student-teacher relationship and how it might impact student learning. This study has been approved by Western Carolina University's ethics review board and Winston-Salem Forsyth County Schools research department. All information provided by you and your child will be kept confidential.

All students that participate in this study will receive a \$5 Walmart gift card. If your child participates in the study, he/she will be assigned to watch a seven minute video presentation on animal conservation delivered by either a female teacher with a visible tattoo or by a female teacher with no tattoo. This video will contain information about the declining populations of some animal species, reasons for that decline, animals that are considered vulnerable, threatened or endangered, and things that are being done to prevent species extinction. After the video presentation, your child will be asked to answer 10 multiple choice questions based on the information presented on animal conservation. He/she will then be asked to rate the teacher on attractiveness, trustworthiness, friendliness, level of caring, intelligence and fairness. For example, your child would choose "very friendly", "a little friendly", "not friendly" to rate friendliness. After he/she rates the teacher, he/she will complete a short demographic survey which will ask his/her sex, if he/she has a parent with a tattoo(s) and what he/she thinks about people with tattoos. This study will not include any discussion about tattoos. The study will be conducted during free class time in a classroom. Your child's participation should take no more than 25 minutes and he/she will benefit by learning about animal conservation.

Should you decide to allow your child to participate in this study, please do not speak to your child about tattoos or personal opinions about tattoos before your child participates in the study. Thank you for considering my request. Return this form with your signature and the completed attached survey(s) in the provided envelope. Both parents are encouraged to complete a survey if possible. Please make sure to seal the envelope and return to school with your child. Thank you for your consideration. If you have any questions or would like to see the material your child will complete, please contact me at (828) 342-2359.

Child's Name: _____

_____ Yes, I give my consent for my child to participate in this study

_____ No, I do not want my child to participate

(Parent or Guardian Signature)

(Date)

_____ Yes, I would like to receive results from this study

Email or mailing address:

Appendix B: Parent Demographic Survey

1. What is your relationship to child?

- mother stepmother
 father stepfather
 grandparent other: _____

2. How long has child lived with you?

- since birth
 years months

3. What is your level of education?

- less than high school
 HS degree/GED
 some college
 bachelor's degree
 post bachelor's degree

4. What is your job/occupation? _____

5. Do you or does anyone in your household, close extended family or close friend have a tattoo that the child has seen? Yes No

6. If yes, who has the tattoo?

- myself adult child
 spouse other: relationship to child _____

7. What type of tattoo(s)? _____

8. How many tattoos? _____

9. How long has person with tattoo known child? years months

10. How close is this person to the child? Please circle response.

<i>Like family</i>	<i>Very close</i>	<i>Close</i>	<i>A little close</i>	<i>Not very close</i>
1	2	3	4	5

11. What is your opinion about tattoos or people with tattoos?

Appendix C: Student Assent Form

I am doing a study to learn about how students “see” teachers. If you agree to be in my study, I am going to ask you to watch a short video about animal conservation and answer some questions about the video and the teacher in the video. I am also going to ask you to answer some questions about yourself.

After beginning the study you may stop at any point.

The questions we will ask are only about what you think. There are no right or wrong answers because this is not a test.

If you sign this paper, it means that you have read this and that you want to be in the study. If you don't want to be in the study, don't sign this paper. Being in the study is up to you, and no one will be upset if you don't sign this paper or if you change your mind later.

Your signature: _____ Date _____

Your printed name: _____ Date _____

Signature of person obtaining consent: _____ Date _____

Printed name of person obtaining consent: _____ Date _____

Appendix D: Animal Conservation Video Script

Hi kids. My name is Ms. Erickson and I'm going to talk to you today about endangered species. What is an endangered species? It is a group of animals that is at risk of extinction, or no longer existing. Animal conservation is the practice of protecting endangered animal species and their habitats. Some of the major threats to animal populations are habitat loss, climate change, land and water pollution, disease, increasing human population and natural phenomenon, such as floods, droughts and forest fires. Some animals are being threatened by more than one thing. Low land gorillas for example are being threatened by disease and habitat loss. They are considered to be a critically endangered species. It is uncertain how many of these apes are still in the wild.

There's even a law that places endangered species under government protection to help save the most threatened species from extinction. The Red List of Threatened Species was developed in 1994 to help us learn about threats to species; determine the risk of extinction and to monitor changes in the population of species. Animals on this list are classified as least concern, threatened, vulnerable, endangered, critically endangered, and extinct in the wild. 1,657 animal species were named as critically endangered on the Red List in 2010. That is 14 more than the previous year. When there are no more animals of a species living in their natural habitat, they are considered extinct in the wild. Once there are no more living animals in a species, the species is considered extinct.

Here are a few animal facts:

The first animals that were added to the endangered species list because of climate change were polar bears in 2008. The warming climate in the Arctic is causing a decline in sea ice, which polar bears need to survive. Polar Bears are considered to be threatened. This means that they are not quite endangered, but their numbers are low.

Do you know what the world's fastest land mammal is? It's the cheetah. How fast can a cheetah run? Cheetahs can go from 0 to 60 mph in 3 seconds. These African mammals are being threatened by humans moving into their habitats. Approximately 7,000-9,000 cheetahs remain in the wild. Cheetahs are considered vulnerable.

Bengal Tigers are largest members of the cat family. Its roar can be heard 2 miles away. These Indian tigers are considered endangered. There were 8 species tiger at one time, but 3 became extinct in the 20th century. Tiger numbers have been reduced by hunting and deforestation, or the removal of trees so the land can be used for something else, like building cities or farms. Once tigers numbered in the hundreds of thousands but now there are fewer than 2,500.

Do you know which animal is the largest ever known to have lived on earth? I'll give you a hint. Its tongue alone can weigh as much as an elephant. They can grow to be 100 feet long and weigh 200 tons. It's the blue whale. They were almost hunted to extinction for their whale oil. They are currently on the Red List as endangered.

What animal is black and white and lives almost entirely on bamboo? It is the giant panda. Habitat destruction has caused the loss of several bamboo species, which the giant panda lives

off of. Did you know that a panda eats around 30 pounds of bamboo shoots, stems and leaves every day?

Which animal is one of the world's rarest mammals, with possibly as few as 40 left in the wild? It's the Javan Rhinoceros of Indonesia. They have a very small population and live in only one place. Rhinoceroses are hunted for their horns. Efforts are being made to protect the Javan Rhinoceroses' existing population and to establish new population through relocation. They too are critically endangered.

Animals that live in the water are also at risk. Freshwater animals are vanishing at a rate of 4 to 6 times faster than species on land or at sea. Lakes, swamps and rivers are home to as many as 126,000 of the world's animal species, including snails, crocodiles, turtles, amphibians and fish. The Mekong Giant Catfish are considered to be critically endangered. They live in the Mekong River off the banks of Laos, Cambodia and Vietnam. Human development, damming, habitat destruction and fisheries threaten this large fish.

Consider honeybees and other insects. Honeybees not only make honey, but they and other insects also pollinate flowers, fruit and vegetable crops. We need food to survive. If fish disappear, we also lose a valuable food source.

So why is animal conservation important? Plants, animals and humans are all connected. We are all part of a large and complex world that depends on balance. Change in one part of our world would cause changes in other parts. Think about the honeybees I just mentioned. It's not all bad news. There are many organizations out there working hard to save and protect species. Nature sanctuaries are being established all over the world to protect animals. They help provide threatened animal species with safety and security. Animal breeding programs also protect species by increasing the population and reintroducing populations of animals back into the wild.

Thank you for listening

Appendix E: Tattoo Sample



Appendix F: Animal Conservation Quiz

1. What is the fastest land mammal?
 - a) tiger
 - b) lion
 - c) cheetah
 - d) blue whale
2. What food does the giant panda eat 30 pounds of each day?
 - a) eucalyptus
 - b) grass
 - c) fish
 - d) bamboo
3. Lowland gorillas have been threatened by which of the following?
 - a) habitat loss
 - b) disease
 - c) illegal hunting
 - d) all of the above
4. How many lowland gorillas are still living in the wild?
 - a) no one really knows
 - b) 7,000
 - c) 40
 - d) 2,500
5. What was the first animal to join the endangered species list because of climate change?
 - a) polar bear
 - b) seal
 - c) snowy owl
 - d) penguin
6. Which of the following species is disappearing fastest?
 - a) freshwater species
 - b) land species
 - c) sea species
 - d) sky species
7. How many animal species were named as critically endangered on the Red List in 2010?
 - a) 100,133
 - b) 55
 - c) 5,958
 - d) 1,657

8. What does it mean if an animal is extinct in the wild?

- a) there are no more animals of that species alive
- b) the species is threatened by human development
- c) there are no more animals of that species alive in the wild
- d) the species is threatened by pollution

9. What animal's tongue is the size of an elephant?

- a) javan rhinoceros
- b) humpback whale
- c) giant catfish
- d) blue whale

10. Which of the following is one of the rarest animals on earth with only approximately 40 alive in the wild?

- a) cheetah
- b) giant panda
- c) bengal tiger
- d) javan rhinoceros

Appendix G: Participant Rating Scale

Circle the number that best describes the teacher.

1. How trustworthy do you think the teacher is?

Very trustworthy			A little trustworthy			Not trustworthy
1	2	3	4	5	6	7 8

2. How attractive (pretty) do you think the teacher is?

Very attractive			A little attractive			Not attractive
1	2	3	4	5	6	7 8

3. How friendly (nice) do you think the teacher is?

Very friendly			A little friendly			Not friendly
1	2	3	4	5	6	7 8

4. How intelligent (smart) do you think the teacher is?

Very intelligent			A little intelligent			Not intelligent
1	2	3	4	5	6	7 8

5. How caring do you think the teacher is?

Very caring			A little caring			Not caring
1	2	3	4	5	6	7 8

6. How fair do you think the teacher is with grading?

Very fair			A little fair			Not fair
1	2	3	4	5	6	7 8

Appendix H: Student Demographic Survey

1. Full Name: _____

2. Sex: _____ male _____ female

3. Does anyone who lives in your house have a tattoo? _____ Yes _____ No

4. If you said yes to number 3, who has a tattoo (mother, father, stepmother, stepfather, grandparent, brother, sister, other)?

5. List your top 3 T.V. shows.

6. Who is your favorite singer or band?

7. How would you describe people with tattoos? Tell me at least 3 things.

8. Do you want to get a tattoo when you are older? _____ Yes _____ No