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Adult Assessment of Child Credibility

by

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ABSTRACT

Bias can influence how individuals evaluate the credibility of others: This bias can be attributed to many factors, including but not limited to race, socio-economic status, gender, and age. This study will focus specifically on the effect of adults' bias on credibility evaluations of children associated with race and socio-economic viewpoint. Participants in this study will read one of four short paragraphs describing the race (Caucasian or South Asian) and socioeconomic factors of a child (living in a shelter or single-family home). Participants will then listen to an audio recording of the child's conversation with an adult regarding a past event that did or did not include a transgression. After listening to the recordings, participants will complete a questionnaire asking how credible they find the child as well as identifying demographic factors, such as race, professional role, and age, about themselves. It is hypothesized that adults, who are demographically different in race and socioeconomic status, will find the child less credible than those who are demographically similar to the child.

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Situating Myself

I am a Canadian that identifies as a white, middle-class female with Irish and English ancestry. I can trace my family heritage back to the late 1700s with many of my ancestors being named "John," "George," and "William." Most of my family came from England, Scotland, and Ireland and settled in Ontario for a generation or two before moving westward to Manitoba where they began farming. My parents were fortunate to have had support from family members as they moved to British Columbia before they had children. My parents have been married for thirty-three years. Everyone in my immediate family is University-educated and drives a vehicle dated 2011 or newer.

I grew up in an affluent neighbourhood in a city in interior British Columbia. With both of my parents owning their own businesses, I grew up solidly middle-class. Most of my classmates and peers were also Caucasian Canadians. Growing up in this white-washed society, my position of privilege and power was not fully examined until I began my graduate degree.

My privilege and power come from my social identity and social location and how those two constructs intersect. I am a young, white, heterosexual, able-bodied female: This is my social identity. These factors influence how I think, feel, and act (Appiah, 2006). My social location enables me to access certain privileges in life such as acquiring a steady job and income, and post-secondary education.

My graduate degree has afforded me the opportunity to study in a culturally and racially diverse environment. It has pushed me to acknowledge my own social standing and how my

privilege can oppress others. I have begun to examine how people of other ethnicities and

social standings are treated after seeing my classmates, who came from all over the world,

being treated differently than I was. This examination has challenged me to critically

investigate how my actions, evaluations, and research can impact others to critically examine

why they make specific assessments of others.

Introduction

Teachers are trusted resources for children and when trusted, teachers are seen as reliable and effective (Fisher, Frey, Marsh, & Gonzalez, 2019). Therefore, because teachers have regular contact with children, it is their responsibility to report any maltreatment of children. Legally, it is mandatory for teachers to report any suspicions of child maltreatment to a children's aid society. (Government of British Columbia, n.d.). This is extremely important for adults working with children. Teachers and other education staff are the adults that work with children every day and play such a large role in their lives. These adults need to develop skills necessary to assess the credibility of a child's statement, inside or outside of school (Walsh, 2010). However, we know relatively little about how such evaluations of credibility are made by adults and yet, these credibility assessments impact children's experiences in the world. Credibility evaluations can be affected by either negative or positive bias.

In this study, the relationship between bias, credibility, and how adults assess a child's credibility will be examined. Both race and socioeconomic status are factors that may influence an individual's opinion. These biases can have implications on how an adult evaluates the credibility of a child, and how the teacher interacts with the student in the classroom. Abuse or negligence at home may manifest itself in child misbehaviours in the classroom that teachers need to recognize. Biases could affect the recognition of these behaviours. This study will investigate adults' abilities to evaluate the truth of a child's statement as a function of the child's demographic related to ethnicity and socioeconomic status. It is believed that the ethnicity and socioeconomic factors attributed to the child will affect their ratings of credibility from the adult participants in this study. The following

literature review will examine the factors of ethnicity and socioeconomic status, as well as the

importance of credibility and bias.

Literature Review

Bias is an inherent part of person-to-person interactions, and yet there is no equation that everyone uses to decide who is credible and who is not. Neither is there a meter to use to judge how biased one individual is against another. Instead, there are myriad factors that contribute to the circumstances under which bias may influence how we evaluate others. For instance, race has been shown to affect courtroom decisions of punishment, namely the severity of punishments (Dhillon, 2015). The effect of socio-economic status and adults judgements on children and has not been widely researched, the studies that have been conducted suggest that people of low socio-economic status struggle academically in school, and teachers can hold an unconscious bias against those of low socio-economic status (Philbrook, Shimizu, Buckhalt, & El-Sheikh, 2018; Valdez, 2013). These biases can affect perceptions of credibility that teachers hold regarding students.

The intersections of race and socio-economic status can lead to biases that this paper will explore in the context of adults and students in classrooms. As this bias that adults may hold has implications for students, it is important to understand what factors affect credibility and bias evaluations. For example, if a teacher has an unconscious bias against children in a racial minority, they may find those students less credible than Caucasian students. This can lead to preferences in the classroom, and in extreme cases, ignoring of signs of abuse from students in the racial minority.

The following sections will explore credibility, along with adults' ability to detect children's deception and signs and symptoms of abuse. Bias, specifically regarding race and

socioeconomic status will be discussed as well as privilege, oppression, and intersectionality. This exploration will attempt to demonstrate the importance of credibility and bias in a child's life, as well as the factors that can affect credibility and bias assessments.

Credibility

Credibility is the quality of being trustworthy and believable (Ross, Jurden, Lindsay, & Keeney, 2003; Voogt, Klettke, & Crossman, 2019). Credibility is an important concept, as many decisions a person makes can be affected by how they evaluate the credibility of another individual. For example, if a teacher finds that one child is credible and another is not, and if these two children have differing stories on an event, it is most likely that the teacher will decide that the child they think is credible is the one telling the truth. In the literature, it is suggested that credibility is the combination of cognitive competence, honesty, expertness, and trustworthiness (Ross et al., 2003; Voogt et el., 2019).

The two-factor model of credibility, proposed by Ross, Jurden, Lindsay, and Keeney (2003), focuses on cognitive competence and honesty. The researchers conducted two experiments in which participants watch a video of a mock sexual assault trial and after watching the trial they were asked to rate the alleged victim on scales of cognitive competence and honesty. In the first experiment, the researchers had participants watch the child's testimony, the alleged assailant's rebuttal, and other witness' testimonies. In this experiment, Ross et al. found that honesty was a stronger predictor of verdict than cognitive competence (2003). In the second experiment, participants watched the same video as in experiment one, but the video was stopped after the child's testimony. The participants did not watch the other witness's testimonies or the alleged assailant's rebuttal. The results of both of these experiments lead to the conclusion that since honesty as a stronger predictor of

credibility ,then children who may not yet be completely cognitively competent may still be viewed as credible, or importantly, in situations in which honesty is a more important characteristic, children may also be judged as credible. This demonstrates that children of all ages may be seen as credible or not, and that adults' preconceived notions may influence their assessments of children.

In a similar conceptualization of credibility, Voogt, Klettke, and Crossman (2019) argued that credibility does not have a simple definition and is a construct, rather than a specific variable. According to these researchers, credibility comprises two factors, expertness and trustworthiness (Voogt, Klettke, & Crossman, 2019). Expertness is the extent to which someone is perceived to be a valid source and trustworthiness is the confidence that we can have in the communicator to communicate what they think is most valid. Overall credibility is believed to be a combination of both traits.

Adults as Lie Detectors.

Adults often think that they know when others are lying to them but Crossman (2006) has argued that adults are poor detectors of deception in other adults, although some people are better at detecting a lie than others. Many studies have investigated why adults find children credible in cases where a transgression has been committed against the child, such as in sexual assault cases (Bala et al., 2005; Bottoms & Goodman, 1994). Though these researchers found no relation between rating of credibility and child's age, other studies have found that younger children are likely to be seen as more credible than older children (Nightingale, 1993). Another study by Nunez, Kehn, and Wright (2011) found that there was a four-way interaction between participant gender, child gender, child age, and context given for ratings of honesty. When children had the same gender as the participant who was rating them, they

were rated lower on honesty when they were over the age of 12 than when they were younger than 12 years of age, but when participants were the opposite gender of the child they tended to view children aged 10-12 as less honest than children of other ages. In contrast with those studies, Talwar, Lee, Bala, and Lindsay (2006) found that adults rated girls as more competent than boys, with more believability, and younger children were rated as more incompetent than older children.

It has also been argued that adults are no better at detecting children's lies than they are adults' lies and adults are often wrong when judging children's honest statements (Crossman, 2006). Talwar, Crossman, Williams, and Muir (2011) examined adult detection of children's pro-social and anti-social lie-telling and found that adults detected children's lies at higher than chance rates but were able to detect adult lies more often than children's lies were detected. The researchers also found that children's antisocial lies (those told for self-protection) were detected more frequently than children's prosocial lies (told to protect another's feelings). Leach et al. (2009) examined whether an individual's ability to detect children's deception stays constant over time. The researchers collected data at two separate sessions, held one week apart, and found that while performance at ability to detect lies was stable over the two sessions, only 2 of the 51 participants performed better than chance at detecting deception (Leach et al. 2009). This suggests that adult assessment of child credibility is not an indisputable judgement. These assessments can be influenced by many factors, and some adults may be better at judging credibility than others.

How can teachers assess how credible a child is? Crossman (2006) demonstrated that adults who have had relevant experience working with children are more adept at recognizing lies in children. The researcher had children in two conditions, truth-teller or liars, those who

had peeked at a toy when asked not to, or those who did not peek. Adult participants watched a video of these children being asked not to peek while the researcher was out of the room, then a video of the children telling the researcher whether they peeked or not. While the adult participants were overall poor detectors of lies, those who worked with children were more likely to detect liars and truth-tellers. Bala et al. (2005) demonstrated that judges and other justice system professionals are slightly above average at detecting adult lies, while law students were significantly worse than those professionals. These results argue that while most adults are no better than chance at detecting lies, when professionals are experienced or trained, there is a slightly higher chance of deception detection. This may be because of training to recognize the characteristics that accompany deception (Bala et al., 2005). While it is not clear how these professionals judge credibility, there may be some components that affect their assessment.

There are many factors that affect how one individual assesses another's credibility. Age, gender, and rater experience can all alter the decision that someone makes about another person (Bala et al., 2005; Crossman, 2006; Nightingale, 1993; Talwar et el., 2011). As Bala et al. (2005) outlined, many adults are no better than chance at identifying whether a child is being deceptive. This suggests that many of the decisions that adults make regarding child evaluations of credibility can be linked to external factors that the adult brings with them to the encounter, such as biases and stereotypes. Adult evaluations of credibility can also influence adult reports of child maltreatment.

Signs and Symptoms of Abuse.

How adults rate children's credibility can influence their reporting of suspected abuse. Since teachers are mandatory reporters, they need to be particularly attentive to their students'

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behaviours. Some behaviours that indicate abuse are outlined in the following paragraph, but it is imperative to understand that there is no one sign or symptom that conclusively points to any kind of abuse.

Vrolijk-Bosschaart, Brilleslijer-Kater, Benninga, Lindauer, and Teeuw (2018) discuss the non-specific symptoms that accompany child sexual abuse, including behavioural problems, post-traumatic stress symptoms, and depressive symptoms. These symptoms are likely caused by the trauma on a child's developing brain (Vrolijk-Bosschaart et al., 2018.) Children who have suffered abuse are also at an increased risk for attempted suicide and often exhibit age-inappropriate sexual behavior (Vrolijk-Bosschaart et al., 2018). Although the above are all signs and symptoms of sexual abuse, the researchers make it clear that these symptoms can be signs of other ailments or traumas (Vrolijk-Bosschaart et al., 2018.) It is vital that teachers understand the role that they play when it comes to mandatory reporting, though reporting is not necessarily a justice outcome. It is often a social service outcome. As stated above, teachers are mandated to report any suspected maltreatment that they see in students (Government of British Columbia, undated.) Unfortunately, there may be cases of teachers failing to report suspected abuse. Gallagher (2014) researched the non-compliance of teachers as mandatory reporters and concluded that their reporting of suspected abuse was highly contextualized and ambivalent. This can happen for a multitude of reasons: fear of repercussions on the teacher or student, belief that abuse or maltreatment is normalized in the culture of the abused, or the bystander effect, which is the effect that occurs when the presence of others discourages an individual from intervening in an emergency situation (Darley & Latane, 1968; Gallagher, 2014). A teacher's assessment of a child's credibility can influence how they deal with signs of abuse. Understanding how teachers assess the

credibility of a child can assist in making sure every child receives a fair chance of being

protected from abuse.

    It is also vitally important that students know that they have a trusted adult to confide in. In

many cases, this trusted adult is likely to be a teacher. As teaching is an act of persuasion,

competence and character are essential (Fisher, Frey, Marsh, & Gonzalez, 2019.) Student

perceptions of their teacher as ethical and knowledgeable have been shown to have a positive

effect on a student's learning. Showing a personal regard for students, along with

trustworthiness and reliability can cultivate how credible students find their teachers (Fisher et

al., 2019.) This personal regard is an important part of the relationship between students and

their teacher, and the public relies on these relationships to ensure that students have a trusted

adult in their lives, outside of their family. As teachers are mandatory reporters of child

abuse, this relationship can prove to be very beneficial for a child undergoing the trauma of

abuse.

Bias

    Implicit bias, or implicit social cognition or unconscious bias, refers to the attitudes or

stereotypes that affect our everyday lives, including but not limited to our understanding,

actions, and decisions (Kirwan Institute, 2015). Biases are actually mental shortcuts that help

people make quicker decisions, even when those decisions are not accurate (Psychology

Today, 2020). Internal bias is emotion that is swayed by past outcomes and experiences

(Sacre et al., 2019). This bias can affect how we view the world around us as well as the

people we interact with. Biases against certain groups of individuals can harm the

interactions that we have with those individuals. In the previous example of a teacher finding

one child more credible than another, this teacher's evaluation of credibility can be affected

by the bias that they carry. If this child is part of a minority that the teacher holds a bias against, that child may automatically be evaluated as less credible than a child who is not part of that minority. Conversely, there is also tokenism, when a member of a distinctive category is treated differently from other people (Linkov, 2014). Sometimes, when an individual is perceived as distinctive, they are viewed as an expert on their 'token properties' (Linkov, 2014). For example, in a classroom in Canada, an indigenous child may be seen as the expert on any and all indigenous cultures in the region. This is also a type of bias that individuals can unconsciously hold. Both of these types of bias can negatively affect a child's experience, in classrooms or elsewhere.

Although race is a significant factor in bias, either unconscious negative biases or biases such as tokenism, there are other factors as well. Gender, age and socioeconomic status can be factors that affect the attitudes or stereotypes that individuals hold. Klettke, Hallford, and Mellor (2016) found both gender and age biases regarding credibility of a sexual assault victim. It was found that males, as well as older generational cohorts, have a less favorable view towards sexual assault victims than females and younger generations do. Further, a study conducted by Fahmy, Snook, Luther, and McCardle (2019) investigated the effect of a woman wearing a Muslim Garment while testifying in a sexual assault case on ratings of credibility. The researchers found that women wearing a Muslim Garment were rated as more credible than those who were not wearing a Muslim Garment. Fahmy et al. contributed this finding to three commonly held beliefs (2019). Firstly, research has previously shown that religious individuals are perceived by their peers as more altruistic and honest than non-religious individuals. Secondly, this garment may dispel the common myth that a sexual assault victim was "asking for it" with the way that they dress. Finally, participants may have

drawn upon a commonly held belief that Muslim women are oppressed, and that oppression leads to sexual abuse (Fahmy et al. 2019). The researchers chose to use a Caucasian woman to wear the Muslim Garment to erase any racial bias that my influence the data. This suggests that though there was not a bias against religious garb, the researchers did not investigate race, and in fact controlled for its bias. These findings indicate that religion may play a role in credibility assessments, as well as race. Since the researchers chose the wearer to be a Caucasian woman to erase racial bias, we can anticipate that there may be racial bias without that control. Bias has also been investigated in the past regarding gender and generation, with findings suggesting that males view female victims of sexual assault as less credible than females do, and older generational cohorts perceived female victims as less credible than younger cohorts (Klettke et al., 2016).

It is important to understand biases, either on a community level or an individual level as these biases influence our treatment of others. Bias can affect ratings of credibility and in turn, can affect how children or other individuals are treated when in a transgression situation.

Socio-Economic Status.

Socio-economic status (SES) is defined as the rating of an individual on a social scale measuring education, income, occupation, place of residence, and other related variables (Lim & Tahnoon, 2013). This scale is often divided into low, medium, and high SES.

Children raised in low SES communities are often faced with significant disadvantages. Such as in a study by Valdez (2013), the researcher found that SES had an influence on teacher's assessments of a child's reading ability. That is to say that when the teachers in this study were evaluating kindergarten and grade 1 children with high reading proficiency, their

evaluation of the child was negatively influenced by the child's SES (Valdez, 2013). A review conducted by Gearin, Fien, and Nelson (2018) proposed that socioeconomic status may predispose individuals to certain patterns of thought, including mind-wandering, that contribute to the academic achievement gap between high and low socio-economic status students. Similarly, Philbrook, Shimizu, Buckhalt, and El-Sheikh (2018) found that children with a low SES status are at a greater risk for insufficient sleep, poor sleep quality, and higher sleepiness. Lack of sleep can greater affect performance in a workplace or classroom, putting these individuals at a further disadvantage. Seeing these children disengaged in class may affect a teacher's opinion of that child, which in turn can affect a teacher's assessment of credibility of that child.

These studies suggest the difference that SES can make in one individual's evaluation of another. Statistically, immigrants and Indigenous peoples are more likely to be living under the poverty line (Government of Canada, 2017). This suggests that race may also be a factor in socio-economic matters.

Race.

Race is both a physical and social construct. As defined by Kee Sun (1995), the racial category in the social world refers to individuals who possess the same biological features as well as similar experiences in the social world, including collective discrimination and prejudice. Race and ethnicity are often spoken of together but are distinctly different concepts. Race is strictly biological, while ethnicity is multi-faceted, comprised of cultural factors such as religion, language, nationality, and physical appearance (Santos, Palomares, Normando, & Quintão, 2010).

Demographic factors can affect how individuals assess the credibility or responsibility of others. For example, a study conducted by Bottoms and colleagues (2004) presented data that showed that African American and Hispanic girls were evaluated as more responsible for sexual abuse committed by a White teacher than White girls. This suggests a bias that is pervasive in mainstream culture, that African American and Hispanic females are seen as more sexual beings that White females. These types of beliefs may influence evaluations of credibility in all types of abuse cases. Bottoms and colleagues (2004) also found that there was a higher likelihood of guilt ratings for defendants and victims of the same race, as compared to a defendant and victim of different races, and the researchers hypothesized that these findings may be credited to a belief that children are more likely to be the same race as their abuser, and that different-race abuse is less likely. These beliefs may be tied to identity politics, where the word 'identity' attaches itself to the notion that everyone who is of a certain identity is in some sense the same (Appiah, 2006). Identity is often tied to words such as nationality, gender, sexuality, class, and race. Different individuals view their identities differently, so that even if two people's demographic factors match exactly, they may not have the same identity. With so many facets to this one identity, it is improbable that one word or belief could tie everyone who identifies as, for example, African-American together. These racial stereotypes have been shown to influence courtroom decisions and may also influence the severity of penalties (Dhillon, 2015). Mazzella and Feingold (1994) found that African Americans are more likely to receive harsher penalties for negligent homicide than Caucasians and Caucasians are more likely to receive harsher penalties for fraud than African Americans. As race and socio-economic status are often connected, the concept of intersectionality becomes a clear component in the above research, due to the intertwining

ways that race and socio-economic status work together to oppress or privilege people. Intersectionality is defined as the place where all social groups that an individual is a part of intertwine to create multiple systems of privilege and oppression (Gopaldas, 2013).

Privilege and Oppression.

Privilege is defined by Merriam Webster Dictionary as "a right or immunity granted as a peculiar benefit, advantage, or favor." Oppression is defined as "unjust or cruel exercise of authority or power" (Merriam Webster, 2020). Privilege and oppression are intertwining concepts that balance with each other, if one individual is privileged, it means that another is oppressed. Peggy McIntosh writes of the "invisible knapsack" of privilege that needs to be unpacked to fully understand the privilege and oppression that race can generate. This knapsack contains statements such as "I can swear, or dress in second hand clothes, or not answer letters, without having people attribute these choices to the bad morals, the poverty, or the illiteracy of my race" and "I can do well in a challenging situation without being called a credit to my race" (McIntosh, 1989). McIntosh discusses the way that groups of privileged individuals see that disadvantaged groups are disadvantaged, but not that they themselves are advantaged.

Similarly, the myth of meritocracy is extraordinarily present in schools today. The myth of meritocracy is the myth that the world has a meritocratic society and that an individual can achieve anything they set out to achieve if they work hard enough (Alvarado, 2010). Seventy-seven percent of American's believe that hard work is often the reason that people are rich in America, when in actuality the hardest working people often get paid the least and hard work is unlikely to result in any significant upward mobility (Alvarado, 2010). The myth of meritocracy can lead to the erosion of self-worth in those that are in the self-defined bottom of

society, who are continuously told by their oppressors that they are not good enough (Alvarado, 2010). The myth of meritocracy is particular damaging to those in lower socioeconomic communities or those with exceptionalities, as the supports for their success many not be in place.

Gorski (2010) suggests the commonality in schools today to approach students based upon perceptions of their weaknesses, as opposed to their strengths. This happens especially when teachers mistake difference as deficit, thinking that if students do not learn in the way that is best for the teacher, they are not learning (Gorski, 2010). This deficit ideology is based on a set of assumed truths about the world, this deficit ideology explains and justifies the inequalities in outcomes (on standardized tests etc.) by suggesting that those inequalities come from deficiencies with individuals or communities (Gorski, 2010). This deficit ideology is a serious form of oppression that draws attention away from the mechanisms of injustice and puts that attention onto citizens that suffer from those injustices (Gorski, 2010).

McIntosh's knapsack, Alvarado's myth of meritocracy, and Gorski's deficit ideology are all examples of the ways that demographic features, such as race and socioeconomic status, work together to either oppress a group of people or privilege another (McIntosh, 1989; Alvarado, 2010; Gorski, 2010). These systems of privilege and oppression usually play a large part in forming the biases that we hold, and these biases can affect the assessments of credibility that we attribute to an individual.

Intersectionality.

Intersectionality is the concept of every individual being made of more than one social identity and how those identities foster life experiences (Gopaldas, 2013). For example, one

could be at the intersection of being Caucasian, female, able-bodied, and middle-class. The way that these identities intersect can affect the privilege or oppression that an individual faces. Another way that intersectionality has been defined is as a complex layering of multiple streams of biased categorization of individuals as members of socio-demographic groups (Johnson & Rivera, 2015.) In layperson's terms, intersectionality is the crossroads of sociodemographic factors, which can be especially harmful if an individual's factors are commonly biased against. For example, according to the Council of Canadians with Disabilities (undated), 15% of people living with disabilities fall under the poverty line (Woolley, 2015). The Canadian Observatory of Homelessness (2019) has found that 1 in 5 families that identify as a racial minority live in poverty in Canada, as compared to 1 in 20 Caucasian families. For these individuals, the crossroads of poverty and disability or poverty and race work together against that individual and they may be seen as twice as 'lacking' compared to a Caucasian or able-bodied, middle class person (Johnson & Rivera, 2015).

Through the following research, I intend to further understand how and why adults asses children's credibility the way that they do. Individuals, including adults and children, come to each encounter with a preset idea of how others will act based on the group that they have mentally pre-assigned them to (Dhillon, 2015). These stereotypes or biases can affect how individuals interact with others and how they judge them. An adult's evaluation of a child can be affected by the way a child looks, acts, or speaks and that evaluation can be potentially damaging to a child. If a child is being abused or neglected, they need to be seen as credible to be believed by an adult. Credibility has several conceptions, centering on cognitive ability as well as honesty or trustworthiness. Bias has been shown to be a factor in many classroom and courtroom decisions and judgements. It is vital that the effects of bias on

credibility assessments are illuminated so that we can understand how individuals evaluate the credibility of others. Race, socio-economic status, privilege and oppression all affect the credibility judgements that adults make. Through the understanding of these factors, we can begin to understand the bias that individuals hold, and by extension, the assessments that they make in terms of credibility.

Research Methodology

The Present Study

The present study will investigate how race and socio-economic status affects credibility assessments of children. Through this investigation, the biases that individuals hold regarding race and socio-economic status can be examined for their impact on credibility ratings of children. By identifying how these biases affect community members in their interactions with children, the process of eradicating the different treatment children receive can be started by identifying and exploring the credibility evaluations that adults give children bases on race and bias.

Method

To assess adults' credibility evaluations of child witnesses and the influence of race and socioeconomic status of the child, participants listened to an audio recording of a child being interviewed by an adult where the child either concealed or disclosed a transgression event that happened during the science show (water spilling on a laptop) to the adult. Before listening to the audio recording, participants read a short paragraph outlining the race and socio-economic status of the child. There were four different instructional sets, with children described as low or medium SES as well as Caucasian or South Asian. There were twelve different audio recordings, with six of those concealing the transgression event and six disclosing the transgression event. After listening to the interview, participants were asked to rate the child on various measures of credibility (e.g., accuracy, honesty, overall credibility). I believe that children who are different demographically from the rater will received a lower score on credibility. Previous studies have examined how the age and gender of a witness may influence the score a credibility rater gives (Klettke et al., 2016; Nunez et al., 2011), but the question of race and socioeconomic status producing bias have not been addressed.

Participants and Design

  Participants were randomly assigned to conditions, including the instructional set (socioeconomic status and ethnicity) and audio recording (conceal or disclose). Making this a 2 x 2 x 2 quantitative design. The sample includes 101 adults, ranging from 21 years of age to 84 years of age. 74 participants identified as female and 27 identified as male. Seventy-one participants identified as Caucasian, 13 identified at Canadian, and 3 identified as Canadian/Caucasian or Caucasian/Canadian. An explanation for ethnicity was not given to participants, and the lack of a definition made it clear that there is a lack of understanding about the difference between ethnicity and race.

As seen in Chart 1, the other 27 participants identified as other ethnicities. One participant did not disclose their ethnicity. One hundred and fourteen participants were interviewed. Thirteen of those interviewed did not complete the questionnaire, their responses were not analyzed.

  Participants were required to be of jury-eligible age (18 years of age or older) and Canadian citizens. Originally, participants in the teaching profession were targeted for participation but due to a lack of participants, participation guidelines evolved into simply those who have worked with children. This included staff at the local school board, students of Thompson River's University Bachelor of Education program, retired school district staff, employees of the local minor hockey association, and other participants recruited through snowball sampling. Participants were recruited via emails to school principals and classroom visits, as well as by snowball sampling.
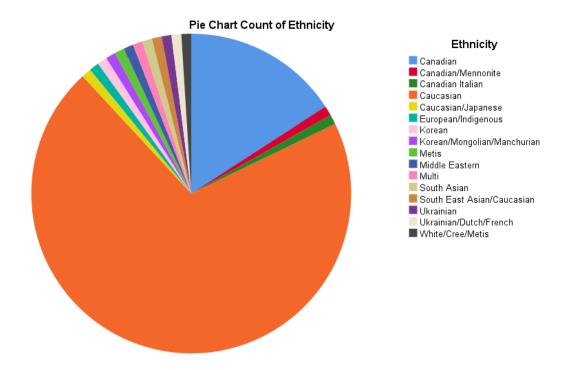
Pie Chart Count of Ethnicity

Ethnicity
- Canadian
- Canadian/Mennonite
- Canadian Italian
- Caucasian
- Caucasian/Japanese
- European/Indigenous
- Korean
- Korean/Mongolian/Manchurian
- Metis
- Middle Eastern
- Multi
- South Asian
- South East Asian/Caucasian
- Ukrainian
- Ukrainian/Dutch/French
- White/Cree/Metis

Chart 1

Materials

Interviews were obtained from a previous study (Blind for review) in which children were visited at their summer camp by scientists (research assistants) who performed a science show. During the show, a female research assistant spilled water on a laptop that belonged to the camp and told the children she would get in trouble if anyone found out. Children were asked to keep the transgression a secret and were not aware they would be interviewed about the event. Following the event, children were interviewed about the science show by a peer and then by an adult who were both naive to the event details. This project used the audio recording from the child-adult conversations as stimuli for this research.

Questionnaire

All participants completed the questionnaire in a mutually agreed upon location. Participants were asked to rate children on 11 variables on a 6-point Likert scale based on the children's description of the art show (Likert, 1932). Nine variables (intelligence, accuracy, believability, truthfulness, consistency, honesty, attentiveness, understanding of the event, and overall credibility) were rated such that 1 indicates a negative evaluation (e.g., not at all honest) and 6 indicates a positive evaluation (e.g., very honest). Conversely, two variables (susceptibility to suggestive questions and the likelihood that the child fabricated the event) were rated such that 1 indicates a positive evaluation (e.g., not at all susceptible) and 6 indicates a negative evaluation (e.g., very susceptible). The questionnaire also included a demographic section which includes questions about participants' age, gender, ethnicity, and professional role (Appendix I).

Procedure

Participants participated at a mutually agreed upon location. Before participation, each individual was informed that this study is examining how adults assess the credibility of children, they were not informed that demographic factors are being examined as well. Next, participants were asked to read a short paragraph outlining the child's name, age, race (Caucasian or South Asian), and type of housing they live in (single-family home or shelter) (Appendix II). Participants then listened to an audio recording of a child being interviewed by a research assistant regarding a transgression that they witnessed. After listening to the recording, participants were asked to complete the questionnaire that is discussed above, rating children on 11 different variables, using 6-point scales. Once the questionnaire was completed, participants were thanked for their contribution to the study and had their names entered into a draw for a chance to win $200.

<div style="text-align: center">**Results**</div>

Inferential tests were not used to analyse the data collected because there was not enough statistical power. Higher statistical power could be achieved by a larger sample size as well as effect size and significance levels (Walmsley & Brown, 2017). Due to the lack of inferential tests, results will be discussed as observed patterns in responses.

Concealing or Disclosing

It appeared that their was a difference in ratings of honesty between participants in the disclosure condition and in the concealing condition. Children who disclosed the transgression event were rated as less honest on average than those who concealed the transgression event. Children who disclosed the event were also rated, on average, as more intelligent, more accurate, more attentive, more credible, less believable, less truthful, less consistent, less susceptible to suggestive questioning, more likely to have fabricated the event and more understanding of the event that children who concealed the transgression event.

Variable Means

The mean of all ratings of all nine variables can be seen in Table 1.1 below. On average, participants rated children as more honest and truthful than attentive or understanding. The rating of attentiveness has the highest standard deviation, meaning that attentiveness has the largest spread from the mean out of all variables. Intelligence has the lowest standard deviation, meaning that most participants rated intelligence similarly.

<div style="text-align: center">**Report of Questionnaire Answers**</div>

	Mean	N	Std. Deviation	Range
Intelligent	3.91	104	.826	4
Accurate	3.73	103	1.002	5

Believable	4.56	104	1.122	4
Truthful	4.75	102	1.114	4
Consistent	3.90	104	1.195	5
Honest	4.82	103	1.127	4
Attentive	3.70	104	1.284	5
Understanding	3.44	104	1.148	5
Susceptible	3.90	103	1.184	5
Credible	4.12	104	1.146	5
Likelihood that the child fabricated event	2.27	103	1.198	5

Table 1.1

Ethnicity

On average, participants who identified as being of European ethnicity rated children lower on intelligence, accuracy, believability, truthfulness, consistency, honesty, attentiveness, understanding of the event, and credibility than participants of other ethnicities. Participants identifying as European also rated children higher on susceptibility to suggestive questioning and the likelihood that the child fabricated the event than participants of other ethnicities. Participants that identified as Caucasian, South Asian or Middle Eastern, Indigenous, or Canadian had variable scores where no patterns could be found.

Professional Role

Participants who identified as being students rated children lower on most variables, as compared to what participants who identified as teachers rated children. There were two exceptions to this statement, with the variables honesty and truthfulness. Students rated children as more truthful and more honest than teachers did.

Participants who identified as administrators, either for a school or a separate business organization, found that the child was more likely to be susceptible to suggestive questioning than teachers, students, or other professions found the child.

Instructional Set

The instructional set outlined the race and socioeconomic status of the child. Participants given Instructional Set 1, where the child was identified as Caucasian and living in a shelter, rated the child as more intelligent, more accurate, more believable, more credible, and as having more understanding of the event than participants who received other instructional sets. Participants with Instructional Set 1 also rated the child as less consistent than those with other instructional sets.

Participants who received Instructional Set 2, where the child is identified as South Asian and living in a shelter, identified the child as having a lower level of understanding of the event, as being less susceptible to suggestive questions, and being less likely to have fabricated the event than those participants who received other instructional sets.

Participants who received Instructional Set 3, where the child is identified as Caucasian and living in a single-family home, rated the child as more truthful, more consistent, more honest, and more likely to have fabricated the event than those who received other instructional sets. Participants also rated these children as less credible, less attentive, less accurate, and less intelligent than participants with other instructional sets.

Participants who received Instructional Set 4, where the child is identified as South Asian and living in a single-family home, rated the child as more attentive and more likely to be susceptible to suggestive questions than participants who received other instructional sets.

Participants with Instructional Set 4 also rated children as less believable, less truthful, and

less honest than participants with other instructional sets.

Discussion

The present study investigated the credibility ratings that adults assigned to children, based on a short audio recording of the child talking about a science show that they saw, as well as concealing or disclosing a transgression event that happened during the science show and the child's socioeconomic and ethnicity information.

Concealing versus Disclosing

As discussed in the results section, there appeared to be a difference between children who disclosed the transgression event being rated as less honest than those who concealed the event. Those who disclosed were also rated as more intelligent, more accurate, more attentive, more credible, and more understanding of the event than those who concealed. Disclosers were also rated as less believable, less truthful and more likely to have fabricated the event. These findings are alarming because they could suggest that adults may view children negatively when the child discloses an adult wrongdoing (Blind for review). This could have damaging effects on children who would potentially disclose an adult transgression, such as maltreatment, because it can cause the children to delay or avoid disclosing because they fear that they may not be believed (Alaggia, 2005).

Ethnicity and Professional Role

It was expected that adults would rate children who identified as a similar ethnicity to them as more credible, but this was unable to be scrutinized, as most participants identified as Caucasian. As previously discussed, there was not a definition of ethnicity given to participants. This caused confusion regarding the difference between ethnicity and race. Although it is identified as a social construct, a certain race is assigned to an individual based

on their physical characteristics, including skin colour, the shape of their nose/lips, and type of hair (Donovan, 2019). The concept of ethnicity revolves around culture, language, family, and place of origin (Donovan, 2019). Though both race and ethnicity are social constructs, it is important to note that race is usually assigned by people outside of that race, which can lead to feelings of superiority and other forms of pervasive racism (Donovan, 2019). Race and ethnicity are sometimes difficult to separate from each other, and the words are often used interchangeably. This causes confusion for many people, and for those who do not identify strongly with a specific nation or culture, it can be difficult to determine what to state as their ethnicity.

A pattern that was examine was that participants who identified themselves as European rated children lower on all variables as compared to participants who identified as all other ethnicities. There were no other patterns in rating regarding ethnicity.

Interestingly, participants who identified as students, both in a teacher preparation program and in other University programs, rated the child lower than those who identified as teachers rated the child on every variable except honesty and truthfulness. This could be due to the lack of in-class experience that students have as compared to teachers, or due to student's previous life experiences.

Participants who stated that their professional role as "administration" rated children as more likely to be susceptible to suggestive questioning than other professions rated children. This label of administration does not necessarily mean that they are employed in an elementary or secondary school. Administrators came from small business, universities, local sport associations and others. This lower rating could potentially be due to administrators lack

of experience with children, or lack of recent experience. Again, it could also be due to the administrator's past experiences, either with children or as a child themselves.

Instructional Set

Participants who had instructional sets that identified the child as Caucasian evaluated the child as more intelligent, accurate, believable, credible, understanding of the event, truthful, consistent, and honest than those who received instructional sets in which the child was identified as South Asian. Specifically, children who were described as Caucasian and living in a shelter were evaluated very favourably on the variables intelligence, accuracy, believability, credibility, and their understanding of the event. Since a large portion of the participants identified themselves as Caucasian, this pattern could be an example of in-group preferences. Previous research has shown that people are better at interpreting the psychological states of members of their own ethnic groups than those in different ethnic groups (Lindholm, 2008). This could be due to individuals having more experience with those in their in-group than out-group (Lindholm, 2008). This suggests that the participants who identified as Caucasian noticed, either consciously or subconsciously, that the child that they were evaluating was also Caucasian and assigned that child to their own "in-group". Due to the child being in the participants "in-group", they were rated more favourably.

Limitations and Future Studies

Data collection for this study was terminated by the researcher due to the COVID-19 global pandemic and the health risks that accompany a face-to-face interview. Twelve different audio recordings of twelve different children were used, and these recordings had a great amount of variability. Some of the children in the audio recordings sounded very meek

and shy while others sounded confident and proud. This may have affected adult assessment of credibility and that effect could be reduced with a larger sample size.

A few of the audio recordings were hard for participants to hear and many struggled to understand what the child was saying as there was a large amount of background noise in the recordings. Some participants also stated that they would not be able to give a child an accurate credibility rating without knowing, seeing, and interacting with the child. One participant wrote on their questionnaire that "it is difficult to make judgement without knowing a child: trust, truth and eye contact are key, as well as intuition." While another wrote, "the recording was difficult to hear, the assessment was difficult to complete as I didn't know what the science lesson was about... There was too little information (90 second clip) to accurately assess [the child's] intelligence and honesty/truthfulness." Some participants struggled to fill out the questionnaire and wrote qualifiers beside the rating that they chose, such as "consistent in the first half" and "at the beginning, when describing the experiment".

Conclusion

By investigating how adults rate children's credibility based on demographic factors they were given, this study provides awareness as to how adults evaluate children's credibility, based on that child's race and socio-economic status, as well as on whether that child concealed or disclosed a transgression event. The finding that children who concealed the transgression event were rated as more honest than those who disclosed the transgression event has important implications for children who need to disclose maltreatment to a trusted adult. As discussed above, these children may be skeptical to disclose to an adult for fear of not being believed (Alaggia, 2005). Further investigation with a larger sample size is necessary to find significant evidence of this. Also, this study has shown that there may be a

bias that benefits members of racial in-groups. Again, further investigation with a larger sample size is needed.

Recommendations

A larger sample size is needed for any future studies. It is recommended that future studies use a longer audio clip with less background interference. It is also recommended that the data collection process be moved online, so that a larger sample size can be obtained. Also, ensure that all participants understand the definition of ethnicity, change the question to be a question of race instead of ethnicity, or provide a list of options, as opposed to having "Please state your ethnicity" as an open-ended question. Several participants in the current study asked the researcher what ethnicity meant or what their ethnicity would be.

Implications for Future Practice

Regarding implications for practice, it is necessary to be aware that biases are pervasive, and often unconscious, ways of thinking and behaving. It would be in the best interest of all individuals, but especially those who work with vulnerable populations, to be aware of the biases that they hold. Being aware of these prejudices can aid in our eradication of them. Though these biases and prejudices may be hard to recognize, we need to be cognizant of the way that we speak and act and how that can affect those around us. It may be difficult at first to recognize why and how we treat one individual one way and another a different way, but if we critically examine those differences, we may be shocked at the reasons behind them. For example, we may think we treat a child one way because he is difficult in class when in reality, we treat him this way because we know that he lives in a rough part of town and is

part of a racial minority. Once we are cognizant of these biases, we can begin to remove them from our thought patterns.

Further, the findings that children who disclose a transgression are seen as less honest that those who conceal can have implications for practice as well. As discussed, this can lead children to refrain from disclosing abuse to trusted adults. To counteract this, educators and other trusted adults need to ensure that the children around them or in their care feel respected and listened to. These children need to feel safe and like they will be believed and to do this, we need to give them our respect and trust. It is necessary to develop strong relationship with children to ensure that they can disclose anything that they need to.

Through this study, it has been made clear that adults have fairly arbitrary systems in place for evaluating children's credibility and it was unclear if socio-economic status or race played a large part in their evaluations. Further investigation is needed.

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Appendix I - Questionnaire

Please complete each of the following questions:

How intelligent did you find the child?

Please circle the number that corresponds with your opinion on the scale from 1 (not at all) to 6 (very).

1   2   3   4   5   6

How accurate did you find the child?

Please circle the number that corresponds with your opinion on the scale from 1 (not at all) to 6 (very).

1   2   3   4   5   6

How believable did you find the child?

Please circle the number that corresponds with your opinion on the scale from 1 (not at all) to 6 (very).

1   2   3   4   5   6

How truthful did you find the child?

Please circle the number that corresponds with your opinion on the scale from 1 (not at all) to 6 (very).

1   2   3   4   5   6

How consistent did you find the child?

Please circle the number that corresponds with your opinion on the scale from 1 (not at all) to

6 (very).

1   2   3   4   5   6

How honest did you find the child?

Please circle the number that corresponds with your opinion on the scale from 1 (not at all) to

6 (very).

1   2   3   4   5   6

How attentive did you find the child?

Please circle the number that corresponds with your opinion on the scale from 1 (not at all) to

6 (very).

1   2   3   4   5   6

How well do you think the child understood the event?

Please circle the number that corresponds with your opinion on the scale from 1 (not at all) to

6 (very).

1   2   3   4   5   6

How credible do you think the child is, overall?

Please circle the number that corresponds with your opinion on the scale from 1 (not at all) to

6 (very).

1   2   3   4   5   6

How susceptible do you think the child is to suggestive questions?

Please circle the number that corresponds with your opinion on the scale from 1 (not at all) to

6 (very)

1   2   3   4   5   6

How likely do you think it is that the child fabricated this event?

Please circle the number that corresponds with your opinion on the scale from 1 (not at all) to

6 (very)

1   2   3   4   5   6

Demographic Questions:

1. Please state your gender.
    1. Male
    2. Female
    3. Other
2. Please state your age in years.
3. Please state your ethnicity.

Appendix II – Audio recording transcripts

1. Please listen carefully to the following audio recording of Riley, age 8.
    Riley is Caucasian and lives in a shelter.
    This summer Riley attended a science camp and spoke to an adult about their experience.
    We are interested in your perception of Riley.

2. Please listen to the following audio recording of Riley, age 8.
    Riley is South Asian and lives in a shelter.
    This summer Riley attended a science camp and spoke to an adult about their experience.
    We are interested in your perception of Riley.

3. Please listen to the following audio recording of Riley, age 8.
    Riley is Caucasian and lives in a single-family home.
    This summer Riley attended a science camp and spoke to an adult about their experience.
    We are interested in your perception of Riley.

4. Please listen to the following audio recording of Riley, age 8.
    Riley is South Asian and lives in a single-family home.
    This summer Riley attended a science camp and spoke to an adult about their experience.
    We are interested in your perception of Riley.