The Development of Judgments and Beliefs about Homosexuality

by

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A thesis submitted in conformity with the requirements for the degree of Doctorate of Philosophy

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Abstract

This study assessed children’s (5-year-olds, 7-8-year-olds, and 10-11-year-olds), adolescents’ (13-14-year-olds), and their parents’ beliefs about same-sex relationships. In particular, participants’ beliefs about the acceptability and legal regulation of homosexuality, their beliefs about tolerating someone with anti-gay attitudes and excluding someone on the basis of his/her sexual orientation, and finally, their essentialist beliefs about homosexuality (i.e., whether they believe sexual orientation is biologically or socially/environmentally determined) were explored. Results revealed age differences in the acceptability of same-sex relationships, with older participants holding more positive attitudes, justified by references to personal choice and moral reasoning. Adults were more tolerant of someone holding a negative belief about homosexuality than the younger participants, and both the adults and the 5-year-olds were more tolerant of someone holding a negative belief about homosexuality and expressing this belief than the other participants. The 5-year-olds were also more accepting of parents acting on this belief by restricting a child’s activities. There was no association between parents’ attitudes and their children’s. In terms of essentialist beliefs, with age, participants were more likely to believe that homosexuality is biologically determined and this belief was generally correlated with more positive attitudes. The findings reveal that while some age differences were found in the
development of attitudes about homosexuality, many scenarios revealed no age differences supporting the notion that children are not inherently more prejudiced than adults.
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Chapter 1
General Introduction

1 General Introduction

It is important to explore beliefs about homosexuality and same-sex marriage as this is a controversial topic that has recently garnered increased political attention. By studying the development of beliefs about homosexuality, this will allow us to have a greater understanding of moral developmental issues. In particular, this study will shed light on how children integrate moral conceptions of justice, equality, and psychological welfare with personal rights and freedoms, as well as conventional considerations such as gender norms and cultural traditions. Given the level of discrimination gay and lesbian individuals often encounter, both in Canada and globally, having a thorough understanding of the development of beliefs about homosexuality will allow researchers, politicians, and teachers to better tackle the issue of sexual prejudice.

1.1 Current Attitudes about Homosexuality

In this section, I will survey national and cultural differences in attitudes toward homosexuality in studies largely examining adults’ beliefs, before reviewing the relevant developmental work. Same-sex marriage has been legal in Canada since 2005 and as of June 18th 2014, same-sex marriage is legal in 18 countries (Masci, Sciupac, & Lipka, 2013). Nineteen U.S. states allow same-sex marriage, and the United States’ Supreme Court recently ruled in favour of striking down the Federal Defense of Marriage Act that banned gay couples from federal benefits (Masci et al., 2013). Despite these changes in policy, homosexuality is illegal in 76 countries, primarily in Africa and the Middle East (Fisher, 2013). Russia’s recent law banning “propaganda for non-traditional sexual relations” caused much controversy within the international
community as Russia hosted the 2014 winter Olympics in Sochi. Protesters expressed their outrage at this law as it affected the rights and wellbeing of athletes and visitors, and undermined the values of non-discrimination inherent in the event (Munroe, 2013). Given the level of disagreement about homosexuality and same-sex marriage, both locally and globally, it has never been a more important time to explore beliefs in this topic.

Several surveys of adults’ attitudes about homosexuality have shown that starting in the late 1980s, public opinion began to shift in favour of homosexuality in the United States. Presently, the majority of Americans support civil liberties for gay and lesbian individuals, which represents a discernable increase from attitudes in 1972. For example, endorsement of freedom of speech for positive views about homosexuality rose from 62% to 86%, support for gay and lesbian individuals to be teachers at colleges or universities rose from 48% to 84%, and believing it to be acceptable for a library to have a book in favour of homosexuality rose from 54% to 78% (Harms, 2011). Regarding general attitudes, in 1988 only 11% of Americans approved of same-sex marriage versus 46% in 2010 (with 40% opposed) (Smith, 2011). While there has been a fairly drastic shift in attitudes over the past two decades, there is a large generational gap with younger adults holding more positive attitudes than older adults; 64% of adults under 30 support same-sex marriage, while only 27% of those over 70 support it (Smith, 2011). The reason for this shift was not explored in the survey.

In addition to age as a factor affecting attitudes about homosexuality, studies show that religion also plays a major role (Altmeyer, 2003; Adamczyk & Pitt, 2009; Herek, 1987, 1988) along with gender (Herek, 1988; Kite, 1994) and gender-role attitudes (Herek, 1988; Kite & Whitley, 1998). People who are part of conservative religions tend to hold more hostile attitudes toward gay and lesbian individuals (Herek, 1987), however culture moderates the relationship between religiosity and attitudes. In developed nations, personal religiosity is a strong predictor
of attitudes, but in developing nations, with political and/or economic instability, personal religiosity has no bearing on attitudes, as the country endorses traditional values and norms (Adamcyzk & Pitt, 2009).

While religiosity is often examined as a factor affecting attitudes about homosexuality, Adamcyzk and Pitt (2009) also highlight the importance of considering the economic and political stability of a nation in conjunction with religious beliefs. Building on prior work (Inglehart, 1990, 2006; Inglehart, Norris, & Welzel, 2002) the authors explored the role of cultural orientation (e.g., “self-expressive” or “survivalist”) and religiosity on the acceptance of homosexuality. A survivalist cultural orientation is found in countries experiencing economic and/or political turmoil (e.g., Egypt, Pakistan, and Singapore). These countries tend to hold onto familiar traditions and norms given the pressing concern about safety and survival. A self-expressive cultural orientation is found in industrialized nations with economic and political stability (e.g., Canada, The United States, and Japan); the cultural focus shifts from a preoccupation with food, shelter, and safety, to subjective well-being, quality of life, and self-expression (Inglehart, 1977).

Adamcyzk and Pitt (2009) explored the effect of cultural orientation and religiosity on beliefs about homosexuality and found that countries with a survivalist orientation (i.e., cultures holding onto traditions and norms) tended to believe that homosexuality was not justifiable, whereas self-expressive countries (i.e., cultures more open to change and self-expression) had more positive evaluations. In countries with a strong survivalist orientation, individual religious beliefs had no bearing on attitudes; overall, people were highly disapproving of homosexuality. However, in countries with a high self-expressive orientation, personal religiosity was related to attitudes; those who identify as being religious held more negative attitudes than those who were not religious. The authors conclude that in cultures with a survivalist orientation, that are
committed to upholding norms and traditions, religious beliefs tend to be in line with secular norms and laws, and thus, attitudes do not seem to vary according to individual religiosity. In cultures with a self-expressive orientation, religious beliefs are not always in line with secular norms and laws, and thus, personal religiosity does have an impact on attitudes about homosexuality. These countries tend to hold more positive attitudes as the political and economic stability creates an environment that is more open and tolerant of nontraditional lifestyles. This explains why religious attitudes are a strong predictor of attitudes about homosexuality in countries like the United States, which is classified as a fairly liberal, self-expressive culture (Adamcyzk & Pitt, 2009).

Turning to the role of religion in the United States, Allport and Ross (1967) proposed two kinds of religious individuals, those who are extrinsically motivated (i.e., use religion for instrumental purposes and adhere to the social conventions of the religion) and those who are intrinsically motivated (i.e., find meaning and purpose in their religion). Those who are extrinsically motivated tend to be racially prejudiced while those who are intrinsically motivated are not (Allport & Ross). However, in a questionnaire administered to Caucasian university undergraduates, Herek (1987) discovered that religious orientation had no bearing on attitudes toward gay and lesbian individuals; in fact, those with an intrinsic orientation had slightly more hostile attitudes than those with an extrinsic orientation. Conservative religions often hold negative beliefs about homosexuality and this likely explains why those who are intrinsically motivated would be prejudiced against gay and lesbian individuals, as it is in line with their religious doctrine. Interestingly, religious fundamentalism (i.e., the belief that one’s religious beliefs reflect the undeniable truth about the spiritual world) did predict negative attitudes toward gay and lesbian individuals. Those with more conservative religious beliefs held more hostile attitudes, suggesting that it is the religious belief system that influences attitudes about
homosexuality.

In self-expressive cultures like the United States and Canada, in which attitudes toward homosexuality have become increasingly positive over the past twenty years, religion is an important predictor of attitudes. Religious fundamentalism is associated with hostile attitudes toward gay men and lesbians (Altemeyer, 2003; Herek, 1987). It is also a fairly consistent finding that men exhibit more sexual prejudice (i.e., prejudice toward gay men and lesbians) than women (Herek, 1988, 1994, 2000) and are more hostile towards gay men than lesbians (Herek 1988, 2000). A possible explanation for this could lie in men’s gender and sexual identity. Herek (2000) argues that completing questionnaires about homosexuality likely triggers male participants’ heterosexual orientation and the need to assert one’s masculinity by rejecting gay men. This could also explain why holding traditional gender role attitudes also affects attitudes about homosexuality (Herek, 1988). Gender roles are undoubtedly related to homosexuality, and the relationship between these concepts will be explored in detail in a subsequent section.

1.2 The Development of Attitudes About Homosexuality

When examining the literature on the development of attitudes about homosexuality, there is limited data as only adolescents have been studied, and often with a restricted age-range. Even among the adolescents, it seems that there is no clear developmental pattern. Some research suggests that prejudice increases in early adolescence and decreases in later adolescence (Hoover & Fishbein, 1999), some research has found that prejudice increases throughout adolescence for males (Baker & Fishbein, 1998), and other work has found no evidence of age differences in attitudes about homosexuality (Morrison, McLeod, Morrison, & Anderson, 1997). Similar to the adult literature, male adolescents consistently have more negative attitudes than females (e.g., Baker & Fishbein, 1998; Hoover & Fishbein, 1999; Horn, 2007; Price, 1982; Morrison, McLeod, Morrison, & Anderson, 1997). In this section, I will survey the existing studies and then offer a
possible account of the discrepancies and discuss the limitations of this research.

Hoover and Fishbein (1999) administered a questionnaire assessing prejudicial attitudes about homosexuality, race, and gender to Caucasian adolescents in grade 7, 9, 11, and College. The authors found that each form of prejudice had a unique trajectory. Prejudice toward gay and lesbian individuals increased in early adolescence (i.e., grades 7–9) and decreased in later adolescence and college. Racial prejudice was stable until college and then increased, and sex-role stereotyping showed age-related changes in stereotypes toward males, but not females. Male behaviour stereotyping (e.g., gender norms) and occupational stereotyping tended to decrease with age, with the decline being steeper for male participants. The authors conclude that there is no one clear developmental trajectory for prejudice in adolescence.

Baker and Fishbein (1998) assessed Caucasian adolescents in grades 7, 9, and 11, looking at the development of gay and lesbian prejudice through questionnaires administered at school. Questionnaires probed participants’ general evaluations and attitudes about gay males and lesbians. For males, prejudice increased from grades 9–11 for both gay males and lesbians, while for females during this same time period, it decreased. The authors argue that the greater prejudice exhibited by males is consistent with the belief that males, who are in a position of social power, have more to lose by challenges to traditional sex roles than do women (Fishbein, 1996).

In contrast, Morrison et al (1997) found no age differences in adolescents’ attitudes about homosexuality. Questionnaires were administered to adolescents in the tenth and twelfth grades exploring their beliefs about sexual coercion, attitudes about the acceptability of homosexuality, and gender stereotyping. Results revealed that males held more negative beliefs about homosexuality than women and endorsed gender stereotypes more often than women, but no differences emerged between students in grades 10 and 12. Similarly, Price (1982) administered
a questionnaire assessing attitudes about homosexuality to adolescents in the eleventh and twelfth grade and found no age differences.

There are a few limitations to the developmental literature on attitudes about homosexuality. First, the age groups examined vary from study to study. When a broad age range is included, from early adolescence until early adulthood, age differences tend to emerge (e.g., Baker & Fishbein, 1998; Hoover & Fishbein, 1999), but when a smaller age range is assessed, such as adolescents one-to-two years apart (Morrison et al., 1997; Price, 1982), no age differences emerge. An additional limitation to the early developmental work is methodological inconsistencies. Horn (2006) suggests that the reason there have been such discrepant findings is due to different methodological approaches (e.g., using a single score averaged from multiple questions/items versus a more detailed exploration of patterns of differences among individual questions). Hoover and Fishbein (1999) also acknowledge that since only quantitative results were obtained in their work, it is possible that by incorporating adolescents’ justifications and reasoning, clearer developmental trends could emerge. The early research seems to lack a theoretical framework for interpreting the results and variations among findings. Horn and colleagues (e.g., Horn, 2006; Horn Szalacha, and Drill, 2008) utilize social cognitive domain theory to assess adolescents’ beliefs as this allows for a thorough exploration of their attitudes, acknowledging the complex interaction of their social experiences and knowledge. This theoretical approach provides an appropriate lens through which to examine controversial issues in a clearer way as it organizes social information into different domains (explained below). The next section will review research on social cognitive domain theory and how this framework will be applied in the current study.

1.3 Social Cognitive Domain Theory

While early researchers proposed that stage models most accurately captured children’s
attitudes about race and gender prejudice (e.g., Aboud, 1988), it seems most appropriate to utilize social cognitive domain theory (i.e., domain theory) to illuminate various forms of social prejudice as it distinguishes between different domains or forms of social reasoning (Killen, 2007; Nucci & Turiel, 1978; Smetana, 2006). Domain theory differentiates between moral, social-conventional, and personal domains. The moral domain pertains to concerns about the freedom, welfare, and rights of individuals, while the social-conventional domain refers to the norms and customs within a society. Social conventions such as how to address a teacher and what form of dress is appropriate at school are based on social rules that function to organize social behaviours within a society; conventions vary from culture to culture and are therefore alterable by an authority figure or by social consensus. In contrast, immoral acts (e.g., hitting and stealing) are considered universal rules that are not alterable. The personal domain involves concerns about the private aspects of one’s life, such as who to be friends with, what music to listen to, and how to style one’s hair. Personal issues are deemed to be outside of the jurisdiction of authority figures, which may be relevant to how some people conceptualize homosexuality.

This personal domain bears relationship with research on self-determination theory, which asserts the importance of autonomy as a universal psychological need (Ryan & Deci, 2001, 2011). Healthy development involves the movement towards greater autonomy; autonomy is defined in this context as the need to behave freely in the absence of external sanctions and control. This development involves a process of internalizing external forces and rules and coordinating this with behaviour and reasoning. Even young children recognize the importance of autonomy and the wrongfulness of parental control over personal matters (Smetana, 1989) and this is true cross-culturally (for a review see Helwig, Ruck, & Peterson-Badali, 2014). Both children and adults recognize the importance of granting greater decision-making autonomy to children as they get older, and they grant greater self-determination rights to adolescents than to
children (Ruck, Abramovitch, & Keating, 1998). Additionally, young children also reference the personal domain when justifying the importance of civil liberties, such as freedom of speech and religion (Helwig, 1995a, 1998).

Children and adolescents coordinate their different social experiences and knowledge to differentiate between the moral, social-conventional, and personal domains (e.g., recognizing one’s choice of clothing as a personal decision, norms for what to wear to school as a conventional matter, and bullying/harming someone for dressing a certain way as a moral infraction). Even young children are able to make domain distinctions (Nucci, 1981; Smetana, 1981; Turiel, 1983). Research indicates that they recognize that moral infractions are worse than conventional infractions and that moral acts are not rule-governed, whereas conventions can change under the purview of an authority figure or by social consensus. Although adolescents have a mature understanding of the moral domain, developmental shifts occur in the personal and conventional domains as adolescents strive to develop a unique identity and achieve increased autonomy (Horn, 2006; Turiel, 1983). Adolescents transition from rejecting social conventions and the influence of authority figures, to accepting and even embracing conventions as a legitimate means of organizing social systems, and finally in late adolescence and early adulthood, adolescents become more flexible as they coordinate the social utility of conventions with the knowledge that these norms are arbitrary social rules (Turiel, 1983).

Early research on domain theory typically involved straightforward issues that clearly fell into one domain (e.g., hitting someone is a moral issue, mealtime etiquette is a conventional issue, and privacy is a personal/psychological issue) (Killen, Lee-Kim, McGlothlin, & Stangor, 2002). Turiel, Hildebrandt, and Wainryb (1991) label homosexuality a “nonprototypical” issue as it is a topic that does not fall unambiguously into one domain. Similarly, Killen (2007) argues that social exclusion is a complex topic involving all three domains. For example, when
evaluating gender and sexual prejudice, there is a personal aspect (e.g., choice of who to be friends with), a social-conventional aspect (e.g., gender norms and traditions), as well as a moral aspect (e.g., concerns about the wrongfulness of discrimination). Research has supported the benefit of taking a domain approach when studying prejudice and exclusion for gender (Killen et al., 2002; Killen & Stangor, 2001) as well as sexual prejudice (e.g., Horn, 2006). The domain approach provides a means of making sense of complicated social processing, as it allows researchers to capture the nuances of reasoning in a way that global stage models cannot; indeed, stage models can underestimate children’s moral reasoning capabilities (Killen, 2007).

1.4 Adolescents’ Attitudes about Homosexuality from a Social Domain Perspective

When considered from a social domain perspective, adolescents increasingly view homosexuality as a personal choice and view it as unfair to restrict the rights of gay and lesbian individuals (Horn, 2006; Horn et al., 2008). Younger adolescents tend to focus on the conventional aspects of gender roles and homosexuality’s deviation from these norms, and they are less comfortable with what they see as such gender-atypical behaviour (Horn, 2006, 2007).

Horn (2006) assessed adolescents’ (grades 10, 12, and university undergraduates) judgments and beliefs about homosexuality in a questionnaire administered at school. The questionnaire asked about the origin and acceptability of homosexuality, how comfortable they would be having a gay or lesbian peer in a variety of school contexts, and how they felt about certain social interactions such as excluding or teasing of a gay/lesbian peer. Participants were asked about hypothetical gay or lesbian peers. No differences emerged in the participants’ overall ratings of the acceptability of homosexuality, and participants tended to reference personal rights and the biological nature of homosexuality to justify why they believed it was acceptable. In general, most participants had positive attitudes about interacting with a gay or lesbian peer, but some age
differences did emerge. Specifically, adolescents in grade 10 were more uncomfortable interacting with a gay peer (males were more uncomfortable than females) and more tolerant of teasing and exclusion than their older peers. Tenth graders used more conventional reasoning (i.e., citing the importance of following norms) and less moral reasoning (i.e., reference to fairness and harm caused by teasing and excluding) than college students. Older adolescents were also more likely to believe that homosexuality is biologically determined; Horn (2006) suggests that the shift from believing homosexuality is environmentally to biologically determined throughout adolescence could also explain the age-related differences (along with the shift in later adolescence in which conventional reasoning becomes less important). This work highlights the importance of distinguishing general evaluations from personal comfort interacting with a gay peer.

Given the importance of peer relationships for the wellbeing of lesbian, gay, bisexual, and transgendered (LGBT) students, Heinze and Horn (2009) assessed how intergroup contact impacts adolescents’ (14- to 18-year-olds) attitudes about homosexuality. They discovered that while there were no age differences in the acceptability of homosexuality, the 14-year-olds had the lowest level of contact with a gay or lesbian peer. Overall, intimate contact (i.e., a friendship versus an acquaintance) with a gay or lesbian peer fostered more positive attitudes. Adolescents who said they had a friend who was gay or lesbian were less likely to believe that homosexuality was wrong and they were more intolerant of teasing and exclusion. Females were more likely to have greater contact with a lesbian/gay peer and to have more positive evaluations. Finally, adolescents who believed homosexuality was wrong used religious/natural order justifications, while those who said it was okay used biological/human rights justifications.

Similarly, Horn (2007) administered a questionnaire to adolescents’ in the tenth and twelfth grades to assess their acceptance of hypothetical same-sex peers who were either gay or straight,
and gender-conforming or non-conforming (e.g., in terms of appearance and activities).
Participants were presented with descriptions of hypothetical individuals who varied along these two dimensions and were asked how acceptable or not acceptable each target person was. In general, participants evaluated targets who did not conform to gender-role conventions more negatively than peers who did follow these norms. Adolescents in the twelfth grade had more positive evaluations than those in the tenth grade. For male participants, it seems that following gender norms is especially important as they evaluated a straight male who did not conform to gender roles regarding appearance as less acceptable than a gay peer who did follow gender norms. This study sheds light on the ways in which adolescents evaluate homosexuality; it seems that negative attitudes about homosexuality revolve in large part around the threat to traditional gender roles.

Building on prior work, Horn et al. (2008) administered a large survey of high school students’ attitudes about homosexuality to tease apart conflicting beliefs about the rights of gay and lesbian students in school (i.e., the conflict between the right of LGBT students not to be discriminated against, and the rights of others to hold their own beliefs about homosexuality). The survey included questions assessing students’ overall acceptance of gay and lesbian individuals, their judgments about the acceptability of teasing and excluding someone who is gay or lesbian, and their beliefs about why homosexuality is right or wrong (e.g., biologically-based, individual rights/freedoms, and religious conventions). The results revealed that adolescents tend to differentiate between individual beliefs about homosexuality and protecting LGBT students from discrimination, although their reasoning is complex. For example, adolescents’ beliefs about the acceptability of homosexuality were influenced by beliefs in social norms and religious conventions, but this did not have a large impact on their beliefs about the acceptability of teasing and exclusion. In addition, female participants were less accepting of exclusion and
teasing than males, and ninth grade students were more accepting of exclusion and teasing than older adolescents, which is consistent with prior work. Students utilized both personal choice and moral justifications (i.e., concern for fairness and equality) to support their judgments about exclusion and teasing; those who used moral reasoning were much less tolerant of these behaviours than those who used personal choice. Adolescents may sometimes use exclusion and teasing as a means of controlling/manipulating the social environment and regulating gender norms (Horn, 2007; Horn et al., 2008). Additionally, participants who believed homosexuality to be biologically determined or grounded in individual rights (e.g., people have the right to love whoever they want) had more positive evaluations than those who referenced religious conventions.

While there has been limited research exploring attitudes about homosexuality from a developmental perspective, the work that has been done converges on the fact that attitudes about homosexuality are complex and multifaceted. Although age differences tend not to emerge in adolescents’ evaluations of the acceptability of homosexuality (Heinze & Horn, 2009; Horn, 2006), age differences did emerge when examining social-conventional aspects of the topic. This held true for studies with small age ranges (e.g., Horn, 2007), in contrast to prior work (Morrison et al., 1997; Price, 1982). It is possible that with a larger age range and a domain approach, age differences would be even more prominent. Younger adolescents are less comfortable at the thought of interacting with a gay or lesbian peer (Horn, 2006), they believe it is more important to follow gender norms than older adolescents (Horn, 2007), and are less critical of exclusion and teasing (Horn et al, 2008). This makes sense in light of research suggesting older adolescents are more flexible and less constrained by social conventions (Turiel, 1983). For males, challenges to traditional gender roles and heteronormativity prove to be especially difficult. Although there is a general understanding of how adolescents reason about homosexuality, virtually nothing is
known about the formation of general judgments about homosexuality in young children (i.e., whether they see sexual orientation as a personal issue, a conventional issue, or whether they recognize and understand various forms of discrimination and prejudice). Given the paucity of research on this topic, there are some possible parallels between judgments about gender roles and cross-gender behaviour that might be relevant for informing the current research topic. Homosexuality contradicts traditional gender norms and seems to threaten typical masculine and feminine gender roles, and it is quite possible that participants may evaluate homosexuality and cross-gender behaviour similarly. The developmental research on children’s and adolescents’ conceptions of gender and evaluations of cross-gender behaviour will be explored in the following section, but these possible connections and parallels are only speculative in nature, given the absence of direct research on younger children’s views about homosexuality.

1.5 The Development of Attitudes about Gender

Gender roles (i.e., the prescribed social and behavioural conventions for men and women within a culture) are important because they may directly impact homosexuality, as noted earlier, and that this has been an issue that has been explored with younger participants in research from the social domain and other perspectives. Kohlberg (1966) argued that children pass through three main stages as they acquire a gender identity. First they establish a basic gender identity around 2.5- to 3-years of age (Kohlberg, 1966; Thompson, 1975; Warin, 2000) wherein they accurately label themselves as male or female. They then acquire gender stability when they realize that gender is an enduring trait; boys will become men, and girls will become women. Finally, around 5- to 7-years-old they reach gender constancy in which they realize that gender is invariant across situations, despite any changes in activities or appearance. Around the same time that children establish a basic gender identity (e.g., 2.5- to 3-years-old) they begin to engage in gender-role stereotyping (Blakemore, 2003; Kuhn, Kohlberg, Langer, & Haan, 1978). From a
very early age children acquire messages about how girls and boys should behave. Indeed, familial influences (i.e., parents’ beliefs about gender roles, parental behaviour with sons versus daughters, gender roles within a marriage, and the gender of siblings) seems to be the largest socializing agent for gender development (for a review see McHale, Crouter, and Whiteman, 2003). Research stemming from a social domain perspective has given a more nuanced picture that involves children’s and adolescents’ attempts to coordinate different domains of social judgment in thinking about this issue. This approach is important as it more accurately captures the complexity of children’s reasoning about gender, in a way that previous research did not (Killen, 2007).

1.5.1 Evaluations of Cross-Gender Behaviour

Research examining cross-gender behaviour reveals that while age differences are often found in how acceptable children find gender-atypical behaviour, even young children coordinate different domains when reasoning about gender roles, and recognize that personal preference should also be considered.

Stoddart and Turiel (1985) assessed children’s and early adolescents’ (5- to 13-year-olds) conceptions of cross-gender activities. They found a U-shaped curve in which young children and adolescents were more critical of cross-gendered behaviour than children in middle childhood. Participants’ justifications revealed that while young children and adolescents may have similar evaluations, this stems from different beliefs about gender identity. Young children believed that gender-typical behaviour was important for the maintenance of one’s physical gender-identity, while adolescents believed that gender-typical behaviour was important for the maintenance of the psychological characteristics associated with gender identity. Given that the youngest age groups have recently acquired gender constancy and stability (Kohlberg, 1966), it
makes sense that they would exaggerate these differences and be more threatened by cross-
gender behaviour. Participants in middle childhood viewed sex roles as social expectations under 
personal jurisdiction.

In contrast, Conry-Murray and Turiel (2012) assessed children’s (4-, 6-, and 8-year-olds) beliefs about gender norms and found little evidence to support the claim that young children are unyielding about gender norms. Children were presented with scenarios that involved hypothetical parents’ choice about whether to select their son or daughter for certain activities. They were asked about a class (e.g., computer or babysitting class), a toy (e.g., doll or truck), and Halloween costume (e.g., soldier or ballet). Each condition had a clear female and male norm. The children were asked which child the parent should choose, whether boys or girls normally participate in the activity, if the norm could be altered due to the target child’s preference, if the norm could be altered in another country, and finally, if a rule enforcing gender norms would be acceptable in a school setting. The authors found that at all ages children recognized gender norms and believed they should be followed, but also believed that individual preferences should be taken into consideration. The vast majority of the children believed that gender norms could be reversed in another country and that it would be immoral to enforce a rule about gender norms in school. The 4-year-olds were not as flexible in their reasoning. The authors suggest that it is possible they struggled to comprehend that the target child would want to behave in a counter-

stereotypical way. Nonetheless, this research illustrates that children do not view gender norms as completely fixed or unyielding, consistent with prior work showing that even young children are able to grasp that gender norms are conventional in nature (Smetana, 1986).

Similarly, Conry-Murray (2013) studied children in two age groups, 5-6-year-olds and 8-9-year-olds. They were presented with hypothetical situations in which a child has a gender-

atypical preference. They were asked about the acceptability of acting on this preference in a
familiar public setting or in a country where the atypical preference was actually common. Results indicated that the children believed the gender-atypical choice was more acceptable in the other country (93%) than in the familiar setting (66%). The 8-9-year-olds judged the behaviour to be acceptable in both settings, while the 5-6-year-olds only deemed this acceptable in the other country (their scores were not above chance on t-tests in the familiar setting). There was also an effect of the character’s gender; participants believed it was more acceptable for a girl to engage in masculine behaviour than for a boy to engage in feminine behaviour. Personal choice justifications were used the most in the familiar setting and references to the cultural customs were used most frequently in the other country. The 5-6-year-olds used unelaborated justifications more than the 8-9-year-olds in both settings. Conry-Murray (2013) highlights the fact that while children are aware of gender stereotypes and endorse gender-typical behaviour, the majority of participants still believed that the character in the story should be able to follow his/her personal preference. The social setting did matter, and children were less accepting of gender-atypical behaviour in the familiar setting, with references to social pressure and teasing.

Since homosexuality threatens traditional gender roles, it is possible that children’s beliefs about cross-gender behaviour will also inform their beliefs about same-sex relationships. Children incorporate both personal choice (e.g., it is okay to violate gender roles) and social-conventional considerations (e.g., depends on commonality in country) when evaluating the acceptability of gender-atypical preferences (Conry-Murray, 2013). These results may be directly relevant to homosexuality. Since young children consider social domains when evaluating a gender-atypical preference, we may see a similar result in which children reason about same-sex relationships as a personal choice, especially with age, while also incorporating in their reasoning the norms of a particular country.
1.6 Children’s and Adolescents’ Attitudes about Exclusion and Tolerance

It is also important to examine the literature on gender and racial prejudice as well as discrimination, as beliefs about exclusion and tolerance are examined in the current study. It is quite possible that children and adolescents reason similarly about gender and sexual prejudice.

One area of current research on gender roles and attributions is based on social domain theory and involves the development of beliefs about exclusion based on these characteristics. Similar to research on homosexuality (Horn, 2006), age differences do not tend to emerge for evaluations about discrimination in general as most children recognize this as wrong, but when more complex questions are presented or more subtle dimensions of discrimination are assessed, age differences do emerge. For example, Killen et al. (2002) studied children in the fourth, seventh, and tenth grades and presented them with various scenarios involving individual friendship (e.g., excluding a potential friend), the peer group (e.g., excluding someone from a music club), and a school setting (e.g., excluding someone from attending school). The target child in the stories was excluded due to gender or race (all participants were given all six scenarios; three stories about race exclusion and three about gender exclusion). Participants believed exclusion based on gender or race was wrong the majority of the time, but it was judged to be more acceptable in the friendship conditions than in the school setting. The 10th graders were more accepting of exclusion in the friendship and peer group condition, with justifications appealing to personal choice and group functioning. This reveals that children are coordinating moral beliefs about the wrongness of discrimination with elements of personal choice. Children believed exclusion to be more acceptable in a personal situation than at an institutional level. Similarly, Horn (2006) found no differences in the acceptability of homosexuality among adolescent participants, but younger adolescents were more uncomfortable interacting with a gay
or lesbian peer, indicating the distinctions adolescents made between moral, personal choice, and social-conventional considerations. Although discrimination is seen as a moral issue and wrong in straightforward cases, in particular applications where other issues are involved, children may see discrimination or exclusion as acceptable. This will be directly examined in the current study, as participants are asked about the acceptability of excluding someone on the basis of his/her sexual orientation.

Both gender and sexual orientation have been approached through examining beliefs about exclusion in various situations. A research literature has also explored more generally the development of children’s tolerance for ideas and practices that differ from their own. The research on exclusion reveals that young children are generally not more prejudiced than older children and adolescents, and the literature on tolerance also converges on the fact that children are able to coordinate multiple aspects of a situation when evaluating the acceptability of disagreeing others. Wainryb, Shaw, and Maianu (1998) assessed tolerance in children in the first, fourth, and seventh grades, as well as university undergraduates. Participants were presented with moral beliefs (e.g., concerning psychological harm and injustice) that conflicted with their own beliefs (confirmed during pilot-testing and baseline assessments). Participants were asked about the acceptability of someone holding that belief, someone making a public speech about the belief, and someone acting based on their belief. Finally, in order to assess the importance of convention, participants’ beliefs were said to be consistent or inconsistent with their culture’s beliefs.

Overall, participants were more tolerant of someone holding a belief (e.g., a father who believes it is acceptable to give boys more privileges than girls) than of expressing the belief, and of expressing a belief than acting on it. Participants were more tolerant when the belief was consistent with the protagonist’s culture. Age differences emerged with younger participants
being less tolerant of someone holding a belief and making a speech about the belief than the older participants. However, while the younger participants were less tolerant compared to the older students, a majority of the first graders were still tolerant of someone holding a dissenting belief. No age differences emerged when evaluating the protagonist acting on the belief. Participants of all ages were equally likely to be intolerant of this, regardless of the source of the belief (e.g., dissenting moral belief or information). When examining participants’ justifications, the older participants often reasoned that it was harmless for someone to hold a belief, while the youngest participants seemed to think there was an inevitable connection between holding a belief and acting on the belief. Similar reasoning occurred for the expression of a belief. It seems that with age, children and adolescents become more tolerant of dissenting others, but the primary reason younger children are intolerant stems from their concern that harm can result from holding and expressing an immoral belief. This shows that children are coordinating their beliefs about freedom of expression with potentially harmful results of intolerant attitudes.

Taken together, the developmental work on tolerance suggests that participants at all ages coordinate the kind of dissenting belief, the form of disagreement, and the cultural context when evaluating the acceptability of disagreeing others. Younger participants do seem to be less tolerant than older participants about disagreeing others, however, this depends on the domain. In the current study participants evaluate the acceptability of hypothetical parents believing that same-sex relationships are wrong, making a speech about these beliefs, and restricting their child’s choice of prom date because of their beliefs. Older children and adolescents may increasingly differentiate judgments about holding beliefs about the acceptability of homosexuality from speech or actions. Thus, regardless of their beliefs about the acceptability of homosexuality, older children and adolescents may come to view laws or restrictions on the expression of dissenting beliefs as wrong or as implicating freedom of speech issues. Research
on children’s conceptions of freedom of speech finds that children develop notions of freedom of speech in childhood, and this becomes more prominent with age (Helwig, 1995a, 1997, 1998) as these beliefs are fine-tuned throughout development. While young adolescents have well developed notions of civil liberties, older adolescents are more likely than younger adolescents to endorse freedom of speech when it conflicts with other moral and social concerns (e.g., racially-intolerant speech) (Helwig, 1995a). With age, children and adolescents increasingly recognize the importance of freedom of speech and appeal to the necessity of this right, even in complex situations involving controversial beliefs and law violation (Helwig, 1995a; Ruck et al., 1998).

Piecing together the research that has been conducted on gender and homosexuality, it is clear that children’s and adolescents’ judgments are influenced by a variety of factors and they are skilled at coordinating different domains when formulating their evaluations. Young children coordinate personal choice aspects of gender-atypical preferences with conventional considerations such as the norms within a culture (Conry-Murray, 2013), and adolescents increasingly believe homosexuality to be a personal choice issue and feel that it is wrong to infringe upon the rights and freedoms of gay and lesbian individuals (Horn, 2006; Horn Szalacha, and Drill, 2008). While children and adolescents view exclusion as wrong, distinctions are made in different circumstances (e.g., friendship versus school exclusion), as children and adolescents navigate personal choice, social-conventional, and moral distinctions related to gender and racial exclusion (Killen et al., 2002). Beliefs about homosexuality might be similarly influenced by a variety of factors. References to homosexuality being a personal choice will likely dominate at all ages, with the moral aspect (i.e., rights and freedoms associated with one’s choice of partner) becoming more prominent with age. Young adolescents are more sensitive about gender roles and expectations (e.g., Horn, 2006, 2007) and thus, social-conventional
considerations regarding homosexuality may become more prominent in late childhood and early adolescence.

An additional factor to consider that may affect conceptions of homosexuality is how children and adolescents conceptualize gender differences (i.e., do they view differences between men and women as biologically- or socially-determined?). As noted earlier, these beliefs were found to impact adults’ and older adolescents’ views about the acceptability of homosexuality. I will first survey the adult literature on this topic (i.e., psychological essentialism) and then look at the developmental work.

1.7 Psychological Essentialism

Psychological essentialism refers to individuals’ tendencies to ascribe a set of beliefs about the underlying nature of things. Applied to social categories, it reflects the belief that groups have a fixed and underlying nature or essence. Essentialism ascribes group membership as something inherent, natural, and stable, akin to biology (Haslam, Bastian, Bain, & Kashima, 2006). Rothbart and Taylor (1992) proposed a two-component model in which inductive potential (i.e., group membership is meaningful and it allows us to make inferences about someone based on their group membership) and inalterability were the two most important components of essentialist thinking. Research has generally supported this two-component model and Haslam, Rothschild, and Ernst (2000) found two factors in their study that generally correspond with Rothbart and Taylor’s model. The first factor, natural kind, was comprised of beliefs in the immutability, discreteness, historical invariance, biological basis, and defining features of a category. This factor best captured beliefs about gender, racial, and ethnic groups. The second factor representing entitativity reflected the inductive potential of a group and corresponded to beliefs in the similarity of individuals in a group. This factor best captured gay
men, AIDS patients, Jews, and political groups. These two factors, natural kind and entitativity, emerged in other studies (Haslam & Ernst, 2002; Haslam, Rothschild, & Ernst, 2002).

It is generally the case that “essentializing” a group leads to greater stereotyping and prejudice; this is true for gender (e.g., Martin & Parker, 2005), race (Williams & Eberhardt, 2008), and mental illness (Howell, Weikum & Dyck, 2011). Martin and Parker (2005) found that attributions to biology to explain gender and race resulted in greater beliefs that these differences cannot be changed and the belief that gender differences (Neff & Terry-Schmitt, 2002) and racial differences (Williams & Eberhardt, 2008) are biologically determined can lead people to justify existing inequalities (for an exception see Haslam et al., 2002). However, when looking at beliefs about homosexuality, the opposite is true. Believing that homosexuality is biologically determined tends to be associated with pro-gay attitudes (Haslam et al., 2002; Herek & Capitiano, 1995; Whitley, 1990). Turiel, Hildebrandt & Wainryb (1991) found that high school students who believed homosexuality to be biologically- or psychologically-determined or who made no assumptions about normal sexual orientation had positive views about homosexuality; those who believed it to be unnatural and that the only normal sexual orientation is heterosexuality held negative attitudes.

Researchers have found that the different dimensions of essentialism have unique effects on prejudice. Hegarty and Pratto (2001) found that the belief that homosexuality was immutable, fixed early in life, difficult to change, and biologically based (i.e., natural kind factor) was related to pro-gay attitudes, whereas the belief that gay and lesbian individuals are deeply different and that sexual orientation is binary (i.e, entitativity factor) was related to anti-gay attitudes. Haslam et al. (2002) also found that the natural kind factor was associated with more tolerance and the entitativity factor associated with more intolerance.
Very little work has examined essentialist beliefs from a developmental perspective. Horn (2006, 2007) has examined adolescents’ beliefs in the origin of homosexuality, but there has been no work examining children’s beliefs about homosexuality. However, children’s essentialist beliefs about gender have been examined and this will be surveyed in the section below.

1.8 How do Children and Adolescents Conceptualize Gender Differences?

Developmental research has shown that young children (around 6-9-years-old) believe that gender differences are grounded in biology and with age they come to recognize the role of socialization (Neff & Terry-Schmitt, 2002; Smith & Russel, 1984; Taylor, 1996; Ullian, 1976). Ullian (1976) was one of the first researchers to explore beliefs about masculinity and femininity in children 6- to 18-years-old. Participants completed an open-ended interview that probed their beliefs about masculinity and femininity, the causes of gender differences, and their personal desire to conform to gender roles. She found evidence for a developmental stage sequence with a movement away from the physical and biological roles of men and women (6- to 8-year-olds), to the social roles and obligations expected of each gender (10- to 12-year-olds), and finally to the psychological aspects of masculinity and femininity (14-18-year-olds). This developmental trajectory seems to parallel Stoddart and Turiel’s (1985) findings. Ullian highlights the importance of differentiating descriptive (i.e., judgments and beliefs about the nature of male and female differences) and prescriptive (i.e., the need or desire to conform to gender roles) beliefs about sex roles, also reflected in Horn’s (2006) study about homosexuality. Smith and Russel (1984) corroborated Ullian’s work and found a similar trend of decreasing biological attributions and increasing socialization attributions with age. The authors found that boys at all ages made fewer appeals to socialization than girls, with the exception of 10-year-olds where there were no sex differences.
This trend of declining biological attributions is consistent with more recent work exploring how children and adolescents conceptualize gender. Taylor (1996) developed a switched-at-birth task to assess whether children believe gender is biologically or environmentally determined. Participants were told a story with visual aids about an androgynous-looking infant who is raised on an island surrounded by people of the opposite-sex; they are then shown a picture of the child as a 10-year-old and are asked a series of questions about the child’s personality and toy preferences, as well as biological properties (e.g., does the child have a body like a boy or girl?). Children younger than 9- to 10-years-old believed gender roles to be biologically influenced (i.e., they believe a boy raised on an island of girls will retain gender-stereotypical properties). This tendency of young children to believe gender differences are rooted in biology was substantiated with later work by Taylor, Rhodes, and Gelman (2009). Additionally, Neff and Terry-Schmitt (2002) assessed older participants (grades 7, 10, 11, and university undergraduates) on their beliefs about the origin of power-related gender differences (e.g., dominance and competitiveness). At all ages adolescents believed that gender differences were due to social factors and religious and biological attributions declined with age.

The switched-at-birth task can be applied to look at essentialist beliefs about homosexuality, and was adapted for use in the current study (explained below). This task is useful because it provides a means of assessing beliefs and theories about sexual orientation at a younger age than in previous work examining adolescents’ beliefs about the origins of homosexuality (Horn, 2006, 2008, 2009). While adolescents and adults can understand the nature of biological and social influences on gender and sexual orientation, young children cannot readily do this. The switched-at-birth task provides an indirect means of assessing their essentialist beliefs, if present.

In contrast to the trend of decreasing biological attributions for gender, the opposite may be true for attributions about homosexuality, with biological attributions becoming more common.
with age, and associated with more positive attitudes. While little work has explored how children and adolescents conceptualize homosexuality, Horn (2006) revealed that younger adolescents were more likely to believe that it is caused by socialization and the older participants believed it to be biologically determined. Since there is no social role for beliefs about innate “gayness” to attach to, as in the case of gender, people may be more inclined to view homosexuality as a matter of personal choice if determined by biology (i.e., you should not force people to act against their biological nature).

1.9 Transmission of prejudice

One element we wanted to explore in this study was whether parents’ attitudes influenced their children’s beliefs about homosexuality. Although it may be commonly believed that parents are responsible for transmitting prejudice to their children, research on this topic has yielded contrary findings. In general, there is no clear association between parents’ prejudice and their children’s attitudes (Aboud & Amato, 2001), but some research has found a more complex relationship. Castelli, Zogmaister, and Tomelleri (2009) found that mothers’ implicit racial attitudes were related to children’s playmate preference and in-group favouritism (i.e., they assigned more positive traits to the White target). However, there was no relation between parents’ explicit attitudes and children’s playmate preference or in-group favouritism. Other research has found that fathers play an important role when assessing beliefs about sex-roles. For example, O’Bryan, Fishbein, and Ritchey, (2004) documented that adolescents’ prejudice against homosexuals and sex-role stereotyping was related to their fathers’ prejudice. Sinclair, Dunn, and Lowery (2005) assessed the relation between parents’ and children’s levels of racial prejudice and whether parental identification would affect the transmission of attitudes. Identification was measured with four questions relating to children’s desire to follow their parent’s instructions,
make their parent proud, spend time with their parent, and how much they wanted to be like their parent (participants answered questions for the parent who completed the survey). The authors found that children’s identification with their parents was a moderator in the transmission of prejudice; only in children who were highly identified with their parents was there a correlation between parents’ and children’s prejudice. Taken together, these findings suggest that the sources of children’s prejudice largely may be in other influences rather than that of direct parental transmission of these values (e.g., cohort effects, school curriculum, media, cognitive development, etc.).

2 The Current Study

Given the dearth of research assessing children’s attitudes about homosexuality, the purpose of this study is to gain a greater understanding of how children, adolescents, and their parents reason about homosexuality and how this changes over time. This is the first study, to our knowledge, that assesses young children’s conceptions of homosexuality. Prior work has focused on adolescents and adults and generally assessed their attitudes about homosexuality rather than their reasoning. This study will allow us to explore children’s reasoning about sexual orientation from a young age to determine how beliefs change over time. The study examined a series of components of reasoning about homosexuality. We asked a number of questions about participants’ beliefs about the overall acceptability and legal regulation of homosexuality as well as their judgments about tolerance and exclusion. In addition, we were interested in how essentialist beliefs relate to attitudes about homosexuality. Prior work has explored this in adults (e.g., Haslam et al., 2000) and limited work has been conducted on adolescents’ beliefs (e.g., Horn, 2006; Neff & Terry-Schmitt, 2005). For the purposes of this study, we decided to focus on adapting the natural kind factor into questions that would be age-appropriate for children and
early adolescents. We focused primarily on the biological/social distinction and immutability, consistent with prior developmental work (e.g., Neff and Terry-Schmitt, 2005; Taylor, 1996; Taylor et al., 2009). The switched-at-birth task was used to assess these beliefs in young children (although it was administered to all participants to allow for exploration of age differences). Finally, we also explored what role, if any, parents have in the formation of children’s beliefs. Accordingly, parents completed the same (or slightly adapted in the case of the youngest participants) version of the interview as their children did in order to explore this link.

2.1 Hypotheses

While there has been no research looking specifically at young children’s conceptions of homosexuality, research has assessed adolescents’ beliefs about homosexuality as well as children’s perception of gender roles and cross-gender activities, and thus, some provisional hypotheses can be generated around some expected general developmental trends.

2.1.1 Attitudes about Homosexuality

As alluded to previously, it is predicted that participants at all ages will likely believe same-sex relationships to be acceptable, but age differences may emerge with younger children being less accepting than older participants, consistent with prior research on gender roles (Conry-Murray, 2013). Younger children may be more likely to accept restrictions on homosexuality in other countries if consistent with religion, common practice, or laws.

2.1.2 Exclusion and Tolerance

We expected that the majority of our participants would be largely tolerant of homosexuality in general, consistent with the findings on gender and racial prejudice reviewed earlier and also the nature of our sample (i.e., largely middle-class, university educated families
who are likely to be more tolerant of homosexuality). Despite this general acceptance of homosexuality, however, we also expected there to be age differences in judgments in particular situations involving exclusion, consistent with the patterns reported in prior work regarding the role of context and age differences. For example, younger children may be more accepting of parental authority restrictions on homosexuality or of individuals who choose their friendships based on sexual orientation. Also consistent with prior research, it was expected that participants of all ages will be more tolerant of someone holding a negative belief about homosexuality than of making a speech about the belief, and more tolerant of someone making a speech opposing homosexuality than of acting on the belief (in our study represented by a parent restricting their child’s choice of prom date) (Wainryb et al., 1998; Wainryb et al., 2001). It was also expected that younger participants would be less accepting of people holding a negative belief than older participants, consistent with research suggesting that they believe harm will inevitably result from a negative belief (Wainryb et al., 1998; Wainryb et al., 2001).

2.1.3 Justifications

Regarding reasoning, we expected that most children in our sample would apply concepts of personal choice (e.g., Nucci, 1981) to reason about homosexuality, although some may also apply social-conventional notions, largely in support of less positive evaluations or in situations in which homosexuality is perceived to conflict with prevailing cultural norms, authority, or religious beliefs. More specifically, it was expected that personal choice justifications would be common at all ages, moral reasoning would be more common in older participants (13-14-year-olds and adults), and social-conventional reasoning may be more common in younger participants (5-11-year-olds). Examination of age and context-related variations in judgments of homosexuality and its acceptability will comprise an important focus of the analyses.
2.1.4 Development of Essentialist Beliefs

It is predicted that biological attributions will become increasingly more common with age and will likely be associated with more positive evaluations of same-sex relationships. The biological aspect of sexual orientation may be more remote for the younger children when compared to gender, as the biological differences between the sexes may be felt and understood earlier when compared to understanding how biology may affect sexual orientation. Prepubescent children will likely not view homosexuality as a biological phenomenon due their lack of understanding about sexuality. Biological theories for gender differences may also be articulated for young children since gender is often used as an organizing structure throughout development, whereas discourse around homosexuality is likely not part of the socialization of children in most families. For these reasons, children may be predisposed to view homosexuality as a personal choice or social-conventional construct.

2.1.5 Transmission of Attitudes

Both of the children’s parents were asked to participate, and hypotheses were formulated around the influence of maternal and paternal influence on attitudes about homosexuality. It is predicted that overall parents will have a minimal influence on children’s beliefs, consistent with the prior research (Aboud & Amato, 2001; Castelli et al., 2009). However, it is hypothesized that fathers’ attitudes about the acceptability of homosexuality may have an influence on children’s attitudes given prior work suggesting fathers do influence sex-role attitudes (O’Bryan et al., 2004).
Chapter 2
Methods

3 Methods

3.1 Participants

This sample consisted of 286 participants, 128 children and their parents. For each child, both parents were asked to participate, but usually it was the mothers who agreed. In total, 116 mothers and 42 fathers participated. Children and adolescents were evenly divided into four age groups: 5-year-olds ($M = 5.08; SD = 0.27$), 7-8-year-olds ($M = 7.50; SD = 0.61$), 10-11-year-olds ($M = 10.67; SD = 0.48$), and 13-14-year-olds ($M = 13.66; SD = 0.56$). There were equal numbers of males and females in the children and adolescent age groups, with the exception of the 5-year-olds in which there were 18 females and 14 males. Participants were obtained through the Child Study Centre’s database that contains the names of over 6,000 children residing in the Toronto metropolitan area whose families had agreed to participate in research. Families in the database are recruited through a number of different avenues, including hospitals, day-care centers, mass-mailings, and parent/baby conferences. The database is maintained at the University of Toronto. The ethnic background of the sample was 68% European, 10.9% Asian, and 21.1% other backgrounds. Ninety-five percent of participants provided demographic information on occupation and 99.6% provided demographic information on education. Seventy-two percent were employed in professional, managerial, sales, or other technical occupations, 14.8% were employed in service occupations, trades, or manufacturing, 6.3% were stay-at-home parents, 1.6% were unemployed; and 0.4% were retired. Sixty-five percent completed university or a post-graduate degree, 20.3% had completed college, and 13.3% had completed high school only.
In terms of religion, 98.4% provided demographic information. Sixty-three percent identified as Christian, 4.7% identified as Jewish, 1.6% as Muslim, and 0.8% as Buddhist. Nineteen percent indicated that they had no family religion and 9.4% selected “other” to describe their religious orientation. In terms of religious activity, 10.9% indicated that they were very active in their religion, 35.2% were somewhat active, and 50.8% were not active.

3.2 Design and Procedures

Participants were given a structured interview, (see Appendix A) lasting approximately 30-45 minutes, in which they were presented hypothetical scenarios and asked about their judgments and beliefs about homosexuality. For the children and adolescents we introduced same-sex relationships with a preamble in order to explain to them what we meant by this. For the children (i.e., 5-, 7-8, and 10-11-year-olds), the explanation was as follows:

“Today I am going to be asking you questions about different kinds of romantic relationships. People who love each other can decide to stay together for their whole lives. Sometimes they get married, and sometimes they decide not to get married, but they can still live together and love each other, and even have a family together. I am going to ask you questions about women/men loving women/men. They do everything that a man and a women who love each other may do, like holding hands and kissing and living together.”

Children were then provided with a series of drawings designed by a research assistant to aid in their comprehension (see Appendix B). When introducing same-sex relationships children were shown a picture of two boys or two girls holding hands. For all participants the questions and scenarios were gender-consistent.

3.2.1 Domain Conceptualization

Participants were presented with a series of assessments designed to gauge their judgments and reasoning about homosexuality. These assessments were mainly guided by social domain
theory and were designed to establish participants’ general conceptualization of homosexuality as a personal, moral, or social-conventional issue. In the first section, participants were asked to evaluate the acceptability of same-sex relationships and marriage, their beliefs about legal regulation of these relationships, to evaluate laws regulating such relationships in other countries, and how commonality affects their judgments (i.e., if same-sex relationships were very common/uncommon). If participants view homosexuality as a personal issue, it would be expected that they would view it as acceptable in all contexts and cultures, irrespective of its commonality. Participants would deem it unfair to restrict someone’s choice in this matter. If participants evaluate it as a conventional issue, it is expected that the different questions and scenarios will prompt different responses. If homosexuality is uncommon, they will view it as unacceptable; if there is a law prohibiting it, it will not be acceptable.

3.2.2 Exclusion

Based on the work of Killen, Lee-Kim, McGlothlin, and Stangor (2002), children and adolescents completed a measure on their beliefs about exclusionary practices by peers or parents. Children were told one story with two follow-up questions. First, they were told a story about Andrew excluding Tom (in the male condition) because “he knows that he (Tom) wants to love and live with a boy when he grows up and hold hands and kiss like a man and woman would do.” They were asked about the acceptability of this and were probed further based on their response. For example, if they said that it is not okay for Andrew to exclude Tom, they were asked whether or not Andrew should listen to his friends (probe 1) and his parents (probe 2) who think he should exclude Tom. If they said it was okay for Andrew to exclude Tom, they were asked whether Andrew should listen to his friends (probe 1) and his parents (probe 2) who thought he should not exclude Tom.
3.2.3 Tolerance

A second set of assessments was derived from the literature on tolerance. We adapted Wainryb et al’s tolerance measure to ask participants about three hypothetical situations in which parents hold a negative attitude about same-sex relationships, make a speech about this belief, and restrict their child’s activities based on this belief. They were asked about the acceptability of each of these scenarios and the older participants were also asked follow-up questions. Specifically, participants were told a story about hypothetical parents who have a daughter (in the female condition) who wants to be with a woman when she grows up. They were told that the parents were opposed to these kinds of relationships. Participants were first asked about the acceptability of the parents’ belief: “Do you think it is okay for the mother and father to believe that it is wrong for girls to love each other that way and live together like a man and a woman, or do you think that they should not believe this?” They were then told “the mother and father believe this so strongly that they want to make a speech in public about why it is wrong for men to be with other men.” Participants were asked about the acceptability of the parents making this speech, and the four oldest age groups were asked if there should be a law stopping the parents from making the speech and if people should protest the speech. Finally, participants were told: “their daughter says that she wants to go to prom with a girl, but they refuse and say that the only way she can go to prom is if she takes a boy as her date.” All participants were asked about the acceptability of the parents’ actions, and the four oldest age groups were asked if there should be a law stopping the parents from doing this.

3.2.4 Essentialism

The final section assessed essentialist beliefs. First, participants were asked why they think someone would want to be in a same-sex relationship and then are presented with a biological (e.g., genes and hormones) and environmental (e.g., parental influence or teaching) explanation
and are asked to rate how likely or unlikely each option is. They are then presented with two scenarios assessing their beliefs in the immutability of homosexuality, the first asks how likely it is that someone can change his/her mind if he/she is gay, and the second asks how likely it is that someone can change his/her mind with parental influence. Participants were also asked at what age someone truly knows if they are gay or lesbian.

In order to assess essentialist beliefs in children, we adapted Taylor’s (1996) switched-at-birth task for the purposes of our study. Participants were told about a boy named Jack (or Susan) who was born in a country where same-sex relationships are not very common. He is sent to live with his uncle who lives in a country where same-sex relationships are very common. Participants are asked whether Jack will want to be with a man or women if he grows up in this country. This allows us to assess whether participants believe that sexual orientation is a product of the environment. We also included a follow-up question that asks participants who Jack would want to be with if he moves back home to his parents, where same-sex relationships are not common. This additional manipulation to the scenario allowed us to gauge whether participants believe that one’s sexual orientation is fixed early in life, regardless of the environmental or biological underpinnings.

For all questions participants were asked to provide an overall evaluation on a Likert scale assessing how okay or not okay an act is (from 1= very, very not okay to 7 = very, very okay) or how likely/unlikely something is (1= very, very unlikely to 7 = very, very likely) in addition to providing their justifications for each question. The interview sections were not counterbalanced because we believed it was important to ask participants about their overall attitudes before providing them with detailed follow-up questions about exclusion, tolerance, and their essentialist beliefs, in case this affected their original rating. The interviews were slightly adapted depending on the participants’ age (see Table 1 for an outline of the interview questions provided to each age group). For the 5-year-olds we removed a number of questions that proved too
difficult for them to comprehend during pilot testing. We simplified the language and removed a number of the legal questions (in particular the questions assessing their evaluations of the laws in Canada) and essentialist questions, as this proved confusing to some of the 5-year-olds. We also adapted the language for the 13-14-year-olds and adults to reflect their greater understanding of this material, and the adults did not complete the exclusion measure. Copies of each of the complete interviews for each age-level are found in Appendix A.

3.3 Coding and reliability

Justifications were obtained for all questions throughout the interview. The coding scheme for justifications was developed from fifty percent of the interviews, randomly selected but evenly distributed across age groups and gender. This coding system was subsequently used to code the remainder of the interviews. The coding system included categories reflecting a social domain model and essentialist beliefs (e.g., personal choice including psychological attraction and mention of personal rights and freedoms, social-conventional reasoning including deterministic beliefs about “normal” relationships, moral reasoning about fairness, equality, and the wrongfulness of discrimination, and finally, references to homosexuality being biologically determined or natural). See Table 2 for a description of the coding categories. The same coding scheme was applied across all sections of the interview. Twenty percent of the interviews (25 children and adolescents, and 25 parents) evenly distributed by age group and gender were coded by two independent coders for comparison with the original coding. The level of agreement for the justification categories ranged from 58% to 94%, and the average overall level of agreement, expressed as Cohen’s kappa, was 78.5. All three coders then coded the remaining data.
Chapter 3
Results

4 Results

Evaluations were analyzed using analyses of variance (ANOVAs) on major questions of interest. For all significant interactions follow-up analyses of simple effects were conducted and where appropriate, pair-wise comparisons were performed using the Bonferroni correction for multiple comparisons, with the overall alpha set at .05. Hierarchical linear regressions were used to determine whether essentialist beliefs predicted judgments, and whether parents’ responses predicted their children’s responses. Logistic regressions were used to determine the effect of age on the switched-at-birth task because both the predictor and outcome variables were categorical.

4.1 Evaluations of the Acceptability and Legal Regulation of Homosexuality

A series of univariate ANOVAs were conducted on each of the evaluation questions with age and sex as independent variables. Two questions assessed participants’ overall judgments (of the acceptability of homosexuality and same-sex marriage), six questions assessed the legal regulation of homosexuality (i.e., whether a law should regulate same-sex relationships, the acceptability of the current Canadian law allowing same-sex marriage and the prior Canadian law which did not allow same-sex marriage, the acceptability of a religiously-based law that prohibits same-sex marriage, the acceptability of religion influencing the law in another country, and the acceptability of breaking the law in a country that banned same-sex relationships), and
two questions assessed how commonality affects participants’ attitudes (the acceptability of same-sex relationships if they were common/uncommon in Canada and in another country). Recall that evaluations were assessed using a Likert scale ranging from 1 = very, very not okay to 7 = very, very okay.

The means and standard deviations for each assessment question are presented in Table 3. Overall, judgments were highly positive about the acceptability of same-sex relationships ($M = 6.10, SD = 1.38$) and only fourteen participants provided negative evaluations. As predicted, judgments about homosexuality became more positive with age for both the evaluations of same-sex relationships [$F (4, 271) = 12.40, p < .001, \eta^2 = 0.16$] and marriage [$F (4, 271) = 24.27, p < .001, \eta^2 = 0.27$]. Post hoc analyses revealed that 5-year-olds and 7-8-year-olds had less positive evaluations of same-sex relationships than the adults, and the 5-year-olds had less positive evaluations than the 10-11-year-olds and 13-14-year-olds (all $p_s < .004$). For the evaluations of same-sex marriage, post hoc analyses revealed that the adults held more positive evaluations than the three youngest age groups (i.e., 5-, 7-8-, and 10-11-year-olds), and the 5-year-olds and 7-8-year-olds had more negative evaluations than both the 10-11-year-olds and 13-14-year-olds (all $p_s < .043$). Regarding participants’ evaluations of the legal regulation of same-sex relationships, an age x sex interaction emerged, $F (4, 271) = 4.50, p = .002, \eta^2 = .06$. Post hoc comparisons revealed a single significant gender difference for the adult age group, with women evaluating a law supporting same-sex relationships more positively ($M = 6.15, SD = 1.3$) than men ($M = 5.03, SD = 2.4$) ($p < .001$). Consistent with the developmental difference for general judgments about homosexuality, when asked about the current Canadian law allowing same-sex marriage, older participants evaluated the law more positively than younger participants, $F (3, 241) = 8.02, p < .001, \eta^2 = .09$. The 7-8-year-olds had less positive evaluations than the 13-14-year-olds and adults ($p_s < .03$). There was also a main effect of sex, $F$
(3, 241) = 4.04, \( p = .046, \eta^2 = .02 \) with females (\( M = 6.47, SD = 0.9 \)) evaluating the law more positively than males (\( M = 6.03, SD = 1.4 \)). When examining evaluations of the previous Canadian law in which same-sex couples were not legally allowed to marry, no age differences emerged, \( F (3, 240) = 1.74, p = .16, \eta^2 = .02 \). Participants of all ages evaluated this law negatively (\( M = 2.00, SD = 1.4 \)).

For evaluations of a law in another country prohibiting same-sex marriage, a significant main effect of age [\( F (4, 271) = 6.94, p < .001, \eta^2 = 0.09 \)] was found. The 5-year-olds were more accepting of the law than each of the older age groups (all \( ps < .014 \)). The four oldest age groups were asked a follow-up question about whether the law would be a good law or a bad law, and no age differences emerged, \( F (3, 234) = 2.14, p = .09, \eta^2 = .03 \). All participants believed the law to be a bad law (\( M = 2.12, SD = 1.4 \)). The four oldest age groups were also asked about the acceptability of a law prohibiting same-sex relationships in a country where most people belonged to a religion that did not allow these relationships; no age differences emerged, \( F (3, 239) = 0.92, p = .09, \eta^2 = .002 \). Indeed, all participants evaluated this law negatively (\( M = 2.45, SD = 1.6 \)). When asked whether this would be a good law or a bad law, the pattern was the same [\( F (3, 231) = 0.38, p = .77, \eta^2 = .005 \)] with participants of all ages evaluating the law negatively (\( M = 2.17, SD = 1.5 \)). When evaluating the acceptability of breaking the law in a country that prohibited same-sex relationships, a significant effect of age was found [\( F (4, 271) = 38.76, p < .001, \eta^2 = .37 \)] with younger participants being more critical of a law violation than the older participants. Specifically, the 5-year-olds and 7-8-year-olds evaluated the law violation more negatively than the three oldest age groups, and the 10-11- and 13-14-year-olds were more critical of breaking the law than the adults (all \( ps < .027 \)).
Participants were asked about the commonality of same-sex relationships to determine if this influenced their judgments. If participants believed that homosexuality was acceptable, they were asked if same-sex relationships would still be okay even if they were very uncommon; if they believed homosexuality was unacceptable, they were asked if same-sex relationships would still be unacceptable even if they were very common. Because only fourteen participants believed that same-sex relationships were unacceptable (across all age groups), statistical analyses were not possible due to small cell sizes. Thus, results will only be presented only for those who had positive initial evaluations.

The results indicated that older participants were more accepting of homosexuality if it was uncommon in Canada than younger participants, $F(4, 271) = 7.34, p < .001, \eta^2 = .11$. Post hoc comparisons comparing age groups revealed that the 5- and 7-8-year-olds had less positive evaluations of homosexuality when uncommon than the adults ($ps < .003$). When examining the acceptability of same-sex relationships if they were uncommon in a different country, similar results emerged with younger participants being less accepting than the older participants, $F(3, 224) = 5.89, p = .001, \eta^2 = .07$. Post hoc comparisons revealed that the 7-8-year-olds had less positive evaluations than the adults ($p = .003$). A second analysis directly compared responses within each age group to the commonality question (i.e., whether homosexuality would be ok if uncommon) with participants’ responses to their initial evaluations of the act, in order to determine whether commonality affected their judgments of homosexuality. It was found that the commonality of same-sex relationships did not predict the evaluations of the 5-year-olds and 7-8-year-olds, but the three oldest age groups’ evaluations were less positive when same-sex relationships were uncommon in another country than in their initial evaluations ($p = .019$).
In order to determine whether religion affected participants’ judgments, two one-way ANOVAs were conducted with judgments about the acceptability of same-sex relationships and same-sex marriage entered as the dependent variables and religion and religious activity entered as the independent variables. Religion significantly predicted evaluations of the acceptability of same-sex marriage, $F(6, 268) = 2.92, p = .009$. Christians ($M = 5.75, SD = 1.6$) had lower evaluations than participants who identified as having no religion ($M = 6.55; SD = 0.7$) ($p = .014$). Participants’ religious activity, or degree of participation, was not associated with participants’ evaluations.

4.2 Tolerance

To assess participants’ attitudes about tolerance, they were given hypothetical scenarios in which parents had a child who was gay or lesbian. The parents felt strongly that homosexuality was unacceptable. Participants were asked about the acceptability of the parents holding this belief, making a speech about this belief, and acting on their belief by restricting their child’s choice of prom date. All participants were asked these three questions. Follow-up questions were asked to the oldest four age groups; specifically, they were asked if people should protest the parents’ speech and whether a law should prohibit the parents from making a speech and from restricting the child’s activities. Means and standard deviations are displayed in Table 4.

To compare participants’ reasoning in the three different realms of tolerance, a 3 (realm: belief, speech, act) x 5 (age) x 2 (gender) repeated measures ANOVA was conducted with realm as a repeated measure. A main effect of realm, $F (4, 267) = 3.79, p = .024, \eta_p^2 = .02$, and a realm x age interaction was found, $F (4, 267) = 7.11, p < .001, \eta_p^2 = .1$. We expected that, with age, participants would increasingly differentiate the realms of tolerance. However, somewhat
contrary to our hypotheses, few distinctions were made by participants, and some distinctions were surprising. The 7-8- and 10-11-year-olds believed it was more acceptable for hypothetical parents to act on their negative belief than to make a speech about this belief. The 10-11-year-olds made further distinctions, believing it was more acceptable to hold a belief than to either express it or to act on it ($ps < .049$). Contrary to our hypotheses, the post hoc results revealed that the 5- and 13-14-year-olds did not differentiate between holding a belief, making a speech about the belief, and acting on the belief. The adults believed it was more acceptable to hold a belief and make a speech than to act on the belief by restricting the child’s prom date (all $ps < .001$).

Examining age differences within each realm revealed that the adults believed it was more acceptable to hold a belief than the 13-14-year-olds ($p = .001$). The 5-year-olds and the adults believed that making a speech in public about why same-sex relationships are wrong was more acceptable than the 10-11-year-olds, and the adults believed that such a speech was more acceptable than the 7-8- and 13-14-year-olds (all $ps < .007$). When examining the acceptability of the parents restricting the child’s choice of prom date, the 5-year-olds were more accepting of parental restriction than all of the older age groups (all $ps < .009$).

Regarding the follow-up questions administered to the oldest four age groups, it was found that older participants were opposed to a law restricting the parents from making a speech, $F (3, 239) = 28.78, p < .001, \eta^2 = .27$. Specifically, the adults held more negative evaluations than the 7-8-, 10-11-, and 13-14-year-olds (all $ps < .001$). An age x sex interaction was also found, $F (3, 239) = 2.76, p = .043, \eta^2 = .03$, with the 10-11-year-old females more critical of this law ($M = 3.87, SD = 1.0$) than the 10-11-year-old males ($M = 5.56, SD = 1.5$). When evaluating the acceptability of protesting the parents’ speech, an age x sex interaction was found $F (3, 239) = 3.57, p = .015, \eta^2 = .04$. The 10-11-year-old females were more critical of protesting ($M = 4.33, SD = 1.3$) than the 10-11-year-old males ($M = 5.37, SD = 1.3$). Finally, the adults were not okay
with a law prohibiting the parents from controlling the child’s choice of prom date, $F(3, 240) = 18.68, p < .001, \eta^2 = .19$. Specifically, the adults held more negative evaluations about this law than the 7-8-, 10-11, and 13-14-year-olds (all $ps < .002$).

### 4.3 Exclusion

The children and adolescents were presented with an additional hypothetical scenario to assess their opinions about exclusion. They were asked if it would be acceptable for a child to exclude another child from being his/her friend on the basis of his/her preferred sexual orientation. Follow-up questions were designed to probe the strength of their belief; for example, if they said it was okay for the child to exclude, they were asked if the child should listen to his/her friends who thought it was wrong to exclude, and if they should listen to his/her parents who thought it was wrong to exclude. The reverse probes were presented to children who believed it was not okay to exclude. Table 5 displays the means and standard deviations for these scenarios.

A significant age x sex effect emerged when evaluating the acceptability of exclusion, $F(3, 120) = 3.08, p = .03, \eta^2 = .07$; however, no post hoc comparisons between the age groups were significant (due to the error correction). It seems that overall, participants believed exclusion was wrong ($M = 2.55, SD = 1.7$). Only twenty-one participants initially stated that it was okay to exclude, rendering statistical analyses on these follow-up questions invalid for this group due to small cell sizes. The results for the follow-up questions will be presented for children and adolescents who answered that it was not okay to exclude.

No age differences emerged when asked about the acceptability of peer influence, $F(3, 94) = 1.6, p = .18, \eta^2 = .05$. Participants generally believed it was not okay to listen to peers when peers thought that it was okay to exclude ($M = 2.23, SD = 1.51$). For parental influence, no age
differences emerged $F (3, 95) = 0.18, p = .91, \eta^2 = .006$. Participants did not believe it was acceptable to listen to hypothetical parents when they thought it was okay to exclude ($M = 2.94, SD = 1.6$).

**4.4 Essentialism**

The 7-8-, 10-11, and 13-14-year-olds as well as the adults were probed about their beliefs about the origin of homosexuality. They were asked how likely it was that someone was in a same-sex relationship because of biological factors and social/environmental factors. They were also asked about the mutability of one’s sexual orientation and whether a child’s parents can influence his/her sexual orientation. All participants, including the 5-year-olds were asked at what age someone would know if he/she wanted to be in a same-sex or opposite-sex relationship, and all participants were administered the switched-at-birth task. The follow-up question to the switched-at-birth task (explained below) was not used for the 5-year-olds. See Table 6 for the means and standard deviations for responses to the essentialist questions.

Consistent with our predictions, the older participants made more attributions to biological factors than the younger participants, $F (3, 233) = 31.36, p < .001, \eta^2 = .28$. The adults were more likely to believe that homosexuality is biologically determined than the 7-8-, 10-11-, and 13-14-year-olds, and the 13-14-year-olds believed biological explanations were more likely than the 10-11-year-olds (all $p_s < .003$). Younger participants made more attributions to social/environmental factors, $F (3, 238) = 5.12, p = .002, \eta^2 = .06$. The 7-8-year-olds and 13-14-year-olds were more likely to believe that social/environmental factors influenced one’s sexual orientation than the adults (all $p_s < .025$).
No age differences emerged when evaluating the mutability of homosexuality, $F(3, 241) = 1.42, p = .23 \eta^2 = .02$. Participants seemed to be uncertain about whether someone who was gay or lesbian could change his/her mind and decide to be with someone of the opposite sex ($M = 4.52, SD = 1.9$). When asked if someone could change his/her sexual orientation because of parental influence, age differences did emerge, $F(3, 241) = 16.49, p < .001, \eta^2 = .17$. The 7-8- and 10-11-year-olds were more likely to believe it was possible to change one’s choice of romantic partner based on parental influence than the adults. The 7-8-year-olds were also more likely to believe this was possible than the 13-14-year-olds (all $ps < .002$). When asked at what age someone is likely to know whether he/she wants to be in a same-sex or opposite-sex relationship, age differences emerged [F(4, 233) = 3.97, $p = .004, \eta^2 = .06$] with the 7-8-year-olds believing in a later onset ($M = 16.48, SD = 8.5$) than the adults ($M = 11.89, SD = 5.5$).

The switched-at-birth task was administered to all participants to assess the impact of social/environmental influences on sexual orientation. There were two parts to the task: first, participants were asked who a target character would choose to be with if he/she was raised with an uncle/aunt in a country where same-sex relationships were very common; second, the four oldest age groups were asked who the target character would choose to be with if he/she was sent home as a teenager, where same-sex relationships are not common. Participants had three options: they could choose a same-sex partner, opposite-sex partner, or they could choose neither, indicating their uncertainty. If participants selected a same-sex partner in the first scenario, it would suggest they believe that environmental norms/factors influence sexual orientation. If they chose an opposite-sex partner, it would suggest participants do not believe that cultural norms affect sexual orientation (participants’ reasoning was explored in the justification section, presented later). The same reasoning applies for the second scenario, but this also allowed us to gauge whether participants believed that sexual orientation was fixed.
early in life (i.e., would participants think the target character would change his/her sexual orientation as a teenager when the norms changed?). To determine how the patterns varied by age, a multinomial logistic regression was run since both the predictor (age) and outcome variables (choice of partner) are categorical.

Table 7 outlines the frequency of responses by age and condition. For the first part of the question, age was found to be a significant predictor of partner choice, $\chi^2(8, N = 286) = 62.80, p < .001$. Results revealed that with age, participants are more likely to indicate that they are uncertain than to venture a guess (all $ps < .04$). When using regression analyses, only within group differences are examined in the predictor variables; in order to determine if there were any between-group differences in age, we reversed the predictor and outcome variables such that partner choice predicted age. Converging with the above results, it was found that with age, participants were more likely to indicate that they cannot guess whom the target character would want to be with based on the scenarios. Further, the four youngest age groups were more likely to choose a same-sex partner over the adults, and the younger participants were more likely to choose an opposite-sex partner than the older participants (all $ps < .047$).

Age was also a significant predictor of partner choice in the second part of the question, $\chi^2(8, N = 249) = 13.42, p = .037$. With age, participants were more likely to indicate they were uncertain than to venture a guess (all $ps < .047$). Examining between-group differences, the 7-8- and 13-14-year-olds were more likely to select a same-sex partner than the adults, and the 7-8-year-olds were more likely to choose an opposite-sex partner than the adults. The adults were more likely to be uncertain than the 7-8 and 13-14-year-olds ($ps < .047$).
When examining whether participants’ responses changed from the first part of the question (another country) to the second part (home), the model was found to be significant, $\chi^2 (3, 249) = 11.12 \ p = .011$. The adults were less likely to change their response than the 10-11-year-olds ($p = .004$).

### 4.5 Impact of Essentialist Beliefs on Judgments

To determine whether essentialist beliefs predict judgments about the acceptability of same-sex relationships and marriage, a series of hierarchical linear regressions were run with age entered as the first step in the analysis. It was expected that biological attributions would be related to more positive evaluations and social/environmental attributions to more negative evaluations. The hypotheses were partially confirmed. Biological attributions predicted positive evaluations of same-sex relationships ($\beta = .20, p = .006$) and same-sex marriage ($\beta = .20, p = .002$) with the models accounting for a significant proportion of the variance [same-sex relationship evaluations: $F (2, 245) = 13.39, p < .001, R^2 = .10$; same-sex marriage evaluations: $F (2, 244) = 38.85, p < .001, R^2 = .24$]. Social/environmental attributions did not however, predict judgments.

To further examine the role of essentialist attributions on judgments, linear regressions were run within each age group. For adults, both biological and environmental attributions influenced their judgments. Biological attributions were related to positive evaluations of same-sex relationships ($\beta = .30, p < .001$), with the overall model accounting for a significant proportion of the variance [$R^2 = .09, F (1, 151) = 14.66, p < .001$] and same-sex marriage ($\beta = .34, p < .001$), with the overall model accounting for a significant proportion of the variance [$R^2 = .12, F (1, 151) = 20.01, p < .001$]. Social/environmental attributions were related to negative attitudes about same-sex relationships ($\beta = -.29, p < .001$) and marriage ($\beta = -.20, p = .016$), with the
models accounting for a significant proportion of the variance \( R^2 = .09, F (1, 151) = 13.87, p < .001; R^2 = .04, F (1, 151) = 5.95, p = .016 \). Regarding children and adolescents, biological attributions predicted judgments for the 10-11- and 13-14-year-olds. For the 13-14-year-olds, believing that homosexuality is determined, in part, by biology related to positive judgments about same-sex relationships \( (\beta = .44, p = .012) \) and marriage \( (\beta = .46, p = .008) \), with the models accounting for a significant proportion of the variance \( R^2 = .19, F (1, 30) = 7.14, p = .012; R^2 = .21, F (1, 30) = 8.18, p = .008 \). Interestingly, for the 10-11-year-olds, environmental attributions were actually related to positive attitudes about same-sex relationships \( (\beta = .39, p = .028) \) with the model accounting for a significant proportion of the variance, \( R^2 = .15, F (1, 30) = 5.30, p = .028 \).

4.6 Parental Transmission of Attitudes

To explore the impact that parents’ evaluations have on their children’s evaluations, a series of linear regressions was run with the child’s evaluations entered as the outcome variable and the parents’ evaluations as the predictor. It was hypothesized that parents’ attitudes would have little to no bearing on their children’s beliefs, and this was largely the case with the exception of two questions, common practice in Canada and the acceptability of a law being based on a religion that prohibited same-sex relationships. Contrary to our predictions, mother’s positive evaluations of the acceptability of same-sex relationships if they were uncommon in Canada were positively related to their children’s evaluations \( (\beta = .31, p = .001) \) with the overall model predicting a significant (yet small) portion of the variance \( R^2 = .09, F (1, 114) = 11.79, p = .001 \). Mothers’ evaluations positively predicted children’s evaluations of the acceptability of a law prohibiting same-sex relationships in a country where most people belong to a religion that believes homosexuality is not acceptable \( (\beta = .34, p = .028) \) with the overall model predicting a
significant portion of the variance \([R^2 = .11, F (1, 89) = 11.40, p = .001]\). Mother’s critical evaluations of this law predicted children’s critical evaluation of the law. Fathers’ evaluations were not related to children’s attitudes. To determine if the relationship between parents’ attitudes and children’s attitudes is mediated by the child’s age, a mediation analysis was conducted and age was not found to affect this relationship \([R^2 = .003, F (1, 81) = .29, p = .59]\).

4.7 Justification Results

Table 8 presents the distribution (i.e., percentage) of justifications used by each age group (see also Figures 5-8). For analyses, justifications were subjected to an arcsin transformation to correct for non-normality (Winer, Brown, & Michels, 1991). The arcsin transformation is used to normalize proportional data by taking the arcsine of the square root of the data (McDonald, 2009). Only justification categories comprising 10% or more of total responses were analyzed. These were: personal choice, psychological, moral, social-conventional, and natural kind. The natural kind category comprised only 7% of total responses, but was included in the analysis due to its theoretical relevance for this study. In order to streamline the justification analysis, it was decided that a mean score would be calculated for each justification category in each section of the interview (e.g., act and legal evaluations, tolerance, exclusion, and essentialism). Multivariate Analyses of Variance (MANOVAs) were conducted for each section of the interview with age and sex as independent variables and the justification categories (e.g., personal choice, psychological, moral, social-conventional, and natural kind) entered as the dependent variables. For all significant interactions, follow-up analyses of simple effects comprised pair-wise comparisons using the Bonferroni correction for multiple comparisons.
While aggregating the justification responses across each section precluded a more detailed exploration of the reasoning used for each question, it did allow us to examine the general patterns emerging across the four main sections of the interview while reducing the chance of a Type 1 error.

For the first section, examining questions pertaining to act and legal evaluations, a significant effect of age \([F (4, 276) = 6.12, p < .001, \eta^2 = .10]\) and sex \([F (1, 276) = 5.13, p < .001, \eta^2 = .09]\) was found. Looking at each justification category in turn, revealed age differences in the use of the personal choice \([F (4, 276) = 11.17, p < .001, \eta^2 = .14]\), social conventional \([F (4, 276) = 3.78, p = .005, \eta^2 = .05]\), and moral \([F (4, 276) = 13.27, p < .001, \eta^2 = .16]\) justification categories. Sex differences emerged for personal choice \([F (1, 276) = 8.73, p = .003, \eta^2 = .03]\) and psychological \([F (1, 276) = 15.75, p < .001, \eta^2 = .05]\) categories. Post hoc results indicated that the 5-year-olds used personal choice justifications less than the four older age groups, and the 10-11-year-olds used these justifications more than the adults \((ps < .004)\). For social conventional justifications, the 5-year-olds used this reasoning more than the three oldest age groups \((ps < .016)\). For moral justifications, the 5-year-olds used this reasoning less often than the three oldest age groups, and the 7-8- and 10-11-year-olds used fewer moral justifications than the adults \((all ps < .044)\). Finally, men were less likely \((M = .29)\) to use psychological attributions than women \((M = 0.45) (p = .005)\). Post-hoc comparisons for the sex differences in the use of personal choice justifications yielded no significant results.

For the second section, children and adolescents’ judgments and beliefs about exclusion, a main effect of age \([F (3, 120) = 3.44, p < .001, \eta^2 = .13]\) was found. Age differences were evident in the use of personal choice \([F (3, 120) = 4.73, p = .004, \eta^2 = .11]\) and psychological \([F (3, 120) = 2.69, p = .049, \eta^2 = .06]\) justifications. The 5-year-olds used fewer references to
personal choice than the 10-11- and 13-14-year-olds, and the 5-year-olds used fewer psychological justifications than the 7-8-year-olds (all \( ps < .015 \)).

For the third section on tolerance, a main effect of age was found \([F (4, 276) = 5.17, p < .001, \eta^2 = .09]\), with differences evident in the use of personal choice \([F (4, 276) = 19.15, p < .001, \eta^2 = .22]\), and social-conventional \([F (4, 276) = 5.73, p < .001, \eta^2 = .08]\) reasoning. Post hoc results reveal that the 5- and 7-8-year-olds used fewer references to personal choice than the three oldest age groups \( (ps < .016) \). Social-conventional reasoning was used more often by the three youngest age groups than the adults \( (all \ ps < .017) \).

In the final section examining essentialist beliefs, a main effect of age was observed \([F (4, 276) = 7.78, p < .001, \eta^2 = .12]\). Age differences were evident in the use of personal choice, \([F (4, 276) = 5.30, p < .001, \eta^2 = .07]\), psychological, \([F (4, 276) = 7.89, p < .001, \eta^2 = .10]\), social-conventional, \([F (4, 276) = 6.75, p < .001, \eta^2 = .09]\), and natural kind \([F (4, 276) = 23.07, p < .001, \eta^2 = .25]\) justifications. Post hoc results indicated that the 7-8-year-olds used personal choice reasoning more often than the 5-year-olds, 13-14-year-olds, and adults \( (ps < .033) \). The 5-year-olds used fewer psychological justifications than the 10-11, 13-14-year-olds, and adults, and the 7-8-year-olds used fewer psychological justifications than the adults \( (ps < .013) \). The four youngest age groups used social-conventional reasoning more than the adults \( (ps < .018) \). Finally, the adults and the 13-14-year-olds used natural kind justifications more than the three youngest age groups \( (ps < .021) \).
4.8 Summary of Results

4.8.1 Acceptability and Legal Regulation of Homosexuality

Judgments about homosexuality became more positive with age for evaluations of the acceptability of same-sex relationships and marriage. Older participants evaluated the current Canadian law allowing same-sex marriage more favourably than younger participants, but no age differences emerged for the past Canadian law prohibiting same-sex marriage. The 5-year-olds were more accepting of a law in another country prohibiting same-sex marriage than the older participants. No age differences emerged for participants’ evaluations of a law in a country where most people belonged to a religion that prohibited same-sex relationships; all age groups evaluated this law negatively. Younger participants were more critical of breaking a law in a country that prohibited same-sex relationships compared with the older participants. In terms of commonality, older participants were more accepting of same-sex relationships when they were deemed to be uncommon, both in Canada and in another country, compared with younger participants. Finally, it was found that participants who identified as Christian had lower evaluations of same-sex marriage, but not same-sex relationships.

4.8.2 Tolerance and Exclusion

Few distinctions emerged in the tolerance scenarios. Children in middle childhood (i.e., 7-8- and 10-11-year-olds) believed it was more acceptable for hypothetical parents to act on their negative belief about same-sex relationships than to make a speech about this belief. The 10-11-year-olds also believed it was more acceptable to hold a belief than to make a speech about it or act on it. The adults believed it was more acceptable to hold a belief and make a speech than to act on the belief. The adults were more tolerant of someone holding a negative belief about
homosexuality than the younger participants, and both the adults and the 5-year-olds were more tolerant of someone holding a negative belief about homosexuality and expressing this belief than the other participants. No age differences emerged for the exclusion scenarios. All participants believed exclusion was unacceptable.

4.8.3 Essentialism

The older participants made more attributions to biological factors to explain why someone would want to be in a same-sex relationship than the younger participants; the younger participants made more attributions to social/environmental factors. No age differences emerged when participants were asked about the mutability of sexual orientation, but younger participants thought it was possible that someone could change his/her sexual orientation because of parental influence. For the switched-at-birth task it was found that with age, participants were more likely to indicate that they cannot guess whom the target character would want to be with based on the scenarios. Overall, biological attributions related to positive evaluations of the acceptability of same-sex relationships and marriage, while social/environmental attributions were not related to attitudes. When examined by each age group it was found that for adults, biological attributions related to positive evaluations, while environmental attributions related to negative evaluations. For the 13-14-year-olds, biological attributions related to positive evaluations, and for the 10-11-year-olds, social/environmental attributions related to positive evaluations.

4.8.4 Parental Transmission of Attitudes

Mothers’ positive evaluations of the acceptability of same-sex relationships if they were uncommon in Canada were positively related to their children’s evaluations. Mothers’ critical evaluations of the acceptability of a law prohibiting same-sex relationships in a country where
most people belong to a religion that believes homosexuality is not acceptable predicted their children’s negative evaluations of this law.

4.8.5 Justification Analyses

Finally, to summarize the general patterns emerging from the justification analyses, personal choice, psychological, moral, and natural kind justifications increased with age, and social-conventional reasoning declined with age.
Chapter 4
Discussion

5 Discussion

5.1 Domain Conceptualization

This study was designed to explore the development of children’s and adolescents’ judgments and beliefs about homosexuality. Children (5-7-8-, and 10-11-year-olds), adolescents (13-14-year-olds) and their parents were interviewed regarding their beliefs about the acceptability and legal regulation of homosexuality, their beliefs about tolerance and exclusion, and their beliefs about the origin of homosexuality. In general, judgments about same-sex relationships became more positive with age; older participants evaluated same-sex relationships and marriage more favourably than younger participants, and they also evaluated the current Canadian law allowing same-sex marriage more positively than younger participants. The younger participants believed a law in another country prohibiting same-sex marriage was more acceptable than the older participants, and they were more critical about breaking a law in a country that did not allow same-sex relationships. No age differences emerged for evaluations of the past Canadian law, or for evaluations of a religiously-based law prohibiting same-sex relationships. Participants of all ages viewed these laws as unacceptable. Older participants were more concerned about adhering to norms than younger participants, as their evaluations were less positive when homosexuality was uncommon (compared with their initial evaluations). In general, same-sex relationships were viewed as a personal issue at all ages, with social-conventional reasoning decreasing with age, and moral reasoning (i.e., human rights issues) increasing with age.
The results of this study fit within the broader framework of domain theory and the pattern of results observed in the literature. For straightforward issues about the acceptability of homosexuality or exclusion, even young children recognize this as a personal choice issue that should not be governed by authority, and they view exclusion as wrong (e.g., Horn, 2006, 2007; Killen et al., 2002). Young children can critically examine laws, and participants of all ages recognized that a law prohibiting same-sex marriage in Canada and in another country would be unacceptable; however, age differences did emerge with older participants being more critical of these laws than the younger participants. Further, young children did not think the law should be violated, which is consistent with past literature in which young children are more deferential to authority and rules, and with age, become more critical of unjust laws and view violating such laws as acceptable (Helwig, 1995a; Wainryb & Turiel, 1998). Even though adolescents and adults view homosexuality as under personal jurisdiction and cite both moral and personal choice reasons, they are affected by social-conventional factors such as norms, viewing homosexuality as more acceptable if it is common. Homosexuality is clearly a multifaceted issue drawing on different forms of reasoning depending on the complexity of the question (e.g., straightforward issues of acceptability or exclusion versus abiding by unjust laws versus social-conventional considerations such as common practice) and the age of the participants.

Past work has demonstrated that adolescents increasingly view homosexuality as a personal choice and view it as unfair to restrict the rights of gay and lesbian individuals (Horn, 2006; Horn et al., 2008), whereas younger adolescents tend to focus on the conventional aspects of gender roles and are less comfortable with gender-atypical behaviour (Horn, 2006, 2007). Further, early adolescents tend to be more tolerant of teasing and exclusion (Horn 2006, 2008; Killen et al., 2002). Overall, the young adolescents in this sample were highly positive in their evaluations and were not tolerant of exclusionary practices. In fact, no age differences emerged
in the exclusion scenarios, highlighting the fact that participants of all ages viewed it as unacceptable to exclude someone based on his/her sexual orientation. However, this does not necessarily contradict the prior research. As previously stated, this study did not assess participants’ comfort with gender norms or feelings about interacting with a gay/lesbian peer, but rather their general evaluations of the acceptability of homosexuality. In contrast, Horn (2006) assessed participants’ comfort interacting with a gay or lesbian peer, and Horn (2007) presented participants with hypothetical people who were heterosexual or homosexual, and gender conforming or not gender conforming. The results suggested that younger adolescents were particularly bothered by gender nonconformity. In our study gender conformity (e.g., clothing, activity preference, mannerisms, etc.) was not assessed. The current study drew on more removed evaluations of the acceptability of homosexuality, and perhaps by including an element of personal comfort, or beliefs about gender conformity, this would have yielded different results. For this reason, it makes sense that participants’ evaluations were positive; age differences only emerged in prior studies when examining the social-conventional aspects of the topic, not for evaluations of the acceptability of homosexuality (Heinze & Horn, 2009; Horn, 2006).

This is not to say that social-conventional reasoning is not taken into consideration; indeed, younger participants used social-conventional reasoning more often than older participants, and the three oldest age groups evaluated same-sex relationships less positively when they were uncommon in another country, suggesting that normative heterosexual behaviour is still viewed as more acceptable. Further, the younger participants were less critical of a law in another country prohibiting same-sex marriage and did not believe it was acceptable to break a law in a country where same-sex relationships were not allowed. This suggests that these participants believe, to some extent, that it is acceptable for each country to have its own rules and that it is
important for citizens to obey these rules. While not a prominent finding, this does illustrate that conventional reasoning is also used when evaluating homosexuality. Younger children view it in terms of simple obedience and punishment whereas adolescents and adults consider common practice and cultural norms. This finding is consistent with previous work showing that social-conventional norms become increasingly important for adolescents (Killen et al., 2002; Killen & Stangor, 2001).

The justifications provided by some of the young children parallel other work suggesting that they are less accepting of gender-atypical behaviour than older children. Recall that Stoddart and Turiel (1985) found that 5-year-olds were less accepting of cross-gender behaviour because it threatened the maintenance of one’s physical gender identity, and Conry-Murphy and Turiel (2012) found that the 4-year-olds in their study were not as flexible in their reasoning about cross-gender behaviour. Conry-Murphy and Turiel suggest that it is possible that children struggled to comprehend that the target child would want to behave in a counter-stereotypical way. Despite the fact that many aspects of sexual relationships are not comprehensible by children, they did see homosexuality in terms of a personal choice and this was reflected in their reasoning, along with social-conventional considerations. However, the justifications provided by some of the 5-year-olds in the current study seem to capture this uncertainty around cross-gender behaviour. Many of the 5-year-olds tended to use either “good/bad” or “romancing” justifications (Piaget, 1929), which were not captured in the justification analyses because they were used less than ten percent of the time. However, this does shed light on the fact that some young children may have had a great deal of confusion or wariness about same-sex relationships as they sometimes had to “invent” reasons why they might occur. For example, one 5-year-old girl explained why same-sex relationships were okay:
“If she wants to go out with a girl, then all of the boys will have to go to sleep or are too small to go out still and need to go to sleep before the girls, and the girls are bigger than the boys so the girl has to go out with the girl.”

This reasoning illustrates the struggle that some of these children experience in comprehending homosexuality. Drawing on Piaget’s notion of assimilation (1932), it seems that young children may have a heterosexual schema about relationships and when they are presented with the concept of same-sex relationships, it can threaten their original schema. Rather than changing their belief system to account for this new information (i.e., accommodation), sometimes children will assimilate new information without compromising the original schema (and distort the external evidence). In the example above, the 5-year-old girl was able to retain her belief that boys date girls by creating a scenario in which the boys are sleeping or are too small to go out with the girls. Similarly, recent research by Conry-Murray (2013) reveals the struggle that young children face when presented with unusual beliefs about social rules. Children in that study were presented with scenarios in which the protagonist believed it was okay to break a moral or conventional rule, and young children (under 5-years-old), regardless of their ability to pass a false-belief task, struggled to accept these counterfactual beliefs. This study and some of our findings highlight the cognitive rigidity that is often seen in young children who are presented with unusual or counter-normative information.

5.2 Tolerance

Contrary to our hypotheses, not all participants differentiated between the different dimensions of tolerance and these distinctions did not follow a clear age-related pattern as in prior research (Wainryb et al., 1998; 2001). The 7-8- and 10-11-year-olds believed it was more acceptable for hypothetical parents to act on their negative belief about homosexuality by restricting their child’s choice of prom date than to make a speech about this belief. The 10-11-year-olds made further distinctions, indicating it was more acceptable to hold a belief than to
make a speech about it or act on it. The adults also made distinctions, believing it was more acceptable to hold a belief and make a speech about it, than to act on the negative belief. Further, the adults believed it was more acceptable to hold a belief and make a speech about that belief than the younger participants, and they were more critical of a law restricting the parents from making a speech and influencing their child. It seems then, that the adults tended to be more tolerant of anti-gay speech than younger participants, but surprisingly, did not differentiate between holding a negative belief and making a speech about this belief. The 5-year-olds were actually quite tolerant of the parental behaviour. Along with the adults, they viewed it as more acceptable for the parents to make a speech in public than the older children and adolescents. While their evaluations were similar, the justifications reveal that the 5-year-olds and adults reasoned very differently about this scenario. The 5-year-olds used more social-conventional and good/bad reasoning than the adults, whereas the adults referenced personal rights and freedoms. The 5-year-olds were also more accepting of the parents restricting their child’s choice of prom date than the older participants. The results suggest that the young children are more deferential to authority than the older participants. No age differences emerged for the acceptability of exclusion or peer influence to exclude, consistent with prior work (Killen et al., 2002; Killen & Stangor, 2001).

It is surprising that the results differed from those in Wainryb et al.’s (1998) study. Wainryb et al. found clear differentiation between realms, as participants were more tolerant of holding a belief than making a speech about this belief, and were more tolerant of making a speech than of acting on the belief. In contrast, in our study these distinctions were not as apparent; only the 10-11-year-olds and adults made clear differentiations between realms. Looking at the means (see Table 4 and Figure 2), it is apparent that participants had negative evaluations for most of the tolerance questions, suggesting that they were generally highly critical of anti-gay beliefs,
speech, and acts. In contrast to our study, which utilized a continuous scale from 1-7 for evaluations, Wainryb et al. coded the responses into three categories: acceptable, unacceptable, or mixed. A direct comparison of the means is therefore not possible, but perhaps the differences between the current study and Wainryb et al.’s could lie in the nature of the topic and the way in which children conceptualize the role of parental authority.

Wainryb et al.’s moral scenarios addressed injustice (e.g., a father who lets his sons play outside and visit friends, but not his daughters) and psychological harm (e.g., a teacher who calls her students names when they get answers incorrect). These issues are straightforward moral issues; the vast majority of people acknowledge these as immoral. Same-sex issues however, are currently quite controversial and have recently received increased political attention. Perhaps the participants in this study view anti-gay beliefs and speech as particularly threatening (in a way that straightforward moral issues are not) given this political climate. They may, therefore, be more sensitive to the risks and possible implications of anti-gay beliefs and speech. This may also explain why the 7-8- and 10-11-year-olds were more critical of the parents making an anti-gay speech than acting on the belief by restricting their child’s choice of prom date. In terms of direct harm, only the child is harmed by the parents’ actions, but the speech could influence and affect a large number of people. It is possible these children were concerned about this, although future research is needed on children’s perceptions of the likely sequelae of anti-gay expressions and attitudes to examine this possibility.

In addition, children may reason quite differently about parental roles and obligations than older children and adolescents and this could explain why the children in middle childhood were less critical of acting on a negative belief than in previous research. While children view it as wrong for the hypothetical parents to restrict their child’s choice of prom date, they may not have
evaluated this as critically as the older participants given their understanding of the personal domain. Nucci (1996) discusses the fact that children up until ten years of age seem to believe that parents and children jointly have control over the personal domain. In other words, young children deem it appropriate for parents to assert control over the personal aspects of children’s lives, whereas older children and adolescents have a more advanced understanding of the personal domain and believe it to be morally wrong for authority figures to dictate control over the personal domain. While Wainryb et al. (1998) also included scenarios involving parents, the issue very clearly fell into the moral domain, as a father who lets his sons play outside and visit friends but not his daughters, obviously reflects a moral issue pertaining to injustice and inequality. Perhaps if we had included a measure more abstractly relating to tolerance about acting on an anti-gay belief, the results would have been more consistent with past work.

In general, the results support the notion that children are not more prejudiced than adolescents and adults (Killen, 2007). While some age differences emerged in the overall acceptability and legal regulation of same-sex relationships, many scenarios revealed no age differences (e.g., past Canadian law, religiously-based law in another country, and the acceptability of exclusion). Further, when age differences did emerge, it was due to variation in degree of ratings within responses of the same general valence, rather than younger participants believing that same-sex relationships were wrong or that it was acceptable to legally restrict the rights of gay and lesbian individuals (see Table 3 and Figure 1). However, with that said, we can also draw some parallels with cognitive-developmental theories and other research findings. In general, the younger participants were more deferential to authority than the older participants; the 5- and 7-8-year-olds believed it was not okay to break a law in another country, and the 5-year-olds were less critical of a law prohibiting same-sex marriage in another country and more tolerant of the parents’ behaviour in the tolerance tasks. These findings are reminiscent of
Piaget’s (1932) conception of heteronomous morality found in young children. According to Piaget, children in the heteronomous period do not believe that social rules are flexible and believe that authority figures must be obeyed. While the young children in our study demonstrate greater flexibility than implied in Piaget’s theory, in that they initially evaluate laws believed to be unjust as wrong and thereby show a critical orientation to social rules, the 5-year-olds in particular are more likely to respect laws and parental authority than older participants and to advocate obedience. This is consistent with prior work by Helwig (1998) showing that young children are more likely to advocate obedience to unjust laws about restrictions on freedom of speech. Additionally, the younger children were not as strongly positive about homosexuality to begin with, and this might have led them to be more tolerant of negative beliefs and behaviour than adults.

5.3 Essentialist Beliefs

Turning to essentialist beliefs, it was predicted that biological attributions would become increasingly common with age and would be associated with positive evaluations. Indeed, the older participants made more attributions to biological factors than the younger participants, and the younger participants did not differentiate between biological or social/environmental attributions. The justification results generally supported participants’ evaluations. Looking at the developmental differences, the 7-8-year-olds used personal choice justifications more than the other participants, children and adolescents referenced social-conventional factors (i.e., environmental aspects influencing homosexuality) more than the adults, and the adolescents and adults used natural kind reasoning more than the children. Overall, biological attributions predicted positive evaluations of homosexuality, but social/environmental attributions were not related to attitudes. When examined by each age group however, it was discovered that both
biological and environmental attributions influenced adults’ attitudes, with biological attributions relating to positive evaluations and social/environmental attributions relating to less positive evaluations. For the 13-14-year-olds, biological attributions were related to positive evaluations, and quite surprisingly, for 10-11-year-olds, environmental attributions were related to positive evaluations. It is interesting that the negative association between environmental attributions and attitudes is not present until adulthood. Examining the means for each age group (see Table 6 and Figure 4) suggests that the children and adolescents were relatively uncertain about the factors affecting sexual orientation, and they did not differentiate between biological or social/environmental attributions. The adults were the only age group to have a clearly differentiated theory about homosexuality, believing it to be biologically determined. It seems that the development of essentialist beliefs starts with undifferentiated theories about the origin of homosexuality in early childhood, which may persist until early adolescence; in later adolescence, biological attributions become more prominent (Horn, 2006), and this trend persists into adulthood.

While research supports the link between biological attributions and positive attitudes about same-sex relationships (Haslam et al., 2002; Herek & Capitiano, 1995; Whitley, 1990), in the current study children and adolescents had positive attitudes even though they had undifferentiated essentialist beliefs (and the 10-11-year-olds had a positive association between environmental attributions and evaluations). It is unclear why biological attributions become more prominent with age. It is possible that as adolescents and adults have a better understanding of sexuality, they come to realize the powerful role of biological factors like hormones in attraction. It is also possible that in recent years, adolescents and young adults are socialized to view homosexuality as biologically based, since this is linked with positive attitudes. However, essentializing homosexuality in this way is controversial as it poses a risk of medicalizing gay
and lesbian individuals (Haslam & Levy, 2006). People may believe it is okay to be gay “because they can’t help it” rather than truly being accepting and inclusive. Many of the participants in this study cited biological (i.e., natural kind) justifications to explain why homosexuality was okay. Future research should explore this further by creating scenarios that probe whether participants would believe homosexuality is less acceptable if it was a choice.

The switched-at-birth task was a useful scenario to present to children to assess their underlying theories and beliefs about same-sex relationships. Participants were presented with a story involving a little boy or girl who was raised in a country where same-sex relationships were very common; when the child becomes a teenager, he/she is sent home to live with his/her parents where same-sex relationships are very uncommon. Participants are asked in both conditions, whether the target character would want to be in a same-sex or opposite-sex relationship. While a third option, “uncertain” was not provided to participants, many opted to say that they were not sure given the lack of information about the character’s sexual orientation. The younger participants were more likely to venture a guess as to whom the target character would want to be with, while the older participants did not believe it was ascertainable from the question, suggesting that they believed sexual orientation is not determined by the environment or social norms. These results make sense in light of the other essentialist results indicating that younger participants are more likely to make social/environmental attributions than older participants and adults, and to believe that parents can influence someone’s sexual orientation.

While the children and adolescents in this sample had relatively undifferentiated theories about sexual orientation (see Table 6 and Figure 4), they do believe there is some merit to social/environmental theories. The results from the switched-at-birth task could be interpreted as supporting these results; indeed, the fact that younger participants are more likely to pick a partner for the target character may indicate their greater support for social/environmental impact
on sexual orientation. These results need to be interpreted with caution however, as there are a number of limitations to this assessment. First, younger participants, being more deferential to authority, may have felt as if they had to choose a response, while older participants realized it was acceptable to state that they were uncertain. Second, there could have been some confusion about the target character’s sexual orientation. Some participants may have assumed the character was gay or lesbian, given that the previous scenarios all involved a character who wanted to be in a same-sex relationship. For these reasons, the results of this task should be interpreted cautiously.

5.4 Parental Transmission

Finally, it was predicted that parents would have a minimal influence on children’s beliefs, but that fathers may influence children more than mothers. In general, parental attitudes had no role on their children. This suggests that for children’s and adolescents’ judgments and beliefs about homosexuality, differences are explained by developmental shifts or other factors rather than familial influences. Families recruited from the Child Study Centre’s database tend to be middle-class and highly educated, and Toronto itself tends to be an open-minded and fairly liberal city, especially regarding gay rights. For this reason, it is possible that if participants were recruited from a smaller town, with more traditional values about sexuality, parents might have a greater influence on their children’s beliefs. Given the link between religiosity and negative beliefs about homosexuality (Adamczyk and Pitt, 2009; Altemeyer, 2003; Herek, 1987) it is possible that in cultures and societies with more negative attitudes about homosexuality, children may be exposed to these negative beliefs earlier through religious instruction and conversations with family. While sixty-three percent of our participants identified as Christian, only ten percent considered themselves very active in their religious practice. Further, there is a great deal of
variation within the Christian faith and different denominations vary considerably in how conservative they are. It is likely that while the majority of participants identified as Christian in this sample, they did not belong to more conservative denominations.

Religious attitudes tend to be a strong predictor of judgments in countries with a stable political and economic climate (i.e., “self-expressive” countries) (Adamczyk & Pitt, 2009). Religious denomination affected attitudes in the current study, with Christians holding less positive evaluations about same-sex marriage than those who identified as having no religion. However, religion did not influence judgments about same-sex relationships. It could be that marriage is viewed differently by those who identify as Christian than by those who identity as having no religion; given that most religions are not accepting of homosexuality, this could explain their less positive evaluations. Religiosity (measured by how active participants were in their practice) had no bearing on attitudes. In a sample like this, with a selection bias wherein parents who agree to participate likely have more positive views than those who decline to participate, we still see evidence of the influence of religion on judgments, which speaks to its powerful role in shaping beliefs about same-sex relationships.

It is a common finding in the adult (Herek, 1988, 1994, 2000) and developmental literature (e.g., Baker & Fishbein, 1998; Hoover & Fishbein, 1999; Horn, 2007) that males are more prejudiced than females when it comes to attitudes about homosexuality; however, we did not find this to be the case. Herek (2000) argued that males could be more prejudiced when participating in a study on homosexuality because it may trigger their heterosexual orientation and the need to assert their masculinity by rejecting gay men. Since our study was exploratory and did not probe participants’ comfort/discomfort with traditional gender roles and sexual orientation, it could be that it was less “threatening” than the way it was presented in previous
studies. Alternatively, since the sample included participants who tended to hold highly positive attitudes, it could be that gender differences did not emerge because of this population; perhaps interviews with a more conservative sample would yield gender differences consistent with prior work. Indeed, examining judgments and beliefs in more conservative samples such as religious fundamentalists or those from traditional cultures would likely yield different results.

In Ontario, and in particular in Toronto, same-sex families and choices are explicitly validated in the school curriculum and in many daycares. The children included in this sample appear to initially conceptualize homosexuality as a personal choice issue and then try to coordinate it with other concepts such as social conventions, obedience to the law, and moral principles of equality and rights. While children in a “progressive” nation such as contemporary Canada may first encounter same-sex marriage as a personal choice issue and only later consider religious beliefs about marriage or traditional stereotypes, it may be very different in traditional societies or environments where homosexuality is explicitly taught as a sin. In these societies, it is quite possible that children may initially hold conventional negative views about homosexuality, and then with time, in certain environments, these views may become challenged by developing conceptions of rights and freedoms. Regardless of the specific developmental trends in more conservative environments, it is likely that the same type of complex coordination of different ideas and experiences occurs, as seen with the participants in this study, reflecting the multifaceted nature of homosexuality and the utility of approaching this topic through a social domain perspective.

5.5 Limitations

While the sample is limited in that participants self-selected to be part of the study, and therefore tended to hold positive attitudes about homosexuality, their beliefs are representative of
the majority of the Canadian population. In Canada, 80% of people believe that society should accept homosexuality (“The Global Divide on Homosexuality”, 2013), and therefore, this study includes participants whose beliefs reflect the dominant mentality of the country. Nonetheless, it would be ideal to also include families who hold negative attitudes about homosexuality to capture the full range of attitudes and beliefs in Canada. An additional limitation to this work is that participants were presented with gender-consistent scenarios/questions. It was not feasible to interview participants about their evaluations of both gay and lesbian individuals, but future work should examine if children’s judgments and reasoning vary depending on the gender of the target. Finally, this study was cross-sectional in nature and it is therefore important to bear this in mind when discussing the findings. While it is possible that the results could reflect cohort effects and not developmental trends, the findings of this study support past work looking at how children and adolescents reason about social domain issues (e.g., Helwig, 1995a; Killen et al., 2001; Smetana, 1981). Further, the 13-14-year-olds and parents are from vastly different cohorts and yet their evaluations and reasoning were quite similar. It is therefore not likely that cohort effects are occurring between the children and adolescents; however, a longitudinal study would be needed to completely rule out the possibility of cohort effects.

5.6 Conclusion

To conclude, this study is the first of its kind to examine beliefs about homosexuality in children as young as 5-years-old and to map the development of judgments and beliefs about same-sex relationships throughout childhood and adolescence. While age differences emerged, with older participants both making more positive evaluations of homosexuality than younger participants, and using more personal choice and moral reasoning than younger participants, a number of questions and scenarios revealed no age differences, and attitudes about
homosexuality generally were positive for participants in all age groups. Adults tended to believe that homosexuality was biologically determined, whereas younger participants did not differentiate between biological and social/environmental attributions. Overall, biological beliefs were related to positive attitudes. Finally, parents’ beliefs generally had little or no influence on their children’s beliefs, highlighting the fact that developmental factors seem to influence attitudes, rather than familial influences, in this study’s more liberal and educated sample. Future research needs to extend these investigations to more conservative populations and cultural contexts to establish the generality and cultural specificity of these findings.
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<tr>
<td>4c) Why wasn't it allowed?</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<td>4d) Why did the law change?</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>4e) Law in a Different Country</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Good law/Bad law</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>5a) Religion</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td><strong>Influencing Law</strong></td>
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<tr>
<td><strong>Good Law/Bad Law</strong></td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<td><strong>5b) Law Violation</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td><strong>6) Common Practice Canada</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td><strong>7) Common Practice Different Country</strong></td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Tolerance</strong></td>
<td>1) Belief</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>2) Speech</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td><strong>2a) Law Restricting Speech</strong></td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td><strong>2b) Protest Speech</strong></td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
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<td>Yes</td>
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<tr>
<td><strong>3a) Act Restriction</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td><strong>3b) Law Restricting Act</strong></td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td><strong>Exclusion</strong></td>
<td>1) Straightforward Exclusion</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>2) Peer Influence</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Essentialism</td>
<td>3) Parental Influence</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<td></td>
<td>1) Biological Attributions</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td></td>
<td>2) Social/Environmental Attributions</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>3) Age at first recognition</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<td>4) Mutability</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td></td>
<td>5) Mutability with Parental Influence</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>6a) Switched-at-birth task (other country)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td></td>
<td>6b) Switched-at-birth task (home)</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
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</table>
Table 2

Description and Example of Justification Categories

<table>
<thead>
<tr>
<th>Justification category</th>
<th>Subcategories</th>
<th>Description and Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good/Bad</td>
<td></td>
<td>Simple statements such as, “I don’t know,” “that’s okay” “It’s just bad”</td>
</tr>
<tr>
<td>Unelaborated</td>
<td></td>
<td>Statements that were not elaborated enough to be coded elsewhere, often in reference to changing norms (e.g., “we need to educate people” “that’s backwards thinking” “if more people are openly gay this can cause societal change”) or unelaborated references to homosexuality (e.g., “I think bisexuality exists”)</td>
</tr>
<tr>
<td>Romancing</td>
<td></td>
<td>Inventing stories or scenarios, especially if a child is embarrassed by the question (Piaget, 1920) (e.g., “If two women get married then they won’t have to wear a dress and the people would get confused” “they would get confused…they would think one of the girls was a man, because some people get married and wear something over their head…they can’t see”)</td>
</tr>
<tr>
<td>Personal Choice</td>
<td>Simple Personal Choice</td>
<td>References to individuals’ ability to do what they want (e.g., “because they want to” “it’s up to him really. His parents can’t control him) or explicit mention of rights, freedoms, or individuals being entitled to their opinion (e.g., “everyone has a right to say what they want” “everyone is entitled to their opinion”</td>
</tr>
<tr>
<td>Psychological Attributions</td>
<td>“you have equal measure to respond and protest”)</td>
<td></td>
</tr>
<tr>
<td>---------------------------</td>
<td>--------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Moral Reasoning</td>
<td>References to psychological or physical attraction (e.g., “they love each other” “he’s attracted to a man”), or individual or personality differences (e.g., “he wants to be different”, “she should be true to herself” “she is coming into her own”)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Appeals to the maintenance of fairness and equality (e.g., “they’re the same” “not everyone is part of that religion and their beliefs aren’t represented”), the wrongfulness of discrimination (e.g., “that’s homophobic” “that’s judging”), or moral reasoning that focuses on the harm done to individuals (e.g., “That would be very damaging...to his self-esteem and his feeling of having some control over his life” “that’s mean” “she needs support”) or moral emotions (e.g., “she’ll be hurt” “that will make her sad”)</td>
<td></td>
</tr>
<tr>
<td>Social-Conventional</td>
<td>Appeals to social-conventional expectations of the group regarding gender roles, relationships, customs, cultural norms, disapproval from peers, parents, or society, and rule-oriented reasoning (e.g., “the man needs a girl to get married” “In our religion, girls aren’t supposed to be with girls” “it’s wrong to break the law”) as well as</td>
<td></td>
</tr>
<tr>
<td>Natural Kind</td>
<td>References to homosexuality being biologically determined (e.g., “they’re born that way” “it is natural” “it’s not a choice” “statistically, we see more people born heterosexual”)</td>
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<td>-------------</td>
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<tr>
<td></td>
<td>deterministic beliefs referencing homosexuality being a deviation from the psychological, biological, or religious order (e.g., “I think if you have defects for whatever reason, psychological reasons, you cannot think the way you are supposed to think... the man is supposed to think like a man, woman like a woman”)</td>
<td></td>
</tr>
</tbody>
</table>
Table 3

Means (and Standard Deviations) for Evaluations of the Acceptability and Legal Regulation of Homosexuality

<table>
<thead>
<tr>
<th>Questions</th>
<th>5-year-olds</th>
<th>7-8-year-olds</th>
<th>10-11-year-olds</th>
<th>13-14-year-olds</th>
<th>Adults</th>
</tr>
</thead>
<tbody>
<tr>
<td>Same-sex Relationships</td>
<td>4.81 (2.2)</td>
<td>5.53 (1.4)</td>
<td>6.03 (1.0)</td>
<td>6.38 (0.91)</td>
<td>6.44 (1.1)</td>
</tr>
<tr>
<td>Same-sex marriage</td>
<td>4.52 (2.2)</td>
<td>4.71 (2.0)</td>
<td>5.66 (1.2)</td>
<td>6.44 (0.8)</td>
<td>6.60 (0.9)</td>
</tr>
<tr>
<td>Legal Regulation</td>
<td>5.74 (1.3)</td>
<td>5.41 (1.5)</td>
<td>5.47 (1.2)</td>
<td>6.25 (1.3)</td>
<td>5.87 (1.7)</td>
</tr>
<tr>
<td>Current Canadian Law</td>
<td>N/A</td>
<td>5.44 (1.7)</td>
<td>6.09 (1.0)</td>
<td>6.40 (1.0)</td>
<td>6.53 (1.0)</td>
</tr>
<tr>
<td>Prior Canadian Law</td>
<td>N/A</td>
<td>2.44 (1.8)</td>
<td>1.75 (0.9)</td>
<td>1.81 (0.90)</td>
<td>2.00 (1.5)</td>
</tr>
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<td>----------</td>
</tr>
<tr>
<td>Law in a Different Country</td>
<td>3.84 (2.1)</td>
<td>2.60 (1.5)</td>
<td>2.63 (1.3)</td>
<td>2.19 (1.2)</td>
<td>2.28 (1.5)</td>
</tr>
<tr>
<td>Good Law/Bad Law</td>
<td>N/A</td>
<td>2.29 (1.7)</td>
<td>2.66 (1.4)</td>
<td>1.87 (1.0)</td>
<td>2.03 (1.4)</td>
</tr>
<tr>
<td>Religion Influencing Law</td>
<td>N/A</td>
<td>2.48 (1.9)</td>
<td>2.63 (1.4)</td>
<td>2.53 (1.3)</td>
<td>2.39 (1.7)</td>
</tr>
<tr>
<td>Good Law/Bad Law</td>
<td>N/A</td>
<td>2.33 (1.6)</td>
<td>2.38 (1.3)</td>
<td>2.16 (1.2)</td>
<td>2.09 (1.5)</td>
</tr>
<tr>
<td>Law Violation</td>
<td>2.84 (2.2)</td>
<td>2.84 (1.9)</td>
<td>4.41 (1.3)</td>
<td>4.97 (1.5)</td>
<td>5.91 (1.4)</td>
</tr>
<tr>
<td>Uncommon Practice Canada</td>
<td>5.40 (1.4)</td>
<td>5.33 (1.7)</td>
<td>5.93 (0.94)</td>
<td>6.06 (1.1)</td>
<td>6.44 (1.0)</td>
</tr>
<tr>
<td></td>
<td>Uncommon Practice</td>
<td>Common Practice</td>
<td>Different Country</td>
<td>Common Practice</td>
<td>Different Country</td>
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<td>-----------------</td>
<td>-------------------</td>
<td>-----------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Canada</td>
<td>N/A</td>
<td>3.00 (2.8)</td>
<td>N/A</td>
<td>N/A</td>
<td>2.6 (1.5)</td>
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<td></td>
<td></td>
<td>3.00 (0)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
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<tr>
<td></td>
<td>5.29 (1.8)</td>
<td>5.67 (1.0)</td>
<td>6.00 (1.1)</td>
<td>6.22 (1.1)</td>
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<tr>
<td></td>
<td>2.50 (0.7)</td>
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<td>N/A</td>
<td>5.40 (1.5)</td>
<td></td>
</tr>
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<td></td>
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</table>

*Note: The scale varied from 1 (very, very not okay) to 7 (very, very okay)*
Table 4

<table>
<thead>
<tr>
<th>Tolerance Questions</th>
<th>5</th>
<th>7-8</th>
<th>10-11</th>
<th>13-14</th>
<th>Parents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belief</td>
<td>3.31 (2.2)</td>
<td>2.74 (1.8)</td>
<td>2.88 (1.5)</td>
<td>2.34 (1.3)</td>
<td>3.79 (2.0)</td>
</tr>
<tr>
<td>Speech</td>
<td>3.14 (2.1)</td>
<td>2.03 (1.6)</td>
<td>1.63 (0.9)</td>
<td>2.25 (1.5)</td>
<td>3.67 (2.1)</td>
</tr>
<tr>
<td>Law Restricting</td>
<td>N/A</td>
<td>5.00 (2.1)</td>
<td>4.72 (1.5)</td>
<td>3.97 (1.7)</td>
<td>2.48 (1.7)</td>
</tr>
<tr>
<td>Speech</td>
<td>N/A</td>
<td>5.00 (2.1)</td>
<td>4.87 (1.4)</td>
<td>4.80 (1.6)</td>
<td>5.56 (1.4)</td>
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<tr>
<td>Act Restriction</td>
<td>3.69 (2.3)</td>
<td>2.87 (1.9)</td>
<td>2.25 (1.5)</td>
<td>1.84 (1.0)</td>
<td>2.41 (1.6)</td>
</tr>
<tr>
<td>Law Restricting</td>
<td>N/A</td>
<td>4.90 (2.2)</td>
<td>4.21 (1.5)</td>
<td>4.47 (1.7)</td>
<td>2.93 (1.7)</td>
</tr>
</tbody>
</table>

*Note: The scale varied from 1 (very, very not okay) to 7 (very, very okay)
Table 5
Means (and Standard Deviations) of Participants’ Responses to Exclusion Scenarios

<table>
<thead>
<tr>
<th>Exclusion Questions</th>
<th>5</th>
<th>7-8</th>
<th>10-11</th>
<th>13-14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Straightforward Exclusion</td>
<td>2.72 (2.3)</td>
<td>3.00 (1.7)</td>
<td>2.31 (1.4)</td>
<td>2.19 (1.3)</td>
</tr>
<tr>
<td>Peer Influence to exclude</td>
<td>2.79 (2.2)</td>
<td>2.33 (1.7)</td>
<td>2.00 (1.0)</td>
<td>1.89 (0.92)</td>
</tr>
<tr>
<td>Parental Influence to exclude</td>
<td>2.84 (1.8)</td>
<td>3.10 (1.9)</td>
<td>3.07 (1.5)</td>
<td>2.79 (1.3)</td>
</tr>
<tr>
<td>Peer Influence not to exclude</td>
<td>5.00 (1.9)</td>
<td>2.50 (1.8)</td>
<td>3.50 (2.1)</td>
<td>4.00 (0.0)</td>
</tr>
<tr>
<td>Parental Influence not to exclude</td>
<td>4.50 (2.1)</td>
<td>3.71 (1.9)</td>
<td>5.50 (2.1)</td>
<td>6.0 (0.0)</td>
</tr>
</tbody>
</table>

*Note: The scale varied from 1 (very, very not okay) to 7 (very, very okay)
Table 6
Means (and Standard Deviations) for Participants’ Responses to Essentialist Questions

<table>
<thead>
<tr>
<th>Essentialist Questions</th>
<th>5</th>
<th>7-8</th>
<th>10-11</th>
<th>13-14</th>
<th>Adults</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biological Attributions</td>
<td>N/A</td>
<td>4.19 (2.0)</td>
<td>3.75 (1.4)</td>
<td>5.09 (1.5)</td>
<td>6.09 (1.3)</td>
</tr>
<tr>
<td>Social/Environmental Attributions</td>
<td>N/A</td>
<td>4.68 (1.7)</td>
<td>3.56 (1.5)</td>
<td>4.47 (1.8)</td>
<td>3.44 (1.9)</td>
</tr>
<tr>
<td>Age at first recognition</td>
<td>12.33 (7.6)</td>
<td>16.48 (8.5)</td>
<td>13.91 (2.3)</td>
<td>15.12 (4.0)</td>
<td>11.89 (5.5)</td>
</tr>
<tr>
<td>Mutability</td>
<td>N/A</td>
<td>4.75 (1.5)</td>
<td>4.41 (1.5)</td>
<td>3.91 (1.7)</td>
<td>4.62 (2.0)</td>
</tr>
<tr>
<td>Mutability with Parental Influence</td>
<td>N/A</td>
<td>4.66 (1.7)</td>
<td>3.69 (1.1)</td>
<td>3.25 (1.6)</td>
<td>2.53 (1.5)</td>
</tr>
</tbody>
</table>

*Note: The scale varied from 1 (very, very not likely) to 7 (very, very likely)
### Table 7
Frequencies (and Percentages) of Responses for the Switched-at-Birth Task

<table>
<thead>
<tr>
<th></th>
<th>5</th>
<th>7-8</th>
<th>10-11</th>
<th>13-14</th>
<th>Adults</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Other country:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Same-sex</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Relationship Norm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Same-sex choice</td>
<td>11 (34.4)</td>
<td>12 (37.5)</td>
<td>16 (50.0)</td>
<td>9 (28.1)</td>
<td>21 (13.3)</td>
</tr>
<tr>
<td>Opposite-sex choice</td>
<td>15 (46.9)</td>
<td>10 (31.3)</td>
<td>3 (9.4)</td>
<td>5 (15.6)</td>
<td>17 (10.8)</td>
</tr>
<tr>
<td>Uncertain</td>
<td>6 (18.8)</td>
<td>10 (31.3)</td>
<td>13 (40.6)</td>
<td>18 (56.3)</td>
<td>115 (72.8)</td>
</tr>
<tr>
<td><strong>Home:</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opposite-sex</td>
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<td></td>
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</tr>
<tr>
<td>Relationship Norm</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Same-sex choice</td>
<td>N/A</td>
<td>6 (18.8)</td>
<td>4 (12.5)</td>
<td>6 (18.8)</td>
<td>8 (5.1)</td>
</tr>
<tr>
<td>Opposite-sex choice</td>
<td>N/A</td>
<td>13 (40.6)</td>
<td>8 (25.0)</td>
<td>9 (28.1)</td>
<td>43 (27.2)</td>
</tr>
<tr>
<td>Uncertain</td>
<td>N/A</td>
<td>13 (40.6)</td>
<td>20 (62.5)</td>
<td>17 (53.1)</td>
<td>102 (64.6)</td>
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<tr>
<td>Interview Section</td>
<td>Justification</td>
<td>5-year-olds</td>
<td>7-8-year-olds</td>
<td>10-11</td>
<td>13-14</td>
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<tr>
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<td>-------</td>
</tr>
<tr>
<td>Act and Legal Regulation</td>
<td>Good/Bad</td>
<td>25.4</td>
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* Note: PC = Personal Choice; SC = Social-Conventiona

*Note: Asterisks (*) in table denote categories included in the justification analyses.
Figure 1

Mean Evaluations for the Acceptability and Legal Regulation Questions

*Note: The scale varied from 1 (very, very not okay) to 7 (very, very okay)

*Note: Interview questions presented in the above figure are those that were administered to all participants
Figure 2

Mean Evaluations for the Tolerance Scenarios

*Note: The scale varied from 1 (very, very not okay) to 7 (very, very okay)
Figure 3

Mean Evaluations for the Exclusion Scenarios

*Note: The scale varied from 1 (very, very not okay) to 7 (very, very okay)*
Figure 4

Mean Evaluations for Responses to the Essentialist Questions

*Note: The scale varied from 1 (very, very unlikely) to 7 (very, very likely)
Figure 5

Percentage of Justifications used for Act and Legal Regulation Questions

Justification Category

Percent Usage

- Personal Choice
- Psychological
- Moral
- Social
- Conventional
- Natural Kind

Categories:
- 5 years
- 7-8 years
- 10-11 years
- 13-14 years
- Adults
Figure 6

Percentage of Justifications used for Exclusion Scenarios

Justification Category: 5 years, 7-8 years, 10-11 years, 13-14 years.
Figure 7

Percentage of Justifications used for Tolerance Scenarios

Justification Category

Percent usage

5 years
7-8 years
10-11 years
13-14 years
Adults
Figure 8

Percentage of Justifications used for Essentialist Questions

[Bar chart showing the percentage of justifications used for essentialist questions categorized by justification type (Personal Choice, Psychological, Moral, Social Conventional, Natural Kind) and age group (5 years, 7-8 years, 10-11 years, 13-14 years, Adults).]
Appendix A

Interview for 5-year-old Children: Female Version

Introduction

Today I am going to be asking you some questions. There are no right or wrong answers to the questions I’m going to be asking you; it is not a test or anything like that, I’m just interested in what you think, and your own opinions. I also will be asking you about the reasons why you think the way you do, so I will ask you why you think the way you do after each question. We will also be asking you about some ways people in different countries may behave or think or laws that may be passed. Some of these situations may or may not be unusual or different than in Canada, but we want to know what you think about them so we will be asking you about a lot different things. If there is any question that you do not feel comfortable answering, you can let me know, and we will skip that question. If for any reason you want to finish the interview before we reach the end just let me know. All of the things that you’ll tell me during this interview are confidential, which means that I won’t repeat anything that you say to me to anyone else. The only reason that I’m tape recording the interview is so I don’t have to write down everything you say.

Today I am going to be asking you questions about different kinds of romantic relationships. People who love each other can decide to stay together for their whole lives. Sometimes they get married, and sometimes they decide not to get married, but they can still live together and love each other, and even have a family together. I am going to ask you questions about women/men loving women/men. They do everything that a man and a women who love each other may do, like holding hands and kissing and living together. Does that make sense? Do you have any questions about these types of relationships?

Part 1: Domain Conceptualization

* Likert-Scale: Okay-Not-Okay

1) Act Evaluation
Do you think it is okay or not okay for women to love other women and want to live together for their whole lives (like we talked about above)? Likert-scale from 1 (“very very okay”) to 8 (“very very not okay”).

2) Marriage Evaluation

Do you think it is okay for two women to get married? Likert-scale from 1 (“very very okay”) to 8 (“very very not okay”).

3) Legal Evaluation (Consistent with their answer in Q1)

Now I’ll ask you about how you about how it should be. So you said (fill in what the kid said). Do you think there should be a rule that says it’s okay/not okay for women to love each other, kiss each other, and live together for their whole lives? Likert-Scale. Why/Why not?

4) Common Practice:

Uncommon (If they said it’s okay for two women to be together)

So, you’ve said that it’s okay for two women to love and live with each other, and now I want to ask you more about this. Let’s pretend it were really uncommon/unlikely in Canada for women to love other women and want to spend their lives together (so most women want to love and live with men and not women like this picture). Do you think it be okay or not okay for two women to be together, and kiss each other, and hold hands like we’ve been talking about if it were really uncommon or unlikely in Canada? Likert-scale. Why/Why not?

Common (if they said it’s not okay)

So, you’ve said that it’s not okay for two women to love and live with each other, and now I want to ask you more about this. Let’s pretend it were really common/likely in Canada for women to love other women and want to spend their lives together (so most women want to love and live with women and not men like this picture). Do you think it be okay or not
okay for two women to be together, and kiss each other, and hold hands like we’ve been talking about if it were really common or likely in Canada? *Likert-scale.* Why/Why not?

5) Other Country

We’ve been talking about whether women loving other women is okay and if there should be a rule about these kinds of relationships. Now let’s talk about the rules in another country. Suppose there was a country that had a rule that that stops women from loving each other, kissing each other, and living together for their whole lives. Do you think this rule in another country is okay or not okay? *Likert-scale.* Why/why not?

6) Suppose there were two women who lived in that country and loved each other and decided to live together for the rest of their lives. Would it be ok or not ok for them to break the rules and be together in this other country? *Likert-scale* Why/Why not?

Part 2: Judgments about Fairness and Exclusion

Now I am going to tell you about a girl named Ann. When Ann grows up she wants to love and live with another girl, like we’ve been talking about. When she’s older she wants to hold hands and kiss a girl instead of a boy. Does this make sense? Now I am going to ask you some questions about Ann.

I am going to tell you some stories about some girls leaving Ann out of some activities. Then I will ask you if you think it is okay or not okay to leave her out.

**Friendship Condition (Based on Killen et al., 2002)**

Jessica lives on Park Street. Ann moves in next door. She wants to make new friends so she goes next door and asks Jessica if she would like to hang out. Jessica doesn’t want to hang out with Ann because she knows that when Ann grows up she wants to love and live with another girl and hold hands and kiss like a man and a women would.

1. Do you think it is okay for Jessica not to hang out with Ann because she knows she wants to love and live with a girl when she grows up? *Likert-Scale* (okay-not okay) Why?

**For a Judgment of Not Okay**
2. **Social Influence:** What if Jessica’s friends say that they don’t think she should hang out with Ann because she wants to love and live with a girl when she grows up? Do you think Jessica should listen to her friends and leave Ann out because they know that Ann wants to hold hands and kiss a girl when she grows up? Likert. Why?

3. **Authority:** What if Jessica’s parents say that they don’t think she should hang out with Ann because she wants to love and live with a girl when she grows up? Do you think Jessica should listen to her parents and leave Ann out because they know that Ann wants to hold hands and kiss a girl when she grows up? Likert. Why?

**For a Judgment of Okay**

2. **Social Influence:** What if Jessica’s friends say that they think she should hang out with Ann even though she wants to love and live with a girl when she grows up? Do you think Jessica should listen to her friends and hang out with Ann even though they know that Ann wants to hold hands and kiss a girl when she grows up? Likert. Why?

3. **Authority:** What if Jessica’s parents say that they think she should hang out with Ann even though she wants to love and live with a girl when she grows up? Do you think Jessica should listen to her parents and hang out with Ann even though they know that Ann wants to hold hands and kiss a girl when she grows up? Likert. Why?

**Dimensions of Tolerance Task**

Now let’s pretend there is a mother and father who had a daughter who wants to love and live with a girl when she grows up (like we’ve been talking about – their daughter wants to hold hands and kiss a girl and not a boy). The mother and father are not okay with this at all. They think it is very wrong for girls to love other girls and want to live together. They think only boys and girls should be allowed to kiss and hold hands, not two girls.

1) **Belief:** Do you think it is okay for the mother and father to believe that it is wrong for girls to love each other that way and live together or do you think that they should not believe this? Likert. Why?
2) Speech: The mother and the father believe this so strongly that they want to make a speech in public about why it is wrong for women to be with other women. Do you think they should be allowed to make a speech in public about why they think it is wrong for two girls to love each other and live together? Why/ Why not? Likert Scale.

3) Act: Their daughter says that she wants to go to a high school dance with a girl, but they say no way and that the only way she can go to the dance is if she takes a boy as her date. Do you think the mother and father should be allowed to stop her from going to the dance if she takes a girl, or do you think that they should not be allowed to do that? Why? How okay/not okay is it (likert scale)?

Part 3: Children’s Essentialist Beliefs

*Likert-Scale: Agree-Disagree

Fixed Early in life

1a) Around what age do kids really know whether they want to love and live with a girl or a boy?

1b) How do you think they know?

Immutable & Biologically Determined

6) Now I’m going to tell you about a girl named Susan. She lives in a country where it is not that common or likely for women to love and live with other women. When Susan was born she was sent to live with her aunt who lives in another country where it is very common for women to love and live with other women (and hold hands and kiss other women). When Susan grows up do you think she will be more likely to want to love and live with a boy or a girl? Why? Why not? Likert scale – degree of likelihood.
Interview for Children 7-8- & 10-11-years-old: Male Version

Introduction

Today I am going to be asking you questions about different kinds of romantic relationships. People who love each other can decide to stay together for their whole lives. Sometimes they get married, and sometimes they decide not to get married, but they can still live together and love each other, and even have a family together. I am going to ask you questions about men loving men. They do everything that a man and a women who love each other may do, like holding hands and kissing and living together. Does that make sense? Do you have any questions about these types of relationships?

Part 1: Legal and Act Evaluation

1) Act Evaluation

Do you think it is okay or not okay for men to love other men and want to live together for their whole lives (like we talked about above)? *Likert-scale from 1 (“very very not okay”) to 7 (“very very okay”).*

2) Marriage Evaluation

Do you think it is okay for them to get married? *Likert-scale.* Why/Why not?

3) Legal Evaluation (Consistent with their answer in Q2)

Do you think there should be a law saying it is okay/not okay for men to love each other and live together for their whole lives? *Likert-scale.* Why/Why not?

4) Same-Sex Marriage in Canada

Now I’m going to talk specifically about the laws in Canada. I don’t know if you’ve heard anything about this, but before 2005 there was a law in Canada saying it was not okay for two men or two women to get married. The law changed in 2005 and now it is okay for two women or two men to get married. (*Likert-scale*)
a) Do you think this law (saying it is okay for two men to get married) is a good or bad law? Why/Why not?

b) Do you think the law before 2005 (saying that it is not okay for two men to get married) was a good law or a bad law? Why/Why not?

e) Some countries have laws against women marrying men marrying men. Is it okay or not okay for some other countries to have this law? Why/why not? Do you think it is a good or bad law?

5) Common practice (Opposite answer in Q2)

Suppose it were really common/uncommon in Canada for men to love other men and want to spend their lives together. Would it be okay/not okay if it were really common/uncommon? Likert-scale. Why/Why not?

6) Common practice another country (Opposite answer in Q1)

Suppose there was another country where it was really common/uncommon for men to love other men and want to spend their lives together. Would it be okay/not okay if it were really common/uncommon in another country? Likert-scale. Why/Why not?

7) Religion

Suppose there was another country where most people belonged to a religion that didn’t allow men from loving each other and living together like the way I described above. Would it be ok or not ok to have a law like this when most people in the country belong to a religion that doesn’t allow these kinds of relationships? Likert-scale. Why/why not? Would it be a good law or a bad law?

7b) Suppose there were two men who lived in that country and loved each other and decided to live together for the rest of their lives. Would it be ok or not ok for them to be together in this other country where it is against the law? Likert-scale. Why/Why not?

Part 2: Judgments about Fairness and Exclusion
Now I am going to tell you about a boy named Tom. When Tom grows up he wants to love and live with another boy, like we’ve been talking about. When he’s older he wants to hold hands and kiss a boy instead of a girl. Does this make sense?

Now I am going to ask you some questions about Tom and some people leaving him out and I will ask you if you think this is okay or not okay.

**Friendship Condition (Based on Killen et al., 2002)**

This is a story about Andrew and Tom. Andrew lives on Park Street. Tom moves in next door. He wants to make new friends so he goes next door and asks Andrew if he would like to hang out. Andrew doesn’t want to hang out with Tom because he knows that when Tom grows up he wants to love and live with another boy and hold hands and kiss like a man and a women would.

1. Do you think it is okay for Andrew not to hang out with Tom because he knows Tom wants to love and live with a boy when he grows up? *Likert-scale.* Why?

**For a Judgment of Not Okay**

2. **Social Influence:** What if Andrew’s friends say that they don’t think he should hang out with Tom because he wants to love and live with a boy when he grows up? Do you think Andrew should listen to his friends and not hang out with Tom? *Likert-scale.* Why?

3. **Authority:** What if Andrew’s parents say that they don’t think he should hang out with Tom because he wants to love and live with a boy when he grows up? Do you think Andrew should listen to his parents and not hang out with Tom? *Likert-scale.* Why?

**For a Judgment of Okay:**

2. **Social Influence:** What if Andrew’s friends say that they think he should hang out with Tom even though he wants to love and live with a boy when he grows up? Do you think Andrew should listen to his friends and hang out with Tom? *Likert-scale.* Why?
3. **Authority:** What if Andrew’s parents say that they think he should hang out with Tom even though he wants to love and live with a boy when he grows up? Do you think Andrew should listen to his parents and hang out with Tom? *Likert-scale.* Why?

4) Why do you think it makes the kids so uncomfortable that Tom wants to love and live with a boy?

**Dimensions of Tolerance Task**

Imagine that there is a mother and father who had a son who wants to love and live with a boy when he grows up, like a man and a women may do. The mother and father are very opposed to this.

**Belief:**

1) Do you think it is okay for the mother and father to believe that it is wrong for boys to love each other that way and live together like a man and a woman or do you think that they should not believe this? *Likert-scale.* Why?

**Speech:**

2) The mother and father believe this so strongly that they want to make a speech in public about why it is wrong for men to be with other men.

1) Do you think it is okay or not okay for them to make a speech in public? *Likert-scale.* Why/Why not?

2) Do you think there should be a law stopping them from doing this? *Likert-scale.* Why/Why not?

3) Do you think people should protest their speech or do you think they should let them say what they believe? *Likert-scale.* Why/Why not?

**Act:**
3) Their daughter/son says that she/he wants to go to prom with a girl/boy, but they refuse and say that the only way she/he can go to prom is if she/he takes a boy/girl as her/his date.

   1) Do you think the mother and father should be allowed to do that, or do you think that they should not be allowed to do that? Likert-scale. Why/Why not?

   2) Do you think there should be a law stopping them from doing this? Likert-scale. Why/Why not?

4) Why do you think the mother and father are so opposed to their son wanting to be with a girl/boy?

**Part 3: Children’s Essentialist Beliefs**

**Now we’re going to talk about Tom some more.**

1) Why do you think Tom wants to love and live with another boy? Any other reasons? Now I am going to give you some possible reasons and tell me what you think about them.

2) Do you think the reason Tom wants to love and live with another boy is because of something in his body, like the way he’s made or born, that makes him like boys and want to be with them? Likert-scale. Why/Why not?

3) Do you think the reason Tom wants to love and live with another boy is because of other things like the way his parents raised him or what he was taught? Likert-scale. Why/Why not?

4a) Around what age do kids really know whether they want to love and live with a girl or a boy?

4b) How do you think they know?

5a) Do you think it’s possible that Tom can change his mind and decide to be with a girl instead? Why/Why not? Likert scale. How might this happen?
5b) Let’s pretend Tom tells his parents that he wants to love and live with a boy when he grows up. But his parents tell him that he is not allowed and that he has to be with a girl instead. Do you think Tom could change his mind and decide to love and live with a girl instead? *Likert-scale.* Why/Why not?

**Switched-at-Birth Task**

6a) Now I’m going to tell you about a boy named Jack. He lives in a country where it is not that common for men to love and live with other men. When Jack was born he was sent to live with his uncle who lives in another country where it is very common for men to love and live with other men. When Jack grows up do you think he will be more likely to want to love and live with a boy or a girl? *Why? Likert scale.*

6b) Let’s say that when Jack is a teenager he is sent back home to live with his parents where it is uncommon for men to love and live with other men. Will he want to be with a women or a man? *How likely? Likert scale.*
Interview for Adolescents (13-14-year-olds): Female Version

Introduction
Today I am going to be asking you some questions. There are no right or wrong answers to the questions I’m going to be asking you; it is not a test or anything like that. I’m just interested in what you think, and your own opinions. I also will be asking you about the reasons why you think the way you do, so I will ask you why you think the way you do after each question. We will also be asking you about some ways people in different countries may behave or think or laws that may be passed. Some of these situations may or may not be unusual or different than in Canada, but we want to know what you think about them so we will be asking you about a lot different things. If there is any question that you do not feel comfortable answering, you can let me know, and we will skip that question. If for any reason you want to finish the interview before we reach the end just let me know. All of the things that you’ll tell me during this interview are confidential, which means that I won’t repeat anything that you say to me to anyone else. The only reason that I’m tape recording the interview is so I don’t have to write down everything you say.

Today I am going to be asking you questions about same-sex relationships. What I mean by this is when two women or two men love each other and may decide to stay together for their whole lives. Sometimes they get married, and sometimes they decide not to get married, but they can still live together and love each other, and even have a family together. I am going to ask you questions about these kinds of same-sex relationships. Does that make sense? Do you have any questions about these types of relationships?

Part 1: Legal and Act Evaluation
*Likert-Scale: Okay-Not Okay

1) Act Evaluation
Do you think same-sex relationships are okay, where two women/men have a romantic relationship and love each other and live together for their whole lives? Likert-scale.
Why/Why not?
2) **Marriage Evaluation**  
Do you think it would be okay for two women or men to get married? *Likert-scale.*  
Why/Why not?

3) **Legal Evaluation** *(Consistent with their answer in Q2)*  
Do you think there should be a law saying same-sex relationships are okay/not okay?  
*Likert-scale.* Why/Why not?

4) **Same-Sex Marriage in Canada**  
Do you know if there is a law in Canada allowing same-sex marriage? *(Likert-scale for questions a,b,e)*  
   a. *(That’s right/Actually,) It wasn’t allowed before, but since 2005 it’s been allowed by law. Do you think that’s a good or bad law? Why/Why not?  
   b. Before 2005, when same sex marriage was not allowed by law, do you think it was okay to have a law like that? Why/Why not? Would it be a good law or a bad law? Why/Why not?  
   c. Why do you think it wasn’t allowed then?  
   d. Why do you think the law changed?  
   e. Some countries have laws against same-sex marriage. Is it okay or not okay for some other countries to have this law? Why/why not? Do you think it is a good or bad law? Why/Why not?

5) **Common practice** *(Opposite answer in Q2)*  
Suppose same-sex romantic relationships were really common/uncommon in Canada.  
Would it be okay for women/men to love other women/men and want to spend their lives together if it were really common/uncommon? *Likert-scale.* Why/Why not?

6) **Common practice another country** *(Opposite answer in Q1)*  
Suppose there was another country where same-sex romantic relationships were really common/uncommon. Would it be okay for women/men to love other women/men and
want to spend their lives together if it were really common/uncommon in another country? *Likert-scale.* Why/Why not?

7) Religion
Suppose there was another country where most people belonged to a religion that prohibited same-sex relationships. Would it be okay or not okay for there to be a law prohibiting same-sex relationships in that country (*likert scale*), where most people belong to a religion that doesn’t allow it? Why/why not? Would it be a good law or a bad law?

7b) Suppose there were two women/men who lived in that country and who loved each other and decided to live together for the rest of their lives. Would it be okay or not okay for them to be together in this other country where it is against the law? *Likert-scale*
Why/Why not?

Part 2: Exclusion & Tolerance

Friendship Condition (Based on Killen et al., 2002)

Jessica lives on Park Street. Ann moves in next door. She wants to make new friends so she goes next door and asks Jessica if she would like to hang out. Jessica doesn’t want to hang out with Ann because she knows that Ann wants to be in a romantic relationship with a girl when she grows up.

Q1. Do you think it is okay for Jessica not to hang out with Ann because she wants to be with a girl when she grows up? (*likert scale – okay/not okay*) Why?

For a Judgment of Not Okay

2. Social Influence: What if Jessica’s friends say that they don’t think she should hang out with Ann because she wants to be with a girl when she grows up? Do you think it is okay then? Why?
Q3. **Authority:** What if Jessica’s parents say that they don’t think she should hang out with Ann because she wants to be with a girl when she grows up? Why?

**For a Judgment of Okay**

2. **Social Influence:** What if Jessica’s friends say that they think she should hang out with Ann even though she wants to be with a girl when she grows up? Do you think it is not okay then? Why?

3. **Authority:** What if Jessica’s parents say that they think she should hang out with Ann even though she wants to be with a girl when she grows up? Why?

**Dimensions of Tolerance Task (Adapted from Wainryb et al., 1998)**

Imagine that there is a mother and father who had a daughter who wants to have a romantic relationship with a girl. The mother and father are very opposed to same-sex relationships.

**Belief:**

1) Do you think it is okay for the mother and father to believe that same-sex relationships are wrong or do you think that they should not believe this? (likert-scale – okay/not okay) Why?

**Speech:**

2) The mother and father believe this so strongly that they want to make a speech in public about why same-sex relationships are wrong.
   a) Do you think there should be a law stopping them from doing this? (Why/ Why not?)
   b) Do you think people should protest their speech or do you think they should let them say what they believe? Why?
Act:
3) Their daughter says that she wants to go to prom with a girl, but they refuse and say that
the only way she can go to prom is if she takes a boy as her date. Do you think the mother
and father should be allowed to do that, or do you think that they should not be allowed to
do that? Why?

Why do you think the mother and father are so opposed to their daughter/son wanting to
be with another girl/boy?

Part 3: Essentialist Beliefs
*Likert-Scale: Agree-Disagree

Now I am going to ask you some questions about why someone would want to have a
romantic relationship with someone of the opposite sex.

1) Why do you think some people want to be in same-sex romantic relationships? Any
other reasons? Now I am going to give you some possible reasons and tell me what you
think about them.

2) Do you think the reason people would want to be in same-sex romantic relationships is
because of biological things like genes and hormones? Likert-Scale. Why/Why not?

3) Do you think the reason people would want to be in same-sex romantic relationships is
because of other things like the way their parents raised them or what they were taught?
(Likert scale). Why/Why not?

4a) Around what age do people truly know whether they want to be with a man or a
woman?
4b) How do you think they know?
5) Do you think it’s possible that if a girl/boy was attracted to another girl/boy and wanted to have a romantic relationship with her/him she/he could change her/his mind and decide to be with someone of the opposite sex instead? Why/Why not? (Likert-Scale). How might this happen?

5b) What if the girl’s parents told her to be with a boy and not a girl? Do you think she could change her mind if her parents told her to? Why/Why not? (Likert-Scale).

**Switched-at-Birth Task**

6a) Now I’m going to tell you about a girl named Susan. She lives in a country where it is not that common for women to love and live with other women. When Susan was born she was sent to live with her aunt who lives in another country where it is very common for women to love and live with other women. When Susan grows up do you think she will be more likely to want to love and live with a boy or a girl? Why?/Why not? Likert scale – degree of likelihood.

6b) Let’s say that when Susan is a teenager she is sent back home to live with her parents where it is uncommon for women to love and live with other women. Will she want to be with a women or a man? How likely? Likert scale – degree of likelihood.
Adult Interview

Introduction

Today I am going to be asking you some questions about same-sex relationships. There are no right or wrong answers to the questions I'm going to be asking you; I'm just interested in what you think, and your own opinions. I also will be asking you about the reasons why you think the way you do and this may be a little redundant for you, but we are trying our best to parallel the interview for the children.

If there is any question that you do not feel comfortable answering, just let me know, and we will skip that question. Everything is confidential and we're tape recording just so that I don't have to write everything down.

Part 1: Legal and Act Evaluation

*Likert-Scale: Okay-Not Okay

1) Act Evaluation
Do you think same-sex relationships are okay? Likert-scale. Why/Why not?

2) Marriage Evaluation
Do you think it would be okay for two women or men to get married? Likert-scale. Why/Why not?

3) Legal Evaluation (Consistent with their answer in Q2)
Do you think there should be a law saying same-sex relationships are okay/not okay? Likert-scale. Why/Why not?

4) Same-Sex Marriage in Canada
Do you know if there is a law in Canada allowing same-sex marriage? (Likert-scale for questions a,b,e)

f. (That’s right/Actually,) It wasn’t allowed before, but since 2005 it’s been allowed by law. Do you think that’s a good or bad law? Why/Why not?

g. Before 2005, when same sex marriage was not allowed by law, do you think it was okay to have a law like that? Why/Why not?

h. Why do you think it wasn’t allowed then?

i. Why do you think the law changed?

j. Some countries have laws against same-sex marriage. Is it okay or not okay for some other countries to have this law? Why/why not?

5) Common practice (Opposite answer in Q2)

Suppose same-sex romantic relationships were really common/uncommon in Canada. Would it be okay for women/men to love other women/men and want to spend their lives together if it were really common/uncommon? Likert-scale. Why/Why not?

6) Common practice another country (Opposite answer in Q1)

Suppose there was another country where same-sex romantic relationships were really common/uncommon. Would it be okay for women/men to love other women/men and want to spend their lives together if it were really common/uncommon in another country? Likert-scale. Why/Why not?

7) Religion

Suppose there was another country where most people belonged to a religion that prohibited same-sex relationships. Would this law be okay or not okay? Why/why not?

7b) Suppose there were two women/men who lived in that country and who loved each other and decided to live together for the rest of their lives. Would it be okay or not okay for them to be together in this other country where it is against the law? Likert-scale Why/Why not?
Part 2: Tolerance

Dimensions of Tolerance Task (Adapted from Wainryb et al., 1998)

Imagine that there is a mother and father who had a daughter who wants to have a romantic relationship with a girl. The mother and father are very opposed to same-sex relationships.

Belief:
1) Do you think it is okay for the mother and father to believe that same-sex relationships are wrong or do you think that they should not believe this? (likert-scale – okay/not okay)
   Why?

Speech:
2) The mother and father believe this so strongly that they want to make a speech in public about why same-sex relationships are wrong.
   c) Do you think there should be a law stopping them from doing this? (Why/ Why not?)
   d) Do you think people should protest their speech or do you think they should let them say what they believe? Why?

Act:
3) Their daughter says that she wants to go to prom with a girl, but they refuse and say that the only way she can go to prom is if she takes a boy as her date. Do you think the mother and father should be allowed to do that, or do you think that they should not be allowed to do that? Why?

Why do you think the mother and father are so opposed to their daughter/son wanting to be with another girl/boy?

Part 3: Essentialist Beliefs

*Likert-Scale: Agree-Disagree
Now I am going to ask you some questions about why someone would want to have a romantic relationship with someone of the opposite sex.

1) Why do you think some people want to be in same-sex romantic relationships? Now I am going to give you some possible reasons and tell me what you think about them.

2) Do you think the reason people would want to be in same-sex romantic relationships is because of biological things like genes and hormones? *Likert-Scale. Why/Why not?*

3) Do you think the reason people would want to be in same-sex romantic relationships is because of other things like the way their parents raised them or what they were taught? *(Likert scale). Why/Why not?*

4a) Around what age do people truly know whether they want to be with a man or a woman?

4b) How do you think they know?

**MALE PARTICIPANT:**

5a) Do you think it’s possible that if a boy was attracted to another boy and wanted to have a romantic relationship with him he could change his mind and decide to be with someone of the opposite sex instead? *Why/Why not? (Likert-Scale). How might this happen?*

5b) What if the boy’s parents told him to be with a girl and not a boy? Do you think he could change his mind if his parents told him to? *Why/Why not? (Likert-Scale).*

**FEMALE PARTICIPANT:**
5a) Do you think it’s possible that if a girl was attracted to another girl and wanted to have a romantic relationship with her she could change her mind and decide to be with someone of the opposite sex instead? Why/Why not? (Likert-Scale). How might this happen?

5b) What if the girl’s parents told her to be with a boy and not a girl? Do you think she could change her mind if her parents told her to? Why/Why not? (Likert-Scale).

MALE PARTICIPANT:

6a) Now I’m going to tell you about a boy named Jack. He lives in a country where it is not that common for men to love and live with other men. When Jack was born he was sent to live with his uncle who lives in another country where it is very common for men to love and live with other men. When Jack grows up do you think he will be more likely to want to love and live with a boy or a girl? Why? Likert scale – degree of likelihood.

6b) Let’s say that when Jack is a teenager he is sent back home to live with his parents where it is uncommon for men to love and live with other men. Will he want to be with a women or a man? How likely? Likert scale – degree of likelihood.

FEMALE PARTICIPANT:

6a) Now I’m going to tell you about a girl named Susan. She lives in a country where it is not that common for women to love and live with other women. When Susan was born she was sent to live with her aunt who lives in another country where it is very common for women to love and live with other women. When Susan grows up do you think she will be more likely to want to love and live with a boy or a girl? Why?/Why not? Likert scale – degree of likelihood.

6b) Let’s say that when Susan is a teenager she is sent back home to live with her parents where it is uncommon for women to love and live with other women. Will she want to be with a women or a man? How likely? Likert scale – degree of likelihood.
Introducing Same-Sex Relationships
Common Practice Canada
Uncommon Practice Canada
Common Practice Another Country
Uncommon Practice Another Country
Exclusion Task
Tolerance Task: Speech
Switched-at-Birth Task: Reared with Aunt/Uncle
Switched-at-Birth Task: Home with Parents as a Teenager