

STRATEGIES AND REASONS FOR NONDISCLOSURE IN CLOSE RELATIONSHIPS
DURING ADOLESCENCE

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DURING ADOLESCENCE

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Abstract

Nondisclosure, or keeping information from others, is typically studied within the parent-child relationship. With parents, adolescents may keep secrets to assert independence or avoid punishment or disapproval (Smetana, 2010), and nondisclosure seems to have overall negative implications for individual adjustment (e.g., higher levels of delinquency and depression, as well as lower self-esteem; Engels et al., 2006). However, there is comparatively little research on nondisclosure in the context of other close relationships during adolescence. This thesis will examine strategies and reasons for nondisclosure in the context of multiple close relationships (parents, siblings, best friends, and romantic partners). Data from a longitudinal study consists of 244 adolescents aged 9 to 16 ($M = 12.71$, $SD = 1.66$) who completed surveys about their nondisclosure. Results show significant differences in nondisclosure depending on relationship, gender, and type of information kept hidden. Adolescents tended to use nondisclosure strategies more for personal information (e.g., thoughts and feelings). Older and younger siblings lie and partially disclose information in different contexts but show similar patterns for when they use the strategy of only disclosing when asked. Furthermore, adolescents had more reasons to keep information from family members as they got older, and girls are more likely than boys to keep information from their mothers because they feel bad or ashamed. Findings provide a greater understanding of patterns of nondisclosure during adolescence, which may in turn have implications for adolescent adjustment and relationship quality.

Strategies and Reasons for Nondisclosure in Close Relationships During Adolescence

Just as adolescents disclose within multiple close relationships, they also choose to keep information from multiple close others. Typically, nondisclosure during adolescence is examined in the context of the parent-child relationship. Research shows that keeping secrets from parents becomes more common as adolescents get older (Keijsers et al., 2010), and adolescents may employ several strategies to do so (Cumsille et al., 2010). However, patterns of nondisclosure across relationships are unclear, and little research has focused on why adolescents do not disclose certain topics, though research with parents suggests that reasons can include avoiding punishment or maintaining privacy (Smetana et al., 2009). Furthermore, while the benefits of disclosure are well-documented, nondisclosure seems to be negatively associated with individual adjustment (e.g., higher levels of depression and lower self-esteem; Engels et al., 2006). Thus, not only is it important to further understanding of patterns of nondisclosure during adolescence, but research should also examine these patterns across multiple relationships to fill gaps in the literature. This thesis will examine patterns in strategies and reasons for nondisclosure in the context of multiple close relationships (parents, siblings, best friends, and romantic partners) during adolescence, while also considering other factors, such as gender and type of information, that affect nondisclosure.

Definition and Theory

As a preface, disclosure is the revealing of information about yourself to others, often through verbal communication (Rotenberg, 1995). Conversely, in this thesis, nondisclosure will be defined as keeping information about yourself from others, through any means. This would include passive means such as not bringing up certain topics in conversation, and active means such as outright lying in response to a request for information. In the literature, different forms

and methods of nondisclosure are often examined separately, and researchers use different terms that can all fall under the umbrella of nondisclosure: concealment, secrecy, lying, or topic avoidance, etc. These terms are not equivalent to each other either; for example, lying requires a deliberate action and is more active than simply not disclosing information (Smetana, 2008; Smetana, 2010). In previous work, disclosure and secrecy are sometimes found to be inversely related (Smetana et al., 2006; Villalobos Solis et al., 2015), but other studies find that they are separate constructs (Frijns et al., 2010; Jäggi et al., 2016; Larson & Chastain, 1990). However, disclosure and nondisclosure are by definition opposites; that is, telling and not telling the truth are on the same continuum, but actively lying is on a different continuum that includes telling a complete lie or telling a partial lie. Previous studies may have used different operational definitions of “secrecy,” such as avoiding the topic versus lying, that lead to contrary results.

Additionally, previous work sometimes investigates disclosure and nondisclosure simultaneously by using four categories of information management: full disclosure, partial disclosure (telling the truth but leaving out details), topic avoidance (avoiding discussion or waiting until asked), and deception (explicit lying) (Bakken & Brown, 2010; Cumsille et al., 2010). For the purposes of this study, both topic avoidance and deception would be considered nondisclosure, while partial disclosure is between disclosure and nondisclosure. As this study does not focus on disclosure, the term nondisclosure will be used instead of the broader term of information management.

Another way of categorization is by organizing topics of disclosure or nondisclosure into different domains using social domain theory. A theory that was originally developed to describe children’s moral development, social domain theory posits that children make sense of their social interactions within three main domains or systems of knowledge (Smetana, 2006; Turiel,

2002). The *moral domain* concerns justice, welfare, and rights (e.g., aggression towards others). The *conventional domain* pertains to authority and social norms (e.g., children calling adults by Mr. or Mrs. instead of using first names). The *psychological domain* includes understanding the self and others as psychological systems. The psychological domain can be further broken down into the *prudential domain*, which includes risky behaviors or behavior that can harm yourself (e.g., smoking or drug use), and the *personal domain*, which includes private aspects of life (e.g., body autonomy). Additionally, issues that fall under more than one domain are sometimes said to be *multifaceted*. During adolescence, a multifaceted issue is most frequently considered to be in the personal domain by the adolescent and another domain by the parent as a sign of developing autonomy (e.g., getting tattoos and piercings would be a personal issue for the adolescent but a prudential issue for the parent).

In adolescence specifically, the personal domain develops as children gain increasing autonomy and control over themselves, leading to possible conflict with their parents over privacy boundaries (Smetana, 2010; Petronio, 2010). This can also lead to increased nondisclosure, as adolescents begin to consider some topics to be more private than others, and they try to keep such information to themselves. For example, adolescents would likely feel differently about disclosing their alcohol consumption compared to having a new romantic partner (Smetana & Metzger, 2008). This would apply to other relationships and domains as well; adolescents could choose to keep certain personal habits from new romantic partners yet disclose that information to their long-time friends. Multiple overlapping relationships, however, can cause privacy turbulence according to communication privacy management (CPM) theory (Petronio, 2010), and concern that information disclosed to one person is at risk of being transmitted to another person (e.g., siblings “tattling” on each other to parents). These

considerations can thus lead to adolescents' use of different strategies or reasoning to keep information hidden from one or more relationship partners.

Strategies for Nondisclosure

Research on the way adolescents manage information tends to present four categories: tell all (full disclosure), tell some (partial disclosure), avoid the topic, or lying. In a latent class analysis, Cumsille and colleagues (2010) found five most frequent patterns of disclosure and nondisclosure with parents: tell all, tell all and avoid, tell part and avoid, avoid, and lie, showing that adolescents can habitually use more than one strategy to keep information from others.

Differences Between Relationship Types

Overall, research on strategies for nondisclosure falls nearly exclusively in the parenting literature, as adolescence is the prime time that children begin to gain independence from parents and consider some information about themselves not necessary for parents to know (Frijns et al., 2020). Of the four categories of information management, full disclosure and avoidance were more frequently used with parents than partial disclosure or lying (Smetana et al., 2009), though several studies find avoiding disclosure or lying the least common in adolescence (Bakken & Brown, 2010; Cumsille et al., 2010). Still, adolescents do report that they lie to their parents at times (Desmond, 2019; Jensen et al., 2004). With mothers especially, adolescents tend to fully disclose more than withholding information or lying, but strategy use is more mixed with fathers (Rote & Smetana, 2018). Furthermore, adolescents are less likely to use these strategies when the parents already know some of the information or if there is more open communication in the relationship (Metzger et al., 2013). In terms of acceptability, the most acceptable strategy for adolescents to keep information from parents was to keep quiet until asked about the issue, followed by avoiding the topic or only partially disclosing information, with lying as the least

acceptable (Rote & Smetana, 2015). However, those who do think that lying or avoiding the topic was more acceptable also engaged in these behaviors more (Rote & Smetana, 2015).

However, adolescents may use different methods to keep information from others, as they spend more or less time with them and in different contexts (e.g., seeing friends mostly at school or over the internet versus seeing family members mostly at home). Furthermore, as Guerrero and Afifi (1995) found, differences in strategies used for nondisclosure can differ based on the issue at hand (e.g., issues in different social domains). As another example, with adolescent romantic relationships, Harper and colleagues (2006) define self-silencing as the act of suppressing personal voice and opinions by presenting a fake self, making it a specific form of nondisclosure only studied in couples so far. Therefore, the literature does not yet show clear patterns in the strategies that adolescents use with different relationships.

Social Domain Differences

Adolescents may keep certain types of information from parents in different ways. Older adolescents have reported lying to parents about a variety of topics, including friends, alcohol or drugs, parties, money, dating, and sex (Jensen et al., 2004), which fall mostly into the personal and prudential domains. Other studies found that high school students were more secretive about peer or personal issues and activities than other issues such as schoolwork (Smetana et al., 2006; Smetana et al., 2010), though adolescents are still more likely to conceal or lie, rather than disclose, about academic issues (Smetana et al., 2019). For early adolescents, one study found that information about media use and free time activities is more actively managed than information about activities with friends (Laird & Marrero, 2010), although all of these topics fall within the personal domain. In general, it seems that adolescents keep secrets about personal issues the most (Villalobos Solis et al., 2015). Further supporting this idea, Perkins and Turiel

(2007) found that most adolescents believed lying to parents was acceptable for personal issues, and a significant minority judged that lying to parents was also acceptable for prudential issues; Rote and Smetana (2015) had similar results where adolescents rated using various information management strategies as more acceptable for issues in the personal domain compared to the prudential domain.

For siblings, older adolescents tended to report less avoidance compared to parents on topics of negative life experiences, dating experiences, and sexual experiences, which are all in the personal domain (Guerrero & Afifi, 1995). Though there may be less nondisclosure between siblings than with parents, adolescents still tend to keep personal domain issues from others the most compared with issues in other domains. The literature does not suggest any differences between specific strategies used for different domains; both avoidance and lying have been reported by adolescents. However, no study has directly studied how multiple strategies are used for different domains, especially outside of parent-child relationships.

Gender Differences

Several studies have found that boys lie more according to both self-reports and parent reports (Engels, et al., 2006; Jensen et al., 2004; Tasopoulos-Chan et al., 2009), but Metzger et al. (2013) found that girls used lying more frequently than avoidance or partial disclosure, and Frijns and Finkenauer (2009) found that girls kept more secrets than boys. Others have found no gender differences in how much adolescents conceal information (Finkenauer et al., 2002; Frijns et al., 2005; Laird, Marrero, et al., 2013; Leavitt et al., 2013) nor the strategies they use (Laird & Marrero, 2010). For personal issues specifically, girls reported more avoidance and partial disclosure to mothers compared to boys; however, they also reported more full disclosure as

well, so these findings may be due to more frequent interactions between mothers and daughters (Tasopoulos-Chan et al., 2009).

Within families, topic avoidance is lowest in female-female pairs (e.g., mother and daughter or sister and sister) compared to all other gender compositions (Guerrero & Afifi, 1995). In friendships, Afifi and Guerrero (1998) found no gender differences in avoiding disclosure in older adolescents, but other studies with younger and middle adolescents have found that boys kept more secrets than girls (Corsano et al., 2017; Laird, Bridges, et al., 2013). Lastly, middle and late adolescent boys in heterosexual romantic relationships reported more self-silencing behavior than girls (Harper et al., 2006; Harper & Welsh, 2007). Taken together, past research suggests that adolescent boys tend to have higher levels of nondisclosure than girls in all close relationships.

Reasons for Nondisclosure

Adolescents choose to not disclose information about themselves for a variety of reasons. Some can keep information hidden out of fear of negative reactions or consequences (Darling et al., 2006; Fletcher & Blair, 2018). Others do it simply out of personal choice (Perkins & Turiel, 2007). While many studies that ask about reasons for nondisclosure specify a target relationship, Rosenfeld (1979) asked undergrads more broadly about why they avoided self-disclosure. There were no gender differences and no single most popular reason, but frequently used reasons included trying to avoid misunderstanding or trying to avoid projecting an unwanted image. The least frequently used reasons were to avoid forming relationships or for physical safety; that is, older adolescents generally did not endorse avoiding disclosure for those reasons.

Differences Between Relationship Types

Similar to other aspects of nondisclosure, most of the research on reasons for nondisclosure focuses on parents. For older adolescents, the most acceptable motives for lying to parents were protecting someone else, wanting the right to make their own decisions, and not wanting to burden the target of disclosure, and the least acceptable motives were to rebel against parents or because their friends did it. More generally, Bakken and Brown (2010) found that decisions on whether and how much to disclose to parents were mostly motivated by pragmatic reasons, such as telling what is needed in order to get permission to go out (regardless of whether it is the truth) and censoring information to avoid punishment. Other considerations included building or maintaining trust, prudential or safety concerns, and developmental concerns (i.e., keeping secrets is justified because of increased maturity). Marshall and colleagues (2005) found that older adolescents also consider additional factors, such as how far away the activity was or if there was a possibility of a safety issue, when deciding whether or not to disclose their activities to parents. Taken together, past research suggests that adolescents keep information from parents primarily out of a desire for autonomy (e.g., making independent decisions) or to avoid negative consequences (e.g., parents getting mad about outside activities).

Little research has touched on reasons for nondisclosure between siblings, friends, and romantic partners. For siblings, Guerrero and Afifi's (1995) sole study cited reasons for avoiding discussing a topic, including relationship protection, unresponsiveness of disclosure target, and social inappropriateness of target. Perkins and Turiel (2007) asked adolescents about justifications for lying or keeping secrets from friends, and top responses included personal choice or concern over their own welfare. Interestingly, the top justification for refusing to lie to friends was maintaining trust (Perkins & Turiel, 2007), but in research on romantic partners, maintaining an intimate relationship is the main reason for self-silencing (Harper et al., 2006).

From the few studies that ask about reasons for nondisclosure in more than one relationship, it is clear that adolescents do give different reasons depending on the relationship. For example, adolescents surveyed by Perkins and Turiel (2007) reported their top justification for lying to parents was “preventing injustice or unjust restrictions to self” (a reason in the moral domain) while their top justification for lying to friends was “personal choice or maintaining privacy” (personal domain), though both reasons were top reasons for both relationships. Within families, adolescents cited protecting the relationship and social inappropriateness of topic or target as a reason for their topic avoidance with parents more than with siblings (Guerrero & Afifi, 1995). Overall, the literature shows that while adolescents have different reasons for nondisclosure in different relationships, there is no consistent pattern due to studies using inconsistent statements for reasons.

Social Domain Differences

Adolescents are motivated by different reasons to keep information from others depending on what the information is about (Smetana & Metzger, 2008). A study on keeping secrets from parents found that issues in the personal domain are usually kept secret because they are deemed to be private information, and issues in the prudential domain are usually kept secret because adolescents fear disapproval or punishment (Smetana et al., 2009). Metzger et al. (2020) provides further support; adolescents kept secrets about drinking alcohol (a prudential domain issue) to avoid punishment, while they kept secrets about what they do online and their peer relationships (both personal domain issues) because they thought that it wasn't their parents' business.

Additionally, Perkins and Turiel (2007) found domain differences in judgments about lying to friends. The majority of older adolescents judged that lying to friends about personal and

prudential issues was acceptable, but only a minority of the younger adolescents agreed. Overall, about half the adolescents judged lying to friends about moral issues as acceptable, and adolescents thought that compared to parents, lying to friends about moral or personal issues was less acceptable, but lying about prudential issues was more acceptable (Perkins & Turiel, 2007). Although there are some domain differences in the acceptability of nondisclosure to friends, the study did not delineate the reasons. Extrapolating from the parental literature, nondisclosure of personal issues due to wanting to maintain privacy would be consistent with social domain theory in that the personal domain by definition consists of private aspects of the self.

Gender Differences

Rosenfeld (1979) noted that male undergraduates used avoidance to maintain control of their image and limit access to their personal information, whereas female undergraduates used avoidance more to protect themselves and their relationships. The reasons for both genders relate to maintaining privacy and protecting the self in different ways, though women additionally consider relationship maintenance as a reason. In younger adolescents, Smetana and colleagues (2009) found that girls were more likely than boys to keep secrets from parents because they consider the information private. These two studies suggest that in general, female adolescents may be more inclined to nondisclosure for reasons broadly relating to privacy or relationship maintenance. Metzger et al. (2020) had similar findings; for keeping secrets from parents about issues in the personal domain, girls were more likely than boys to endorse reasons of preserving the relationship (i.e., not disappointing parents) and personal reasons (i.e., thinking that the issue is none of their business), though boys endorsed the latter reason more when it came to keeping secrets about romantic relationships.

Present Study

As this review has shown, the literature has some clear gaps, especially in nondisclosure between siblings and peers. Some studies operationalize nondisclosure to single strategies, such as lying or concealment. Furthermore, patterns of how and why adolescents don't disclose to close others, even parents, are unclear, such as domain differences in using different strategies. Especially since some forms of nondisclosure have previously been found to be associated with important outcomes during adolescence (Engels et al., 2006), understanding these broader patterns within nondisclosure is crucial. The present study addresses these gaps by surveying adolescents about the variety of strategies they use and reasons they give for not disclosing to their mother, father, sibling, best friend, and romantic partner for topics in all social domains.

The specific research questions and hypotheses for this thesis are as follows:

1. What strategies do adolescents use to avoid disclosing information about themselves?
 - a. How do these strategies differ depending on relationship type?
 - b. How do these strategies differ depending on social domain?
 - c. How do these strategies differ depending on gender?

I hypothesize that adolescents will not use any strategy very frequently, compared to fully or partially disclosing information. However, relatively frequently used strategies should differ by relationship type and thus relationship dynamic and function. Boys will likely use more strategies than girls, in general, and all genders will likely use more nondisclosure strategies for issues in the personal domain compared to other domains. As the literature is unclear about patterns in using specific strategies, I do not make specific predictions about interaction effects.

2. Why do adolescents choose to not disclose information about themselves?
 - a. How do these reasons differ depending on relationship type?
 - b. How do these reasons differ depending on social domain?

c. How do these reasons differ depending on gender?

I hypothesize that the most frequently cited reasons will include protecting privacy, avoiding negative consequences, and maintaining the relationship. For differences between relationship types, past research shows inconsistent patterns; as with strategies, I hypothesize that there will be significant differences in top reasons for not disclosing to different close others. Issues in the personal domain are predicted to be not disclosed to protect their privacy, and girls are predicted to be more likely to choose not to disclose for the same reason.

Method

Participants

Participants were adolescents ($N = 244$, 47.5% female) from a Midwestern college town originally recruited as pairs of siblings for a larger study on communication within the family. Participants' ages ranged from 9 to 16 years ($M = 12.71$, $SD = 1.66$), and 67.6% identified as White and non-Hispanic (10.7% White Hispanic, 16.8% Black/African American, 4.9% American Indian/Alaska Native, 3.7% Asian, 2.9% Hawaiian/Pacific Islander, and 6.1% another race or multi-racial). The median household income was \$70,000-\$84,999, and parents were overall highly educated (over 80% completed at least some college). Most participants reported having a best friend (91%), with 3.6% mixed-gender pairs and 96.4% same-gender pairs. Few participants reported having a romantic partner (10.2%), and all pairs were mixed-gender pairs.

Procedure

This study is part of a larger study taking place over three years with three yearly waves of data collection (Campione-Barr et al., 2021). At Wave 1, participating adolescents came to the research lab with their parents and one younger sibling. In the lab, adolescents and their siblings completed surveys on their frequency of disclosure, nondisclosure, and relationship quality with

close others, problem behavior, depression, and anxiety, among other measures. Parents completed measures asking about their children's disclosure and behavior. Family members also took part in a semi-structured interview about the children's disclosure, and adolescents were recorded having a discussion with each parent and sibling about concerns or issues in their lives. At Wave 2 one year later and Wave 3 two years later, all family members were sent the same survey from Wave 1, to be completed online through Qualtrics.

Only select survey data from the participating adolescent and their younger sibling (from here on collectively called the participants) from the first wave of data collection are analyzed in the present study, as the first wave has the most complete data.

Measures

Disclosure Frequency

To provide a rough measure of nondisclosure frequency, I included a measure of disclosure frequency. Participants reported on how frequently they disclosed on various topics from their close others (mothers, fathers, siblings, best friends, and romantic partners) in a 27-item measure adapted from previous research (Campione-Barr et al., 2015; Smetana et al., 2006). Topics included seven items in the personal domain (e.g., "How I spend my free time"), three items in the moral domain (e.g., "If I lie or don't keep promises to others"), three items in the conventional domain (e.g., "If I curse or use swear words"), seven items in the prudential domain (e.g., "Whether I drink beer, wine, or other alcoholic drinks"), and seven items in the multifaceted domain (e.g., "Whether I have sex or am considering having sex with someone"). Each item was rated on a scale from 1 ("Never tell") to 5 ("Always tell"). Scores were calculated by taking the mean of the ratings for each domain and close other. Higher scores indicate higher

levels of disclosure. Thus, as nondisclosure is the direct opposite, lower scores on this measure should also suggest a higher level of nondisclosure of some form.

Strategies for Nondisclosure

Participants reported how they kept information on various topics from their close others (mothers, fathers, siblings, best friends, and romantic partners) in a 27-item measure. Topics presented were the same as in the “Disclosure Frequency” measure. For each topic, possible strategies were given as a list of checkbox choices, and participants checked all applicable choices for each of their close others. Five strategies were given as choices: 1) Avoid discussing the issue/change the subject, 2) Make up a story or lie to them, 3) Tell him/her only when he/she asks, 4) Partial disclosure, tell them some but not all, and 5) None of the above, I tell them everything. Strategies were coded as 1 if chosen and 0 if not chosen.

Each item appeared to the participants based on their answers to previous survey questions. The list of checkbox choices for each relationship and topic only appeared if the participants responded that the topic was relevant to them (e.g., that they had drunk alcohol before), there was an applicable relationship partner (e.g., they had a romantic partner), and that they disclosed information on that topic some of the time or less for that relationship (i.e., 3 or less on a 1-to-5 scale on the disclosure frequency measure).

Reasons for Nondisclosure

Participants reported why they choose to not disclose on various topics to their close others (mothers, fathers, siblings, best friends, and romantic partners) in a 27-item measure. Topics presented were the same as in the “Disclosure Frequency” measure. For each topic, possible reasons were given as a list of checkbox choices, and participants checked all applicable choices for each of their close others. Seven reasons were given as choices: 1) He/she would not

approve/I would get into trouble, 2) I would feel bad, embarrassed, or ashamed, 3) He/she might think less of me, 4) He/she would not understand/would not be interested/would not listen, 5) It is a private matter and not their business, 6) It does not harm anyone, and 7) I always tell him/her about this. Reasons were coded as 1 if chosen and 0 if not chosen. The conditions for the appearance of item choices were the same as the “Strategies for Nondisclosure” measure.

Results

Preliminary Analyses

Disclosure Frequency

To examine overall levels of disclosure, I conducted a 5 (relationship type) X 5 (social domain) X 2 (gender) mixed-methods ANOVA. There was a main effect of relationship ($F(2.15) = 3.863, p = .03, \eta^2 = .26$) with no interaction effects (See Figure 1). Post-hoc t-tests found that adolescents disclosed more to mothers than fathers ($t(199) = 8.191, p < .001$) and disclosed least to siblings (compared to mothers: $t(236) = 12.046, p < .001$; compared to fathers: $t(205) = 5.047, p < .001$; compared to best friends: $t(218) = 9.401, p < .001$; compared to romantic partners: $t(24) = 3.779, p = .001$). Adolescents also disclosed more to best friends compared to fathers ($t(188) = 4.881, p < .001$), siblings ($t(218) = 9.401, p < .001$), and romantic partners ($t(22) = 3.18, p = .004$). In effect, adolescents disclosed most to mothers, followed by best friends, romantic partners, and fathers, with siblings being the least frequent target of disclosure.

Descriptive Analyses for Nondisclosure

For each topic, I calculated the percentage of participants that chose each strategy or reason to find the most frequently chosen strategies and reasons for each domain and each relationship type. This percentage was calculated by taking the number of participants who chose a specific strategy or reason for each topic question divided by the number of participants who

could have responded to the topic regardless of what strategies or reasons they chose. The denominator will be different for each case, because the number of participants who could have responded to the topic depends on how they answered other measures earlier in the study, as explained in the Measures section.

Overall, few percentages were above 50%, and none were above 60% (See Tables 1 and 2). Due to the low N's for each group, percentages were not further separated by gender. The most frequently used *strategy* for nondisclosure seems to be "telling only when asked," followed by "avoiding or changing the topic." The least frequently used strategy is "lie or make up a story," though adolescents tend to lie more about topics in the moral domain than other domains. The most frequently chosen *reasons* for not disclosing to close others were "it doesn't harm anyone," especially for the personal and multifaceted domains but not for the moral domain, and "it's a private matter." One of the top reasons for keeping information from parents was also "they would not approve/I would get in trouble," especially for the moral and conventional domains.

Main Analyses

Analysis Plan

For each participant, I calculated the proportion of the times they chose each strategy or reason across each group of topics within a social domain, which has been previously shown to be valid for strategy use (Smetana et al., 2009). These proportion scores were calculated separately by relationship type and social domain, so each participant has a total of 25 proportion scores for each of the five strategies and seven reasons. For participants who did not have a calculatable proportion score (e.g., due to not having the relevant relationship partner or responding previously in the survey that they disclosed a great deal about the topic), a proportion

score of 0 was substituted. The reason for this was the assumption that any participant who did not even see the question appear in the survey would have high disclosure/low nondisclosure levels, based on how they answered previous question in the survey.

For examining the first research question about strategies for nondisclosure, I conducted a 4 (relationship type) X 5 (social domain) X 2 (gender) X 2 (birth order) multivariate analysis of variance (MANOVA) with proportion scores for all *strategies* except “none of the above, I tell them everything” as the dependent variables, with domain and relationship type as within-subject predictors, and gender and birth order as between-subject predictors. For examining the second research question about *reasons* for nondisclosure, a second MANOVA model was run with the same predictors but instead included all reasons except “I always tell him/her about this” as dependent variables. Due to the extremely low number of participants with romantic partners, this relationship type was excluded from analyses; the levels of the relationship type predictor included only mothers, fathers, siblings, and best friends. Birth order was included in the models to account for the fact that participants were recruited as sibling pairs, but sibling ordinal status is of less interest to this study. I also ran models with age as a covariate, and if birth order effects were no longer significant with the addition of age, birth order was dropped as a predictor. This was the case for the reasons MANOVA model, but not for strategies.

Strategies for Nondisclosure

A main effect of Domain ($F(16, 3824) = 1.69, p = .04, \eta^2 = .007$) was qualified by two significant three-way interactions of Domain X Gender X Birth order ($F(16, 3824) = 2.51, p = .001, \eta^2 = .01$), which was only significant for the strategy of lying ($F(3.71) = 6.19, p < .001, \eta^2 = .025$), and Domain X Relationship X Birth order ($F(48, 11472) = 1.52, p = .01, \eta^2 = .006$), which was only significant for the strategies of lying ($F(8.54) = 2.25, p = .02, \eta^2 = .009$) and

only telling when asked ($F(10.21) = 1.85, p = .05, \eta^2 = .008$). There was also a significant three-way interaction of Relationship X Gender X Birth order ($F(12, 2148) = 2.30, p = .007, \eta^2 = .013$), which was only significant for the strategy of partial disclosure ($F(2.59) = 4.22, p = .009, \eta^2 = .017$). Note that because participants used each strategy with differing frequency, the scales of the y-axes on the figures in this section are not the same (see Figures 2a to 5b). Post-hoc tests had an alpha level of $p < .005$ due to the number of comparisons.

Lying. For the strategy of lying, there were two three-way interactions: Domain X Gender X Birth order (see Figures 2a and 2b) and Domain X Relationship X Birth order (see Figures 3a and 3b). For the Domain X Gender X Birth order interaction, post-hoc t-tests found that only male older siblings and female younger siblings lie more about information in the personal domain compared to information in the prudential domain (older boys: $t(60) = 3.04, p = .004$; younger girls: $t(54) = 3.49, p < .001$). Female younger siblings also lied more about personal domain information than moral domain ($t(54) = 3.24, p = .002$). For the Domain X Relationship X Birth order interaction, post-hoc t-tests found no significant differences for older siblings. However, younger siblings tend to lie about information in the personal and moral domain compared to information in the prudential domain, but only to family members (mothers: $t_{PE-PR}(121) = 3.08, p = .003, t_{MO-PR}(121) = 3.10, p = .002$; fathers: $t_{PE-PR}(121) = 3.52, p = .001, t_{MO-PR}(121) = 2.95, p = .004$; siblings: $t_{PE-PR}(121) = 3.88, p < .001, t_{MO-PR}(131) = 3.22, p = .002$). Younger siblings also lie about information in the personal domain more than information in the multifaceted domain, but only to their siblings ($t_{PE-MU}(121) = 3.08, p = .003$).

Only telling when asked. For the strategy of only telling when asked, there was one three-way interaction of Domain X Relationship X Birth order (see Figures 4a and 4b). Post-hoc t-tests showed similar patterns for older and younger siblings. Older siblings only disclosed when

asked more for information in the personal and multifaceted domains than the prudential, conventional, and moral domains for family members (mothers: $t_{PE-PR}(121) = 9.00, p < .001$, $t_{PE-CO}(121) = 5.33, p < .001$, $t_{PE-MO}(121) = 5.18, p < .001$, $t_{MU-PR}(121) = 6.71, p < .001$, $t_{MU-CO}(121) = 3.82, p < .001$, $t_{MU-MO}(121) = 3.60, p < .001$; fathers: $t_{PE-PR}(121) = 8.76, p < .001$, $t_{PE-CO}(121) = 6.63, p < .001$, $t_{PE-MO}(121) = 6.01, p < .001$, $t_{MU-PR}(121) = 7.21, p < .001$, $t_{MU-CO}(121) = 5.15, p < .001$, $t_{MU-MO}(121) = 4.69, p < .001$; siblings: $t_{PE-PR}(121) = 2.97, p = .004$, $t_{PE-CO}(121) = 6.83, p < .001$, $t_{PE-MO}(121) = 5.29, p < .001$, $t_{MU-PR}(121) = 3.78, p < .001$, $t_{MU-CO}(121) = 6.42, p < .001$, $t_{MU-MO}(121) = 5.36, p < .001$), though there was no difference with the prudential domain for best friends ($t_{PE-PR}(121) = 2.50, p = .01$, $t_{PE-CO}(121) = 4.70, p < .001$, $t_{PE-MO}(121) = 3.48, p = .001$, $t_{MU-PR}(121) = 2.09, p = .04$, $t_{MU-CO}(121) = 4.03, p < .001$, $t_{MU-MO}(121) = 3.19, p = .002$). Younger siblings also only disclosed when asked more for information in the personal and multifaceted domains than the prudential, conventional, and moral domains for family members (mothers: $t_{PE-PR}(121) = 4.40, p < .001$, $t_{PE-CO}(121) = 3.61, p < .001$, $t_{PE-MO}(121) = 5.22, p < .001$, $t_{MU-PR}(121) = 3.91, p < .001$, $t_{MU-CO}(121) = 2.96, p = .004$, $t_{MU-MO}(121) = 4.16, p < .001$; fathers: $t_{PE-PR}(121) = 4.26, p < .001$, $t_{PE-CO}(121) = 3.94, p < .001$, $t_{PE-MO}(121) = 5.10, p < .001$, $t_{MU-PR}(121) = 3.89, p < .001$, $t_{MU-CO}(121) = 2.14, p = .002$, $t_{MU-MO}(121) = 4.66, p < .001$; siblings: $t_{PE-PR}(121) = 5.02, p = .004$, $t_{PE-CO}(121) = 6.85, p < .001$, $t_{PE-MO}(121) = 8.41, p < .001$, $t_{MU-PR}(121) = 2.89, p = .005$, $t_{MU-CO}(121) = 4.11, p < .001$, $t_{MU-MO}(121) = 5.49, p < .001$). Furthermore, similar to their older siblings, there was no difference with the prudential domain for best friends ($t_{PE-PR}(121) = 2.58, p = .01$, $t_{PE-CO}(121) = 4.99, p < .001$, $t_{PE-MO}(121) = 6.73, p < .001$, $t_{MU-PR}(121) = 1.45, p = .15$, $t_{MU-CO}(121) = 3.33, p = .001$, $t_{MU-MO}(121) = 3.45, p = .001$), with the exception that younger siblings only disclosed when asked more for prudential information than moral ($t(121) = 3.33, p = .001$).

Partial disclosure. For the strategy of partial disclosure, there was one three-way interaction of Relationship X Gender X Birth order (see Figures 5a and 5b). Post-hoc t-tests found that female older siblings partially disclose more to mothers than fathers ($t(60) = 3.90, p < .001$) or best friends ($t(60) = 3.96, p < .001$), and they also partially disclose more to siblings than best friends ($t(60) = 4.71, p < .001$). Male younger siblings partially disclose more to siblings than mothers ($t(66) = 2.85, p = .006$) or fathers ($t(66) = 3.24, p = .002$).

Summary. Older brothers and younger sisters lie more about information in the personal domain compared to the prudential and moral domains. Younger siblings in general tend to lie more to their family members about information in the personal and moral domains compared to the prudential and multifaceted domains. Regardless of gender, both older and younger siblings tend to use the strategy of only disclosing information when asked in the personal and multifaceted domains compared to other domains. Older sisters tend to use partial disclosure most to mothers and siblings, but younger brothers partially disclose more to their siblings than their parents.

Reasons for Nondisclosure

A main effect of Relationship ($F(18, 2160) = 23.40, p < .001, \eta^2 = .028$) was qualified by two two-way interactions of Relationship X Gender ($F(18, 2160) = 1.80, p = .02, \eta^2 = .015$), which was only significant for the reason of “I would feel bad, embarrassed, or ashamed” ($F(2.59) = 5.71, p = .001, \eta^2 = .023$), and Relationship X Age ($F(18, 2160) = 4.70, p < .001, \eta^2 = .038$), which was significant for the reasons of “They would not approve/I would get in trouble” ($F(2) = 9.71, p < .001, \eta^2 = .039$), “I would feel bad, embarrassed, or ashamed” ($F(2.59) = 7.09, p < .001, \eta^2 = .029$), “It’s private” ($F(2.26) = 8.75, p < .001, \eta^2 = .035$), and “It doesn’t harm anyone” ($F(2.51) = 6.44, p = .001, \eta^2 = .026$). There was also a significant two-way

interaction of Domain X Age ($F(24, 3848) = 2.10, p = .001, \eta^2 = .013$), which was only significant for the reason of “It doesn’t harm anyone” ($F(3.28) = 4.52, p = .003, \eta^2 = .018$). Note that because participants endorsed each reason at different levels, the scales of the y-axes on the figures in this section are not the same (see Figures 6 to 11). Post-hoc tests had an alpha level of $p < .005$ due to the number of comparisons.

They would not approve/I would get in trouble. For the reason of “they wouldn’t approve,” there was one two-way interaction of Relationship X Age (see Figure 6). Post-hoc regressions found that age positively predicted keeping information from mothers because they wouldn’t approve ($\beta = .221, p = .001$), but not for any other relationships.

I would feel bad, embarrassed, or ashamed. For the reason of “I would feel bad,” there were two two-way interactions: Relationship X Age (see Figure 7) and Relationship X Gender (see Figure 8). For the Relationship X Age interaction, post-hoc regressions found that age positively predicted keeping information from mothers because the adolescent would feel bad or embarrassed ($\beta = .215, p = .001$), but not for any other relationships. For the Relationship X Gender interaction, post-hoc t-tests found that girls chose this reason more than boys, but only for keeping information from mothers ($t(242) = 3.546, p < .001$).

It’s private. For the reason of “it’s private,” there was one two-way interaction of Relationship X Age (see Figure 9). Post-hoc regressions found that age positively predicted keeping information from family members because it’s a private matter (mothers: $\beta = .226, p < .001$; fathers: $\beta = .215, p = .001$; siblings: $\beta = .231, p < .001$), but not for best friends.

It doesn’t harm anyone. For the reason of “it doesn’t do any harm,” there were two two-way interactions: Relationship X Age (see Figure 10) and Domain X Age (see Figure 11). For the Relationship X Age interaction, post-hoc regressions found that age positively predicted

keeping information from family members because it doesn't do any harm (mothers: $\beta = .274$, $p < .001$; fathers: $\beta = .185$, $p = .004$; siblings: $\beta = .206$, $p = .001$), but not for best friends. For the Domain X Age interaction, post-hoc regressions found that age positively predicted keeping information in the multifaceted ($\beta = .209$, $p = .001$) and conventional ($\beta = .178$, $p = .005$) domains because it doesn't do any harm, but not for other domains.

Summary. Overall adolescents keep information from family members, especially mothers, for more reasons as they get older, including for reasons of avoiding disapproval, feeling bad or embarrassed, maintaining privacy, and thinking that their actions don't do any harm. Adolescents also increasingly chose the reason of "it doesn't harm anyone" as they got older for keeping information in the multifaceted and conventional domains secret. Lastly, girls tended to keep information from mothers because they would feel bad, more so than boys.

Discussion

The present study examined adolescents' nondisclosure within multiple close relationships, specifically the strategies that adolescents use to keep information from their parents, siblings, and best friends and the reasons they have for doing so. Broadly, adolescents disclose to siblings the least and mothers the most, suggesting that siblings are the relationship partner adolescents keep information from most frequently. Further analyses explained below show greater complexity in how and why adolescents manage information with different relationship partners and how it also depends on type of information (social domain) and gender.

Strategies for Nondisclosure

In general, adolescents did not use any one strategy very frequently based on the descriptive analyses. The percentages of strategy use were, with few exceptions, below 50%, and the majority were below 30%. Participants included in these analyses had previously reported

that they did not disclose these pieces of information frequently, implying that it is common for them to use more than one strategy or different strategies depending on what information they were hiding and from whom. The most frequently used strategy was not partial disclosure as I expected, but “telling only when asked”, followed by “avoiding the topic or changing the subject.” Consistent with previous research (Desmond, 2019; Jensen et al., 2004; Smetana et al., 2010; Smetana et al., 2009), adolescents did choose lying as a strategy at times, but the frequency was noticeably lower than other strategies, especially for personal or multifaceted domain topics. These patterns suggest that adolescents are more often lying by omission, or simply keeping quiet about information that they would rather not share. Additionally, because all strategies were listed together in the survey, it is likely that adolescents differentiated “lying by omission” strategies such as avoiding the topic from “lying” because lies of omission do not involve telling a falsehood.

As suggested by descriptive results, several notable patterns for strategy use emerged from the main analyses, where adolescents’ use of nondisclosure strategies depended on the relationship partner and the social domain of the information, in combination with gender and birth order. In support of hypotheses, at least for the strategies of lying and only telling when asked, the personal domain was always the domain with the most frequent strategy use when it significantly differed from other domains. This is interesting when placed within the broader disclosure literature, because previous research showed that disclosure is also higher for issues in the personal domain compared to moral and conventional issues (Campione-Barr et al., 2021). However, theoretically, personal issues are outside social regulation or authority, so adolescents may particularly differ in terms of who they are willing to share that information with. It may be that the specific strategies of lying and only telling when asked, along with the specific context

such as relationship, gender, and birth order, are more favored among adolescents for personal information. For example, with parents, younger siblings might be choosing lying over other strategies for personal information because they cannot use the other strategies. If parents are consistently asking for information over the dinner table, choosing a strategy like avoiding the topic may lead to arguments about keeping secrets, and adolescents lie to maintain the peace. Indeed, upon examining other strategies, domain differences seem to vary by strategy; for the strategy of avoiding the topic, moral and conventional domain topics have the highest strategy use. This would be consistent with both previous research (Campione-Barr et al., 2021) and social domain theory (Smetana 2006; Turiel, 2002), because these domains have social and personal repercussions.

Domain differences in the strategies of lying and only telling when asked further depends on the relationship, as expected, with differences between family members (i.e., mothers, fathers, and siblings) and best friends. These findings suggest how close others can play different roles in how adolescents share and hide information, and birth order also appears to be important. Younger siblings only showed a domain difference in lying to family members, to whom they lied more about personal information; they seem to lie to best friends about information in all domains equally and rarely. For younger siblings who tend to be in close contact with family members more often and haven't quite gained the independence afforded to older siblings, there may be a more pressing need to try to form a bubble of privacy around themselves, leading to greater use of nondisclosure strategies such as lying. The difference may not be as apparent with friends because adolescents generally don't try to exert independence from them, and in fact begin to spend more time with them starting in early adolescence (Lam et al., 2014). Thus, adolescents do not need to differentiate what kind of information they lie about, and all lying is

at a low level regardless. Additionally, adolescents used both strategies less for prudential domain information (i.e., potentially risky behaviors) than personal domain information, but only for family members. For parents, adolescents may use fewer strategies due to their beliefs about parental authority over prudential issues, especially for younger adolescents (Campione-Barr et al., 2020). The difference is less apparent with siblings for “only telling when asked” (see Figures 4a and 4b) and may reflect the relatively lesser authority that siblings have on each other. However, younger siblings still lie the least about prudential information to their older siblings, reflecting the sibling hierarchy.

Lastly, for the strategies of partial disclosure and lying, interesting patterns were found with gender, birth order, relationship, and domain. Older sisters partially disclosed most to mothers and siblings, but younger brothers partially disclosed more to siblings than parents. The specific finding that older sisters partially disclose more to mothers is in line with findings of Tasopoulos-Chan and colleagues (2009). To look at these results from another angle, it is also not surprising that the female siblings are partially disclosing more to mothers, while the male siblings are partially disclosing to siblings more than parents. Disclosure has been found to be highest (and avoidance lowest) within female-female pairings within the family (e.g., mother-daughter pairs; Guerrero & Afifi, 1995; Smetana et al., 2006), and partial disclosure is still disclosing somewhat, albeit while also hiding some details about the information. On the other hand, only older brothers and younger sisters lied more about issues in the personal domain than issues in the prudential and moral domains. As previously mentioned, younger siblings may be especially motivated to lie about their personal matters to family to create more privacy for themselves, and this may be true as well for older brothers as well. However, there were no relationship differences for older siblings in lying, suggesting that older brothers are lying to

everyone more about their personal matters. This is in line with previous studies that found both higher levels of lying with boys (Tasopoulos-Chan et al., 2009) and more secret-keeping about personal domain issues (Villalobos Solis et al., 2015).

Reasons for Nondisclosure

In general, the most frequently cited reasons for keeping information from others included protecting personal privacy and avoiding others' disapproval or punishment, which were consistent with predictions and previous research on disclosure and lying to parents (Darling et al., 2006; Fletcher & Blair, 2018; Smetana, et al., 2009). Descriptive analyses also showed patterns of differences in relationships, which are supported in later analyses; for example, for the reason of avoiding disapproval or getting in trouble, percentages are higher for parents in all domains than for other relationships. However, contrary to predictions, another common reason that adolescents gave for keeping information hidden was that the secret doesn't harm anyone, though there is a noticeable dip in percentages of adolescents choosing this reason for the moral domain, which concerns harm to others (Smetana, 2006; Turiel, 2002).

Further analyses showed that for the reason of "it doesn't harm anyone," information in the multifaceted and conventional domains were increasingly seen as not harmful to be kept secret as adolescents got older. For the conventional domain at least, these results are consistent with social domain theory (Smetana, 2006; Turiel, 2002); the conventional domain concerns social norms such as using or refraining from using curse words, which older adolescents increasingly do and get into less trouble for (Jay et al., 2006). It is also more acceptable for older adolescents and emerging adults to flout some social conventions that younger adolescents abide by because older adolescents are seen as being more responsible for themselves (Smetana, 2010), which may explain why older adolescents reason that hiding information in the conventional

domain doesn't harm anyone. Information in both the multifaceted and personal domains showed upward trajectories in being kept secret for the reason of “it doesn't harm anyone” as adolescents aged, though only the multifaceted domain had a statistically significant increase. Nevertheless, both domains are clearly above the other domains (see Figure 11), possibly also reflecting the increased autonomy of older adolescents, especially for maintaining control over their private information (Smetana, 2010).

As expected, there were significant relationship differences in reasons for nondisclosure, and similar to social domain, these differences changed with age. For the reasons of avoiding disapproval and feeling bad, participants increasingly chose these reasons as they got older, but only for mothers. For the reasons of maintaining privacy and not harming anyone, participants also increasingly chose these reasons as they got older, but only for family members, not best friends. It is clear that adolescents are endorsing more reasons as they get older and gain more independence from their parents. This is consistent with previous findings that disclosure to family members (including siblings) also decreases with age (Campione-Barr et al., 2021); it follows that adolescents would then have more reason to keep information secret out of a desire for greater autonomy (Smetana, 2006; Smetana, 2010).

Contrary to expectations, girls were not more likely to choose reasons of privacy. Instead, girls chose the reason of feeling bad, embarrassed, or ashamed more than boys, but only for keeping information from mothers. This could stem from the close relationship that daughters and mothers typically share within the family unit, where daughters disclose most to mothers (Smetana et al., 2006). When girls keep information from their mothers, who they usually share information with, feelings of shame or guilt may arise. Furthermore, adolescents may hide information due to feeling bad or embarrassed about their actions, perhaps in the sense that

they've let their close others down. This effect may be most apparent within a mother-daughter relationship because they share the closest relationship of any parent-child gender combination (Youniss & Smollar, 1985; Smetana et al., 2006).

Limitations and Future Directions

Though this study contributes important findings on how and why adolescents keep information from their close others, it is not without limitations. First, the generalizability of the findings is limited, especially across culture, gender, and sexual orientation. All participants identified as cisgender while participating in the first wave of the study, and all romantic partners were part of seemingly heterosexual relationships. This constrained sample is relevant because minority gender or sexual orientation identities are common topics that adolescents might keep from one or more of their family members or friends (e.g., due to fear of rejection; Willoughby et al., 2008). Even romantic partners may be kept in the dark about developing or existing identities, especially if the relationship is new; existing research shows that homosexual young adults do keep more secrets within romantic relationships than their heterosexual peers (Easterling et al., 2012). Furthermore, the study was conducted in a college town in the Midwest US, and most of the families included were white, high-income families. As previous studies have shown, there are differences in information management within parent-child and peer relationships across culture, ethnicity, and SES (e.g., Bakken & Brown, 2010; Kito, 2005; Smetana et al., 2010). The present study could not include tests of these differences in nondisclosure due to the relatively small sample size of non-white or low-income participants, so future studies should include a more intentionally diverse sample to better assess patterns across multiple relationships at once.

A second limitation is the exclusion of romantic partners from the main analyses due to the low number of participants who were in romantic relationships at the time they took the survey. Part of the reason for this is likely because of the age range of the participants. The youngest participants were only nine years old (none of whom were in romantic relationships), and the mean age was under 13, so it is not surprising that most do not have a romantic partner. A subsequent study would include older participants for a wider age range, so that more of the sample are likely to have romantic partners. Along the same lines, there were several items in the measure that did not apply to many of the participants, such as drinking alcohol or having sex, due to the young age range. A wider age range that includes participants of legal drinking age would also increase the variability of the data on how and why adolescents keep information hidden about these topics.

Lastly, it is important to extend these results to investigate how nondisclosure affects individual adjustment and relationship quality, particularly in the context of a network of relationships. Recent work by Slepian (2021) on the process of keeping secrets redefines secrecy based on *intention*, not just active concealment, providing two broad contexts where secret-related thoughts might arise. One is during social interactions, where the cognitive effort of keeping information hidden can take away from the interaction and be detrimental to relationship quality. The other context is outside of social interaction where the secret keeper doesn't need to take action to keep the information hidden, like thinking about the secret while mind-wandering. Engaging with the thoughts can lead to rumination or other coping behaviors that affect adjustment. Indeed, previous work has shown links between keeping secrets from parents and various negative outcomes, such as lower relationship quality, depressive symptoms, and problem behavior (Engels et al., 2006; Frijns & Finkenauer, 2009). By extension, keeping secrets

from multiple close others may have different implications for adjustment compared to keeping secrets from just one person, and this can also depend on which person someone is keeping secrets from and what the secret is about. For example, the cognitive effort of keeping a secret from a parent, who an adolescent presumably sees every day, is likely greater than the effort of keeping a secret from an online friend. Additionally, there may be spillover effects, where the effort of keeping a secret from one or a few close others is detrimental to other or all of an adolescent's social relationships.

In conclusion, this study provides an important base for examining patterns of nondisclosure across multiple close relationships and social domains. The strategies that adolescents use to hide information depends on what kind of information they are keeping secret and who exactly they are keeping the information from. Similarly, the reasons that adolescents give for why they choose not to disclose certain information also depends on the type of information and their relationship partner, in addition to age. These differences can all have implications for future adjustment and relationship quality within adolescents' close social network.

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Table 1. Average percentages and N's of participants using each strategy by relationship type and social domain.

Avoid topic or change the subject					
	Relationship				
Domain	Mother	Father	Sibling	Best Friend	Romantic Partner
Personal	28.60	29.16	24.33	21.23	22.64
Prudential	27.54	27.16	25.88	18.35	11.76
Moral	45.90	46.22	41.67	42.22	14.29
Conventional	42.86	47.18	37.72	34.41	30.77
Multifaceted	23.94	26.67	20.90	12.98	7.69
Lie or make up a story					
	Mother	Father	Sibling	Best Friend	Romantic Partner
Personal	9.46	9.12	8.56	4.35	5.66
Prudential	17.39	14.81	5.88	6.42	11.76
Moral	19.67	20.17	15.97	12.22	21.43
Conventional	12.34	13.38	10.78	4.30	0
Multifaceted	8.88	10.33	7.46	1.92	10.26
Tell only when asked					
	Mother	Father	Sibling	Best Friend	Romantic Partner
Personal	47.10	48.66	48.40	46.55	33.96
Prudential	42.03	38.27	41.76	44.95	58.82
Moral	41.80	42.86	40.97	36.67	42.86
Conventional	39.61	38.73	36.53	35.48	30.77
Multifaceted	52.90	53.67	54.98	50.00	43.59
Partial disclosure					
	Mother	Father	Sibling	Best Friend	Romantic Partner
Personal	26.45	24.33	20.72	26.85	32.08
Prudential	17.39	14.81	26.47	27.52	23.53
Moral	25.41	22.69	19.44	18.89	28.57
Conventional	20.78	21.83	21.56	13.98	23.08
Multifaceted	26.64	23.00	25.62	23.56	20.51
Average N's					
	Mother	Father	Sibling	Best Friend	Romantic Partner
Personal	66	80	107	56	8
Prudential	10	12	24	16	2
Moral	41	40	48	30	5
Conventional	51	47	56	31	4
Multifaceted	37	43	57	30	6

Table 2. Average percentages and N's of participants endorsing each reason by relationship type and social domain.

They would not approve/I would get into trouble					
	Relationship				
Domain	Mother	Father	Sibling	Best Friend	Romantic Partner
Personal	10.75	11.09	2.67	0.51	5.66
Prudential	30.43	24.69	7.06	6.42	5.88
Moral	40.16	36.97	10.42	6.67	0
Conventional	52.60	48.59	11.98	5.38	30.77
Multifaceted	20.08	19.00	4.98	0.96	0
I would feel bad, embarrassed, or ashamed					
	Mother	Father	Sibling	Best Friend	Romantic Partner
Personal	15.91	14.85	8.96	8.18	11.32
Prudential	23.19	18.52	13.53	14.68	23.53
Moral	38.52	36.13	22.92	36.67	14.29
Conventional	36.36	37.32	20.36	24.73	15.38
Multifaceted	10.04	8.33	6.72	4.33	5.13
They might think less of me					
	Mother	Father	Sibling	Best Friend	Romantic Partner
Personal	6.88	7.33	7.22	7.93	9.43
Prudential	21.74	18.52	11.76	6.42	17.65
Moral	36.07	34.45	31.25	32.22	21.43
Conventional	24.68	24.65	18.56	16.13	30.77
Multifaceted	9.65	9.00	7.21	4.33	0
They would not understand/would not be interested/would not listen					
	Mother	Father	Sibling	Best Friend	Romantic Partner
Personal	20.86	27.01	30.61	13.81	15.09
Prudential	14.49	13.58	26.47	18.35	5.88
Moral	12.30	17.65	22.22	11.11	7.14
Conventional	14.29	14.79	22.75	11.83	7.69
Multifaceted	22.78	30.67	31.34	17.79	12.82
It is a private matter and not their business					
	Mother	Father	Sibling	Best Friend	Romantic Partner
Personal	33.12	31.48	36.10	28.90	22.64
Prudential	15.94	14.81	31.18	30.28	29.41
Moral	27.87	28.57	43.06	21.11	35.71
Conventional	12.99	11.27	29.94	24.73	23.08
Multifaceted	22.78	21.67	34.08	23.08	20.51
It does not harm anyone					
	Mother	Father	Sibling	Best Friend	Romantic Partner
Personal	44.73	40.79	37.17	39.13	22.64
Prudential	20.29	23.46	30.00	28.44	35.29
Moral	4.92	5.88	8.33	7.78	21.43
Conventional	14.29	17.61	22.16	23.66	7.69
Multifaceted	51.74	47.00	44.78	48.56	48.72

Average N's	Mother	Father	Sibling	Best Friend	Romantic Partner
Personal	66	80	107	56	8
Prudential	10	12	24	16	2
Moral	41	40	48	30	5
Conventional	51	47	56	31	4
Multifaceted	37	43	57	30	6

Figure 1. Main effect of relationship type on disclosure frequency.

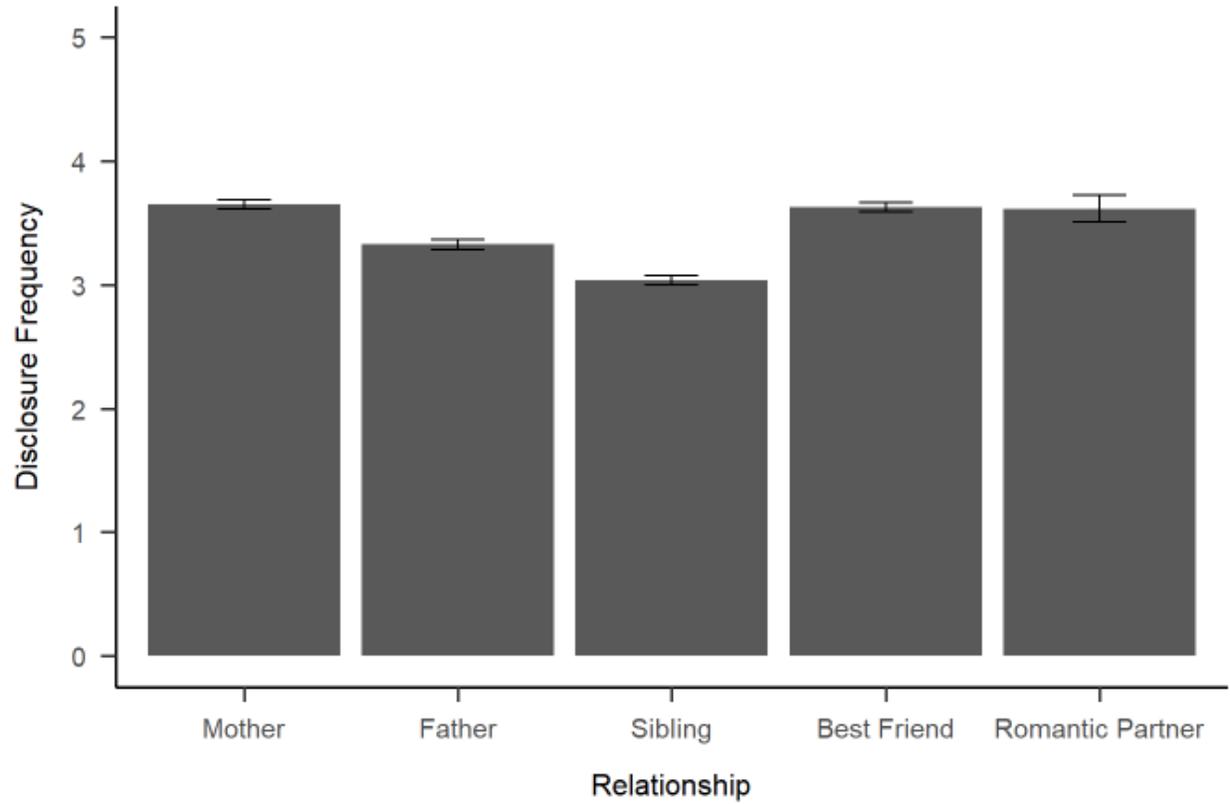


Figure 2a. Domain X Gender X Birth order interaction for older siblings' use of lying

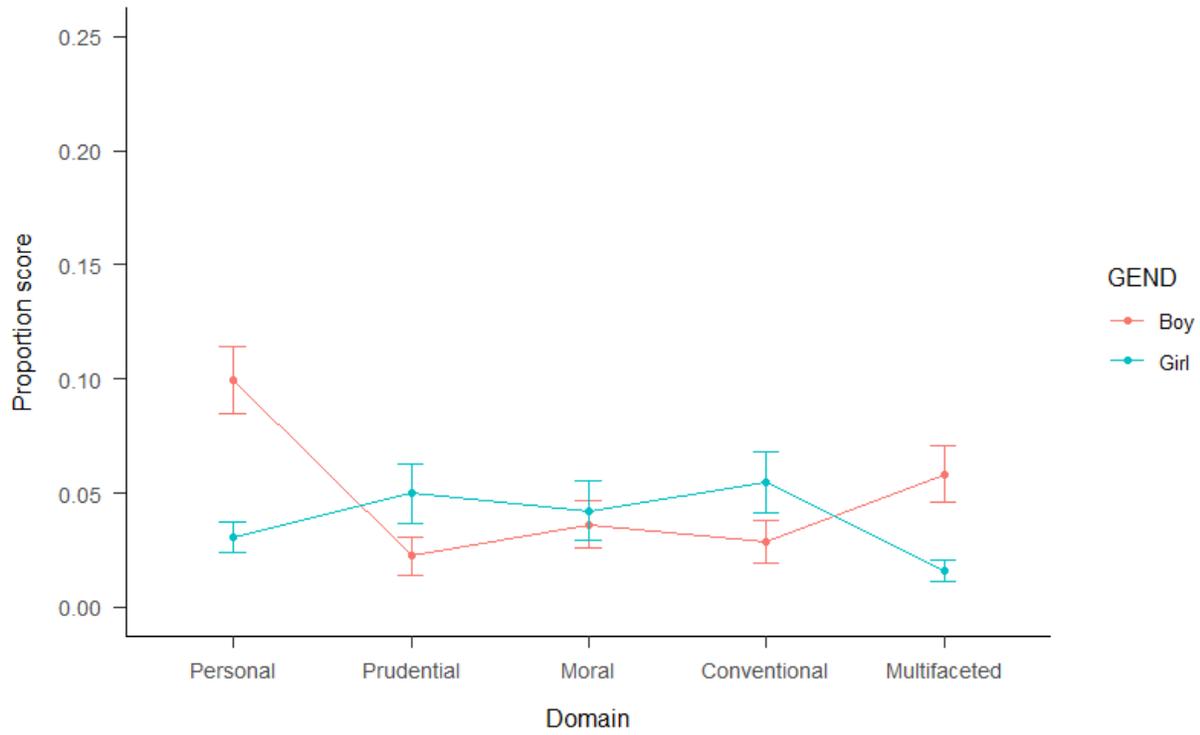
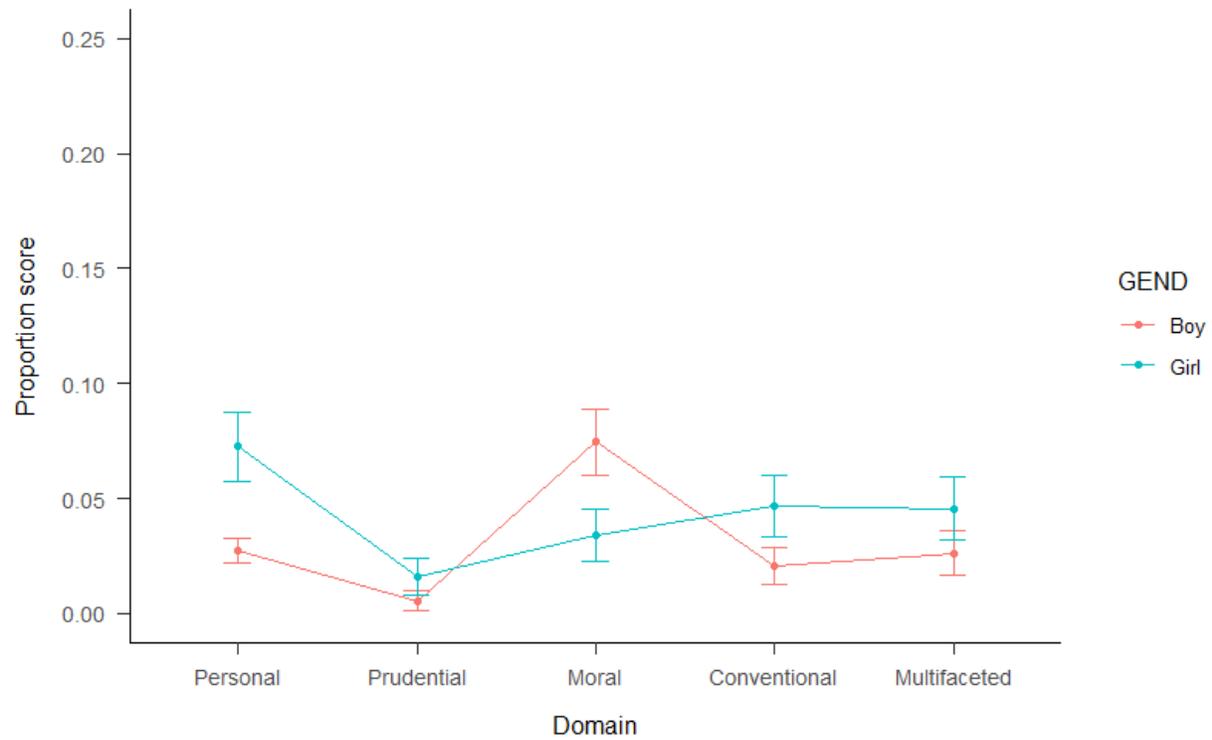


Figure 2b. Domain X Gender X Birth order interaction for younger siblings' use of lying



Note. The y-axis scale is 0 – 0.25 due to the low frequency of use for this strategy.

Figure 3a. Domain X Relationship X Birth order interaction for older siblings' use of lying.

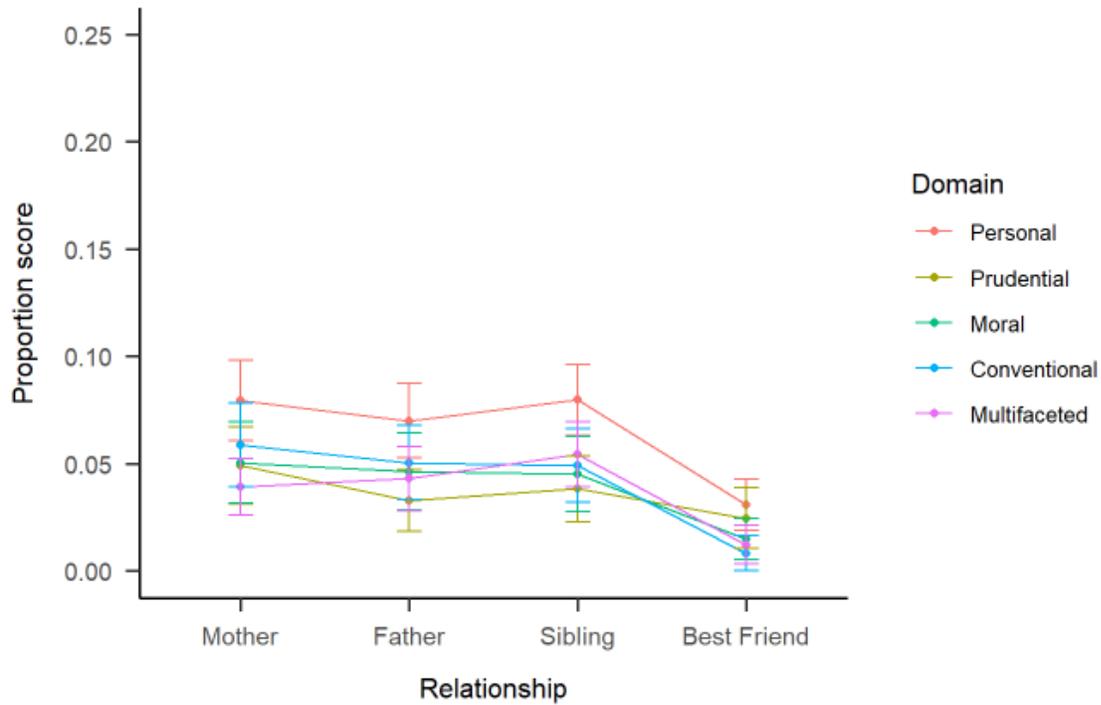
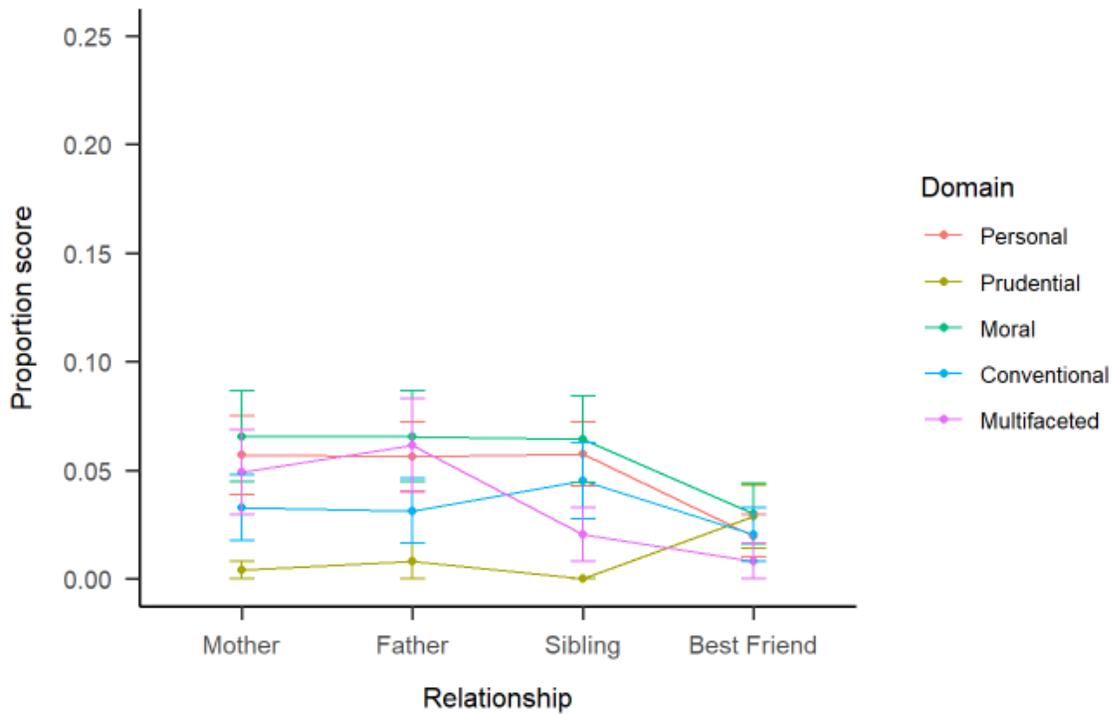


Figure 3b. Domain X Relationship X Birth order interaction for younger siblings' use of lying.



Note. The y-axis scale is 0 – 0.25 due to the low frequency of use for this strategy.

Figure 4a. Domain X Relationship X Birth order interaction for older siblings' use of only telling when asked.

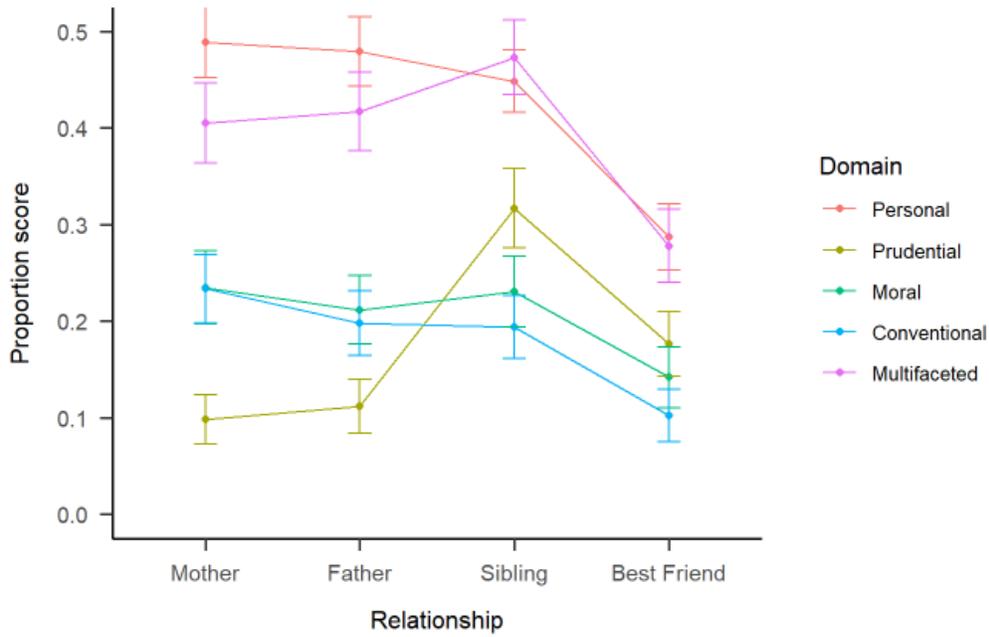
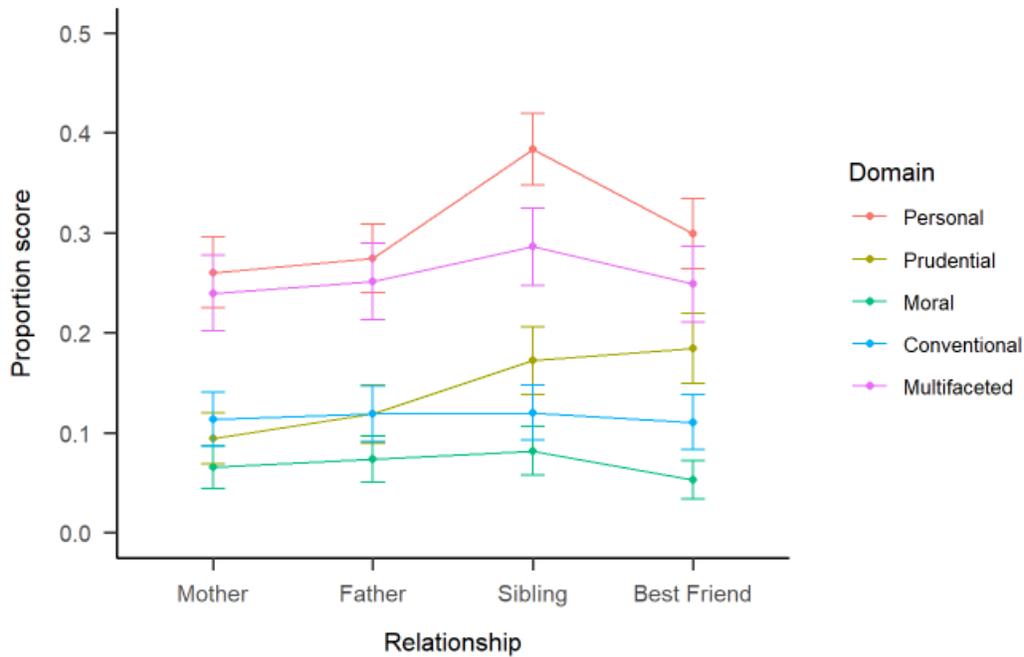


Figure 4b. Domain X Relationship X Birth order interaction for younger siblings' use of only telling when asked.



Note. The y-axis scale is 0 – 0.5 due to the relatively higher frequency of use for this strategy.

Figure 5a. Relationship X Gender X Birth order interaction for older siblings' use of partial disclosure.

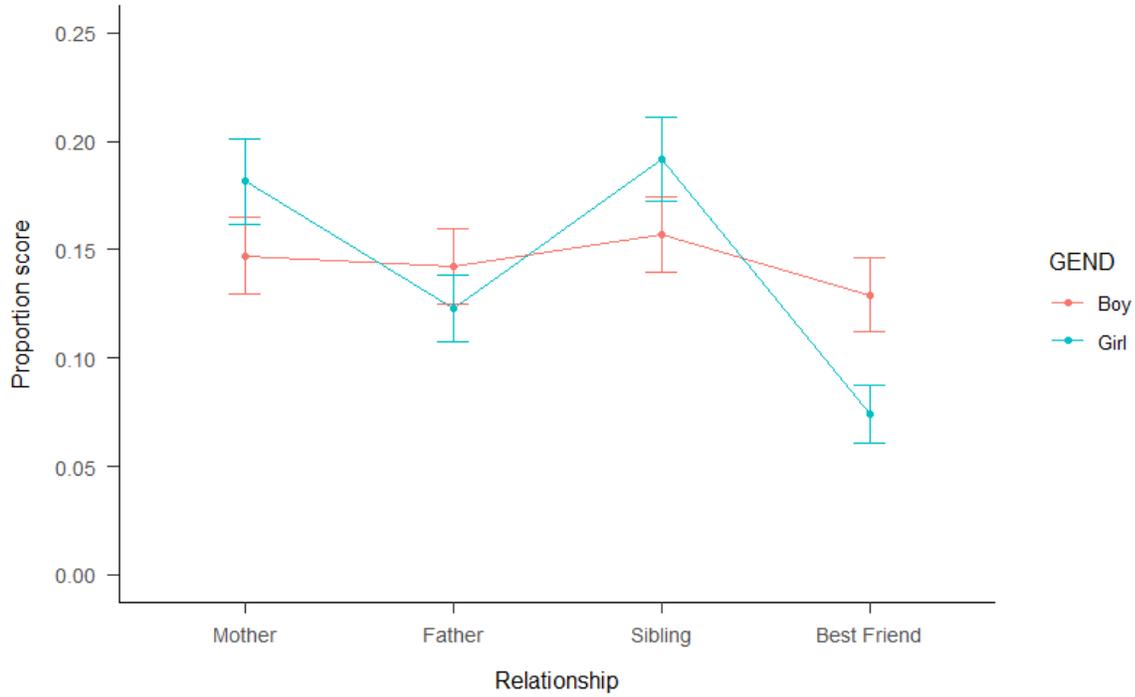
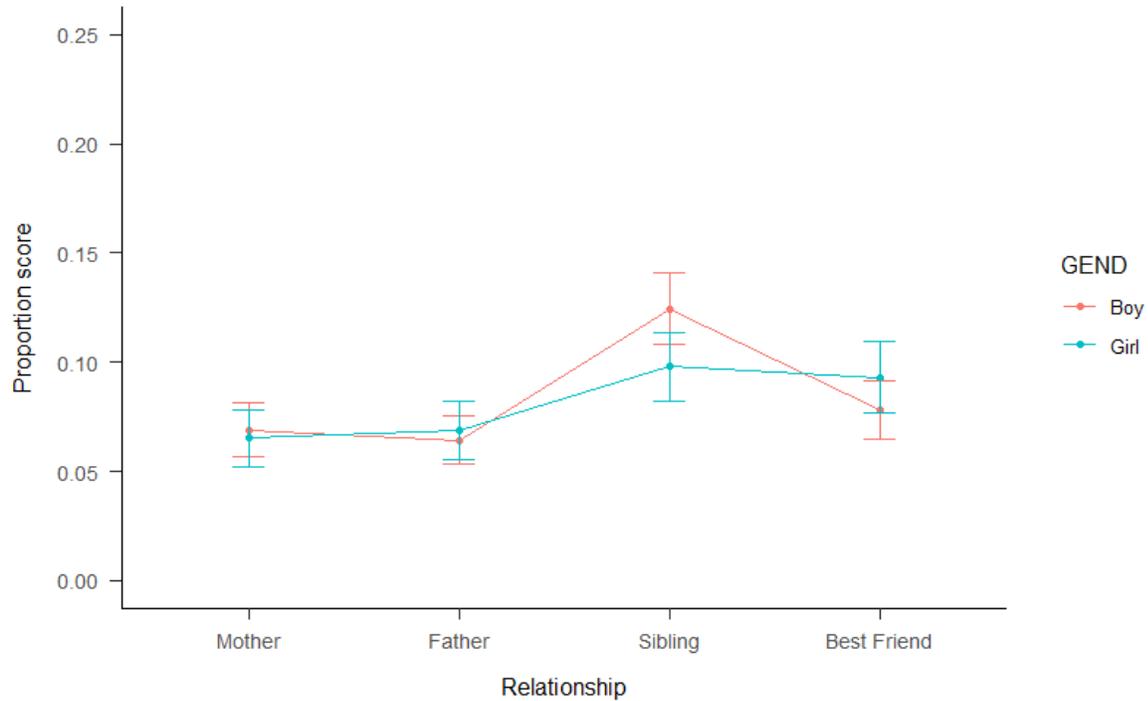
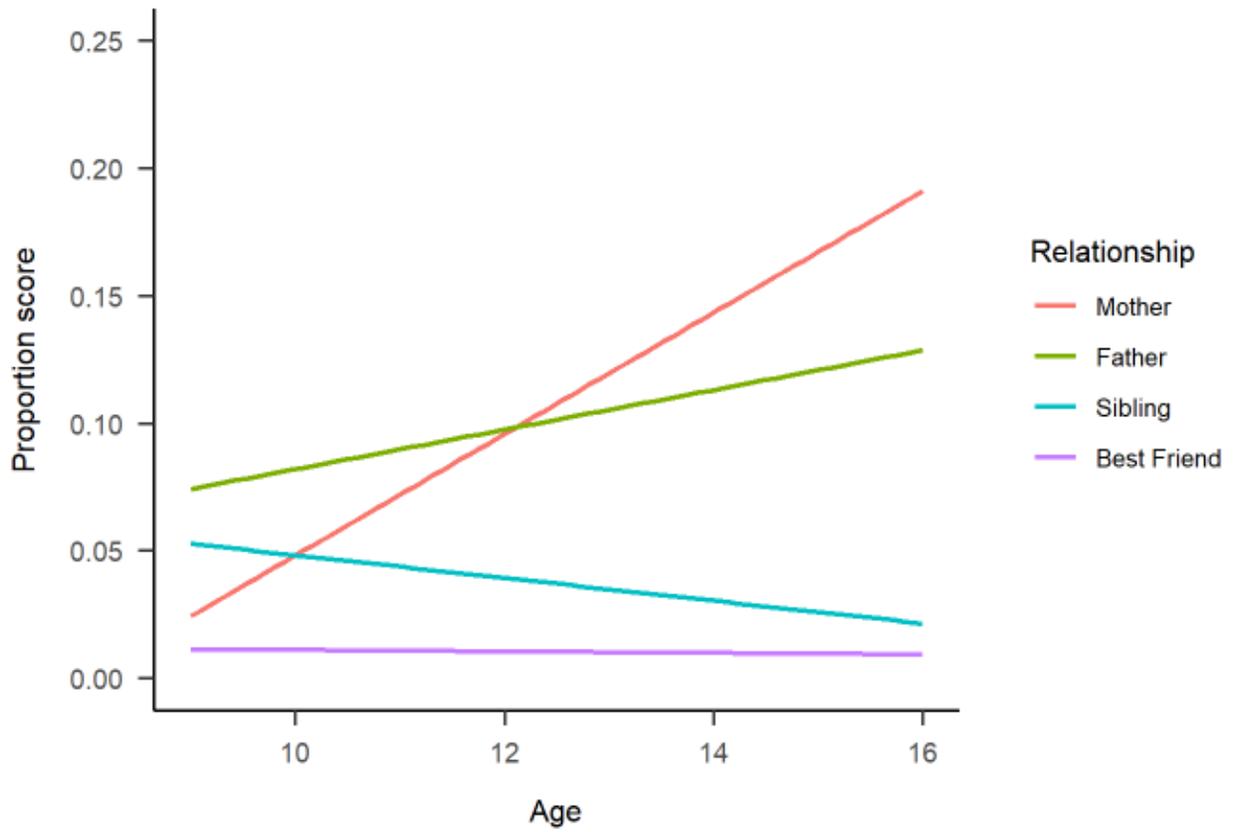


Figure 5b. Relationship X Gender X Birth order interaction for younger siblings' use of partial disclosure.



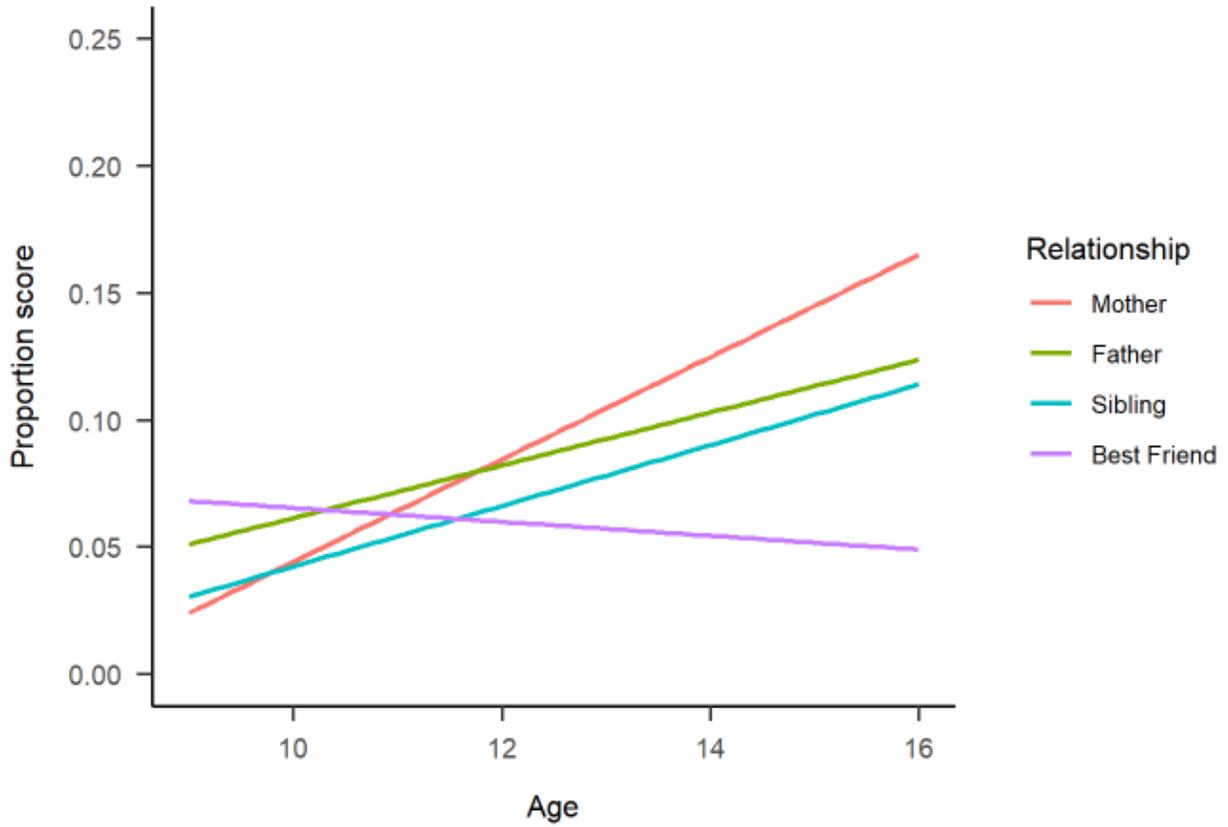
Note. The y-axis scale is 0 – 0.25 due to the low frequency of use for this strategy.

Figure 6. Relationship X Age interaction for reason “They would not approve”



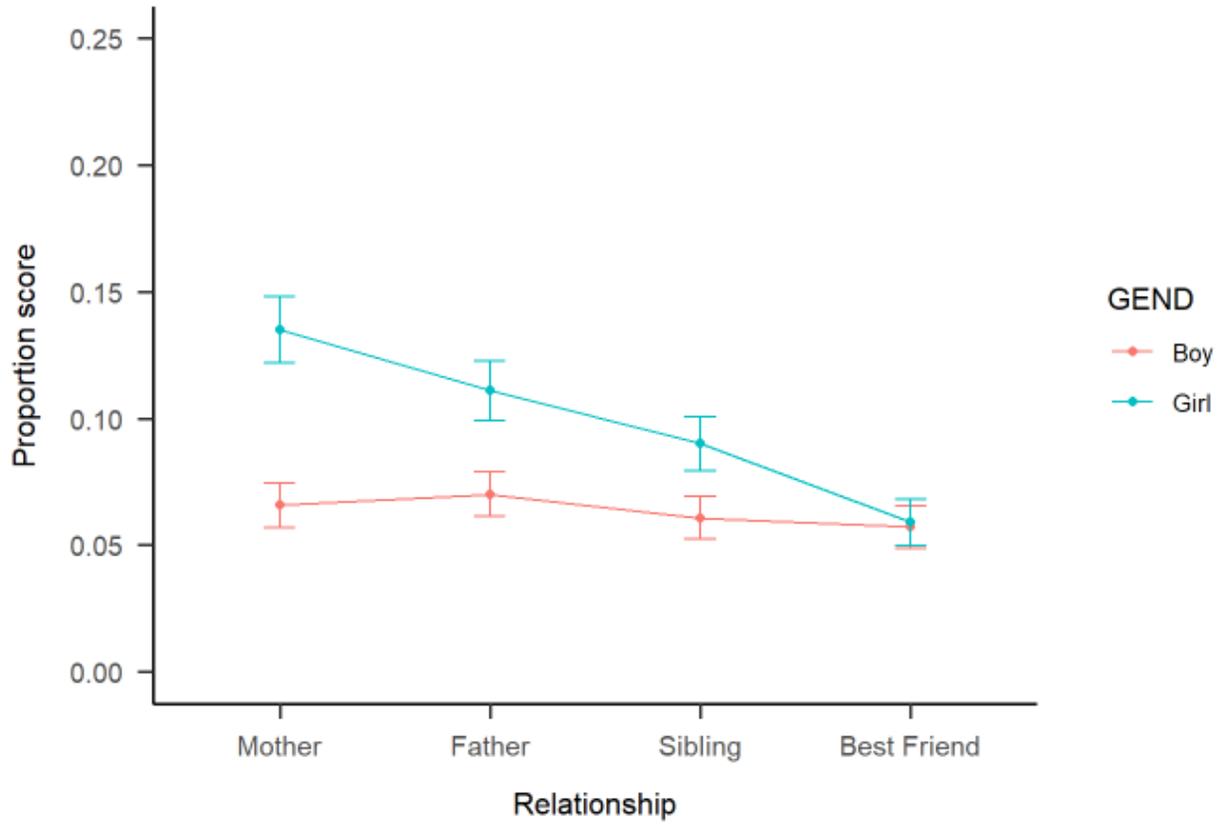
Note. The y-axis scale is 0 – 0.25 due to the low frequency of adolescents endorsing this reason.

Figure 7. Relationship X Age interaction for reason “I would feel bad”



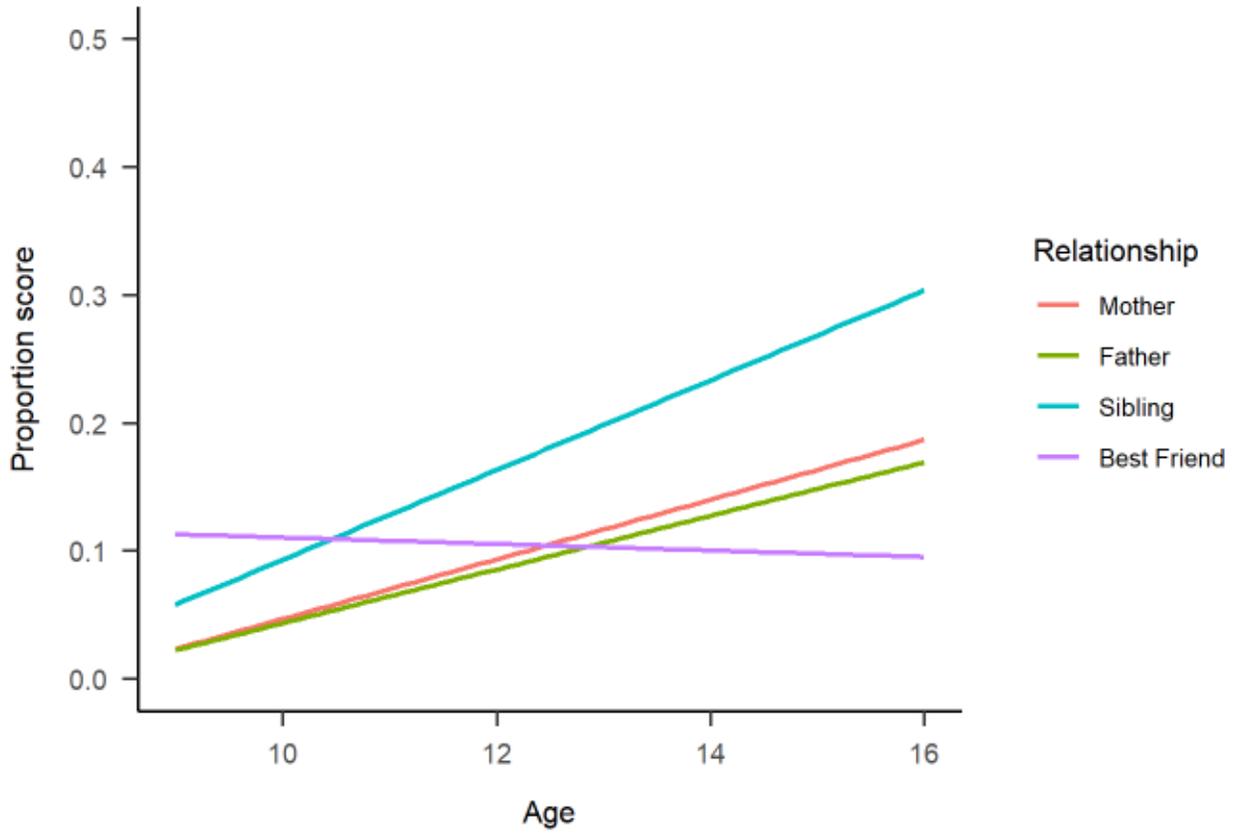
Note. The y-axis scale is 0 – 0.25 due to the low frequency of adolescents endorsing this reason.

Figure 8. Relationship X Gender interaction for reason “I would feel bad”



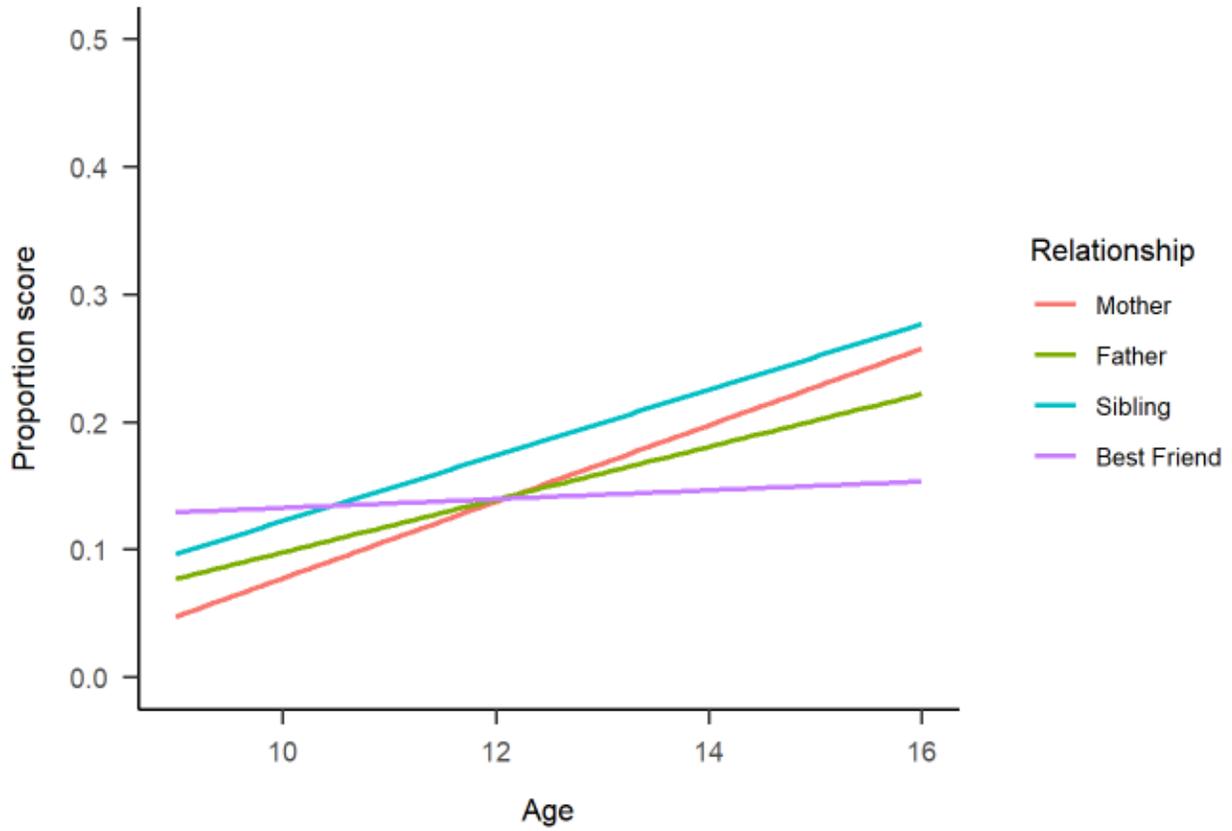
Note. The y-axis scale is 0 – 0.25 due to the low frequency of adolescents endorsing this reason.

Figure 9. Relationship X Age interaction for reason “It’s private”



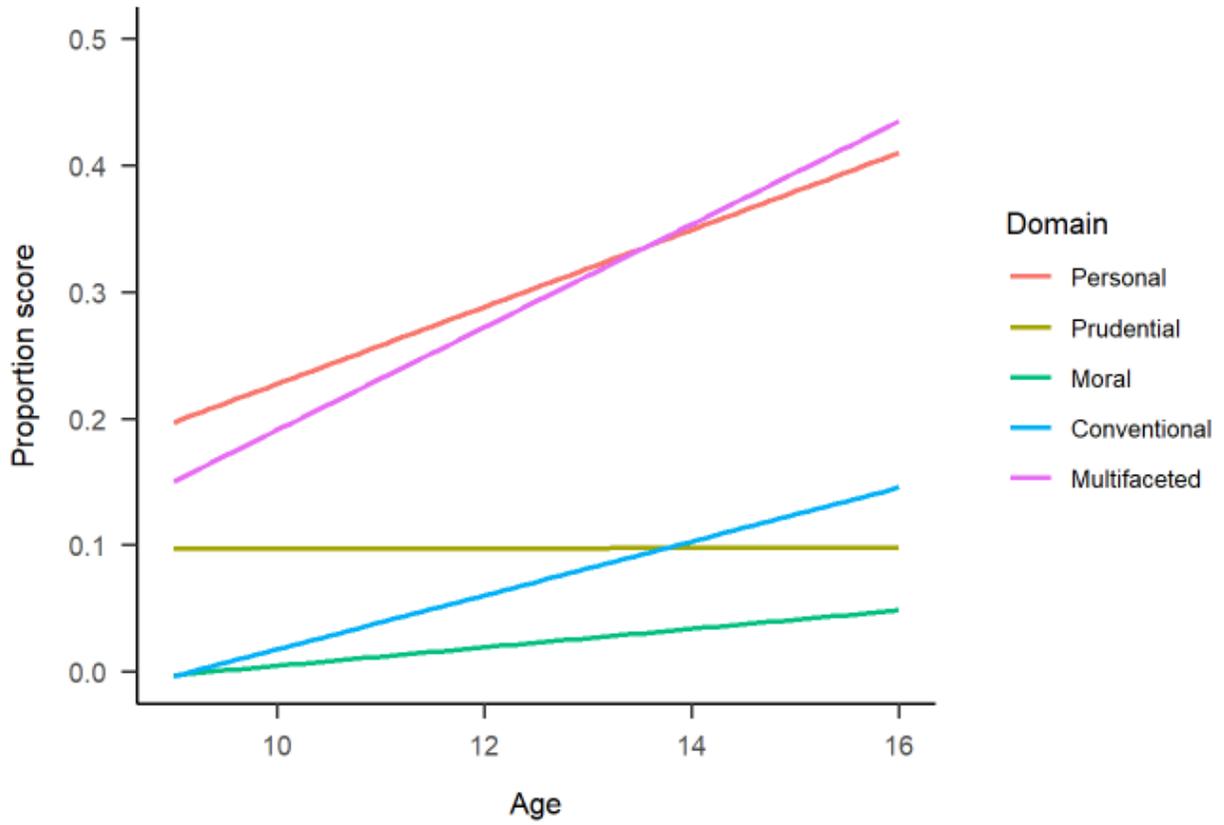
Note. The y-axis scale is 0 – 0.5 due to the relatively higher frequency of adolescents endorsing this reason.

Figure 10. Relationship X Age interaction for the reason “It doesn’t harm anyone”



Note. The y-axis scale is 0 – 0.5 due to the relatively higher frequency of adolescents endorsing this reason.

Figure 11. Domain X Age interaction for the reason “It doesn’t harm anyone”



Note. The y-axis scale is 0 – 0.5 due to the relatively higher frequency of adolescents endorsing this reason.