Development and Validation of a New Scale to Measure Children and Adolescents' Justifications of Antisocial Lies: Moral Disengagement of Lying Scale

Ipek Isik

Department of Educational and Counselling Psychology

McGill University, Montreal

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Abstract

Starting from 4 years of age, children evaluate lie-telling as a morally wrong behavior (Bussey, 1999). However, although they develop a moral understanding of lies and evaluate them negatively at an early period, they also engage in lie-telling behavior. They start telling lies to conceal their own transgressions as well as covering another person's wrongdoings (Talwar & Crossman, 2011). Previous research on children's lie-telling showed that moral and conceptual understanding of lies did not predict children's actual lie-telling behavior (Talwar et al., 2002). This finding demonstrates a discrepancy between children's moral reasoning and actions in the context of antisocial lie-telling. Foster et al. (2019) suggested social cognitive processes of moral disengagement (Bandura, 1986) could explain why children tell lies despite knowing that it is wrong. Moral disengagement refers to eight mechanisms which allows people to selectively disengage from their internal moral standards without feeling self-condemnation (Bandura 1999, 2002). To date, there has been only one empirical study that examined the relationship between moral disengagement processes and children's evaluations of lie-telling by using a 12-item moral disengagement scale specified for lie-telling (Doyle & Bussey, 2018). The current study comprised the initial phase of the development of the Moral Disengagement of Lying Scale for children and adolescents between 6 to 16 years old. Children and adolescents' (N=124, M_{age} =9.42) completed the Moral Disengagement of Lying Scale, which consists of 48 items mapped onto eight different moral disengagement mechanisms tailored to children's self- and other-oriented antisocial lies. They also completed the Moral Disengagement and Lie-Telling Scale by Doyle and Bussey (2018). The findings revealed a conceptually sound, valid and

reliable one-factor solution for the Moral Disengagement of Lying Scale. Findings showed that moral disengagement is not predicted by age. Moreover, children and adolescents scored higher on other-oriented moral disengagement items than self-oriented moral disengagement items in the context of antisocial lie-telling. This finding suggests that children and adolescents are more likely to disengage from their moral standards when they need to lie for another person. Overall, the Moral Disengagement of Lying Scale is a conceptually meaningful and empirically validated instrument that could be used to understand children's reasoning for telling lies for themselves and others.

Keywords: antisocial lie-telling, self-oriented lies, other-oriented lies, moral disengagement, children's moral understanding of lies, social cognitive theory

Résumé

Dès l'âge de 4 ans, les enfants considèrent le mensonge comme étant un comportement immoral (Bussey, 1999). Cependant, très tôt, bien qu'ils développent une compréhension morale du mensonge et l'évaluent de façon négative, ils adoptent également un comportement de mensonge. Ils commencent à mentir afin de cacher leurs propres transgressions ainsi que pour couvrir les méfaits d'une autre personne (Talwar & Crossman, 2011). Des études antérieures sur les mensonges des enfants ont démontré que la compréhension morale et conceptuelle des mensonges ne permet pas de prédire le comportement réel des enfants en matière de mensonges (Talwar et al., 2002). Cette constatation démontre une divergence entre le raisonnement moral et les actions des enfants dans le contexte du mensonge antisocial. Foster et al., (2019) suggèrent que les processus cognitifs sociaux de désengagement moral (Bandura, 1986) pourraient expliquer pourquoi les enfants racontent des mensonges bien qu'ils sachent que c'est un comportement répréhensible. Le désengagement moral fait référence à huit mécanismes permettant aux gens de se désengager sélectivement de leurs normes morales de base sans ressentir un sentiment de culpabilité (Bandura 1999, 2002). Jusqu'à présent, il n'y avait qu'une seule étude empirique examinant la relation entre les processus de désengagement moral et les évaluations des enfants en matière de mensonge en utilisant une échelle de désengagement moral en 12 points spécifiée pour le mensonge (Doyle & Bussey, 2018). L'étude présente comprend la phase initiale de l'échelle de désengagement moral et de mensonge menée auprès d'enfants et d'adolescents âgés de 6 à 16 ans. Les enfants et les adolescents (N=124, $M_{\hat{a}ge}=9.42$) ont rempli l'échelle de désengagement moral et de mensonge, composée de 48 items correspondant à huit

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mécanismes différents de désengagement moral adaptés aux mensonges antisociaux des enfants axés sur eux-mêmes et sur les autres. Ils ont également rempli l'échelle de désengagement moral et de mensonge de Doyle et Bussey (2018). Les résultats ont révélé une solution à facteur unique conceptuellement solide, valide et fiable pour l'échelle de désengagement moral et de mensonge. Ces résultats ont montré que le désengagement moral n'est pas prédit par l'âge. De plus, les enfants et les adolescents ont obtenu des scores plus élevés aux énoncés de désengagement moral axés sur les autres qu'aux énoncés de désengagement moral axés sur eux-mêmes dans le contexte des mensonges antisociaux. Ce résultat suggère que les enfants et les adolescents sont plus susceptibles de se détacher de leurs normes morales lorsqu'ils doivent mentir pour une autre personne. En somme, l'échelle de désengagement moral et de mensonge est un instrument conceptuellement significatif et empiriquement validé pouvant être utilisé afin de comprendre le raisonnement des enfants en matière de mensonges face à eux-mêmes et aux autres.

Mots clés: mensonges antisociaux, mensonges axés sur soi, mensonges axés sur les autres, désengagement moral, compréhension morale des mensonges par les enfants, théorie cognitive sociale

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Development and Validation of a New Scale to Measure Children and Adolescents' Justifications of Antisocial Lies: Moral Disengagement of Lying Scale

Lie-telling has been characterized as a paradoxical behavior. It is perceived as a morally reprehensible behavior, and it is socially discouraged. Lying contains an intent to deceive another person by making false or misleading statements (Talwar & Crossman, 2011); therefore, it poses a threat to relationships by violating feelings of trust. On that account, it is evaluated as an unfavorable behavior among adults (DePaulo, 1998). Yet, although lie-telling is perceived to be wrong and unfavorable, adults reported telling lies frequently in their everyday interactions (DePaulo et al., 1996, 1998). Similar to adults, children start evaluating lies negatively around 4 years of age (Bussey, 1992,1999). In spite of knowing that lying is wrong, children also engage in lie-telling behavior (Talwar et al., 2002). This finding portrays a discrepancy between children's moral reasoning and moral actions in the context of lie-telling.

Moral disengagement has been suggested as a potential theoretical lens to explain the gap between children's moral reasoning and their actual lie-telling behavior (Foster et al., 2019).

Moral disengagement is a part of the Social Cognitive Theory proposed by Bandura (1990, 2002), which refers to eight mechanisms that allow an individual to selectively disengage from their internal moral standards without feeling self-condemnation. Moral disengagement mechanisms might permit one to tell lies without feeling guilty and excuse their lie-telling by offering reasoning paths that allow one to justify their immoral actions that contradict with their moral standards (Foster et al., 2019). To further understand how moral disengagement potentially operates as a switch between moral reasoning and moral behavior in the context of lie-telling, it is crucial to develop an extensive measure of moral disengagement of lying.

The aim of the current study is to develop a measure which assesses children's and adolescents' levels of moral disengagement in the context of antisocial lie-telling. Assessing moral disengagement in the context of antisocial lie-telling will further provide an understanding regarding the underlying cognitive mechanisms that children use to rationalize or excuse their lies. Understanding the link between children's moral reasoning and actual lie-telling behavior will guide parents and professionals to develop strategies to promote honesty in youth. This is important since frequent lie-telling is associated with problematic behaviors during childhood and adolescence (Foster et al., 2019; Stouthamer-Lober, 1986; Talwar & Crossman, 2011).

Accordingly, children's understanding of the concept of lies, their actual lie-telling behavior and the relationship between their reasoning about lies and lie-telling behavior will be discussed in this paper. Then, social cognitive theory will be addressed, and how moral disengagement mechanisms can be utilized to explain children's and adolescents' thought processes when telling lies will be discussed. Finally, the Moral Disengagement of Lying Scale will be introduced, and the hypotheses of the current study will be presented.

Literature Review

Children's Understanding and Evaluations of Lies

Lie-telling refers to an action which intends to deceive another person by creating false beliefs (Talwar & Crossman, 2011). Although the concept of lie-telling is complex and layered, children start to develop an understanding of the concept and moral evaluations of lies starting from a young age (Bussey, 1992, 1999; Talwar et al., 2004). Around 4 years of age, children start to develop an early understanding about what it means to tell a lie. However, since 4- and 5-year-olds use the factuality of the statement as a compass to determine whether the given

statement is a lie, their categorization of lies and truths may not always be accurate (Stricahartz & Burton, 1990; Talwar & Crossman, 2011). Children's categorization of truths and lies becomes more accurate around age 7 (Bussey, 1992) because 6- to 11-year-old children base their reasoning on the intent of the speaker along with the falsity of the statement when categorizing lies and truths (Wimmer et al., 1984; Xu et al., 2009). Cognitive maturation allows children to take into account factors such as the belief and intent of the speaker in addition to the accuracy of the information when determining if a statement is a lie or the truth. Therefore, children's understanding of the concept of lies develops over time (Bussey,1992; Stricahartz & Burton, 1990; Xu et al., 2009).

In addition to categorizing lies and truths accurately, children's moral judgements of lies and truths are an important part of how children develop the concept of lies. Around 3 years of age, children start judging lie-telling as morally reprehensible and inappropriate compared to truth-telling (Bussey, 1999). Punishment is an important motive that determines preschoolers' negative judgements of lie-telling behavior. In other words, children tend to evaluate lie-telling more negatively when they are given scenarios in which the character has been punished for telling lies compared to the scenarios in which punishment is not present (Bussey, 1992).

Around 8 to 11 years of age, external motives such as punishment are replaced by internal motives such as self-conscious emotions (i.e., attributing feelings of guilt and shame to lies and pride to truth-telling; Bussey, 1992, 1999). This demonstrates that children depend more on internal mechanisms such as self-censure than external factors such as punishment on their moral judgements of lies and truths as they mature. In addition, research has shown that children become more sensitive to the context in which the lie-telling behavior has occurred when evaluating lies, and they do not approach all types of lies similarly because they start considering

the feelings of others when evaluating lies. In some situations, they evaluate lie-telling more positively than truth telling for protecting another person's feelings (Heyman et al., 2009). Although children become more selective in their evaluations of lies, they still tend to evaluate lies that are told for self-oriented purposes negatively throughout adolescence (Bussey, 1999).

Overall, this suggests that children's understanding of lies change throughout early childhood and adolescence. Their moral reasoning of lies becomes more refined as internal mechanisms such as perspective taking, and self-conscious emotions take over external motives such as avoiding punishment throughout adolescence. Yet, although children become more sophisticated in understanding the concept of lies, evaluating them negatively and knowing that it is wrong to tell lies in most cases, they still engage in lie-telling behavior.

Development of Lie-Telling Behavior

Lie-telling is one of the earliest antisocial behaviors that children engage in. Children start engaging in lie-telling behavior around 3 years of age (Evans & Lee, 2013; Talwar & Crossman, 2011), which is the period in which they develop a rudimentary moral understanding about the appropriateness of lie-telling (Bussey, 1999). The early lies children tell are characterized as antisocial lies. They are self-oriented lies, which are mostly told for self-protective purposes, such as to avoid punishment, or for self-beneficial motives, like gaining an external incentive (e.g., a prize). Children's early lies can be easily spotted since children are not able to maintain their lies (Talwar & Crossman, 2011). As children become more cognitively sophisticated and develop skills such as perspective taking (Lee 2002), second-order belief (Talwar et al., 2007), and executive functioning (Williams et al., 2016), they become better at maintaining their lies. Therefore, by preschool years, they tell lies not only for themselves but also for other people. Lies that are told to keep another person's secrets are an example of

antisocial lies that are told with other-oriented motives (Talwar & Crossman, 2011). Children are more prone to tell lies for a person with whom they have a strong interpersonal connection, like a parent (Talwar et al., 2004; Talwar & Crossman, 2011). However, this does not mean that children are always telling lies for people with whom they have close relationships. Children's decisions to tell lies are highly sensitive to the situation. For example, if they knew that they would not be held responsible for the consequences of the other person's transgression, they would be more likely to lie (Talwar et al., 2004; Talwar & Crossman, 2011). Thus, children's antisocial lies can be told for either self-oriented or other-oriented motives, and they are highly sensitive to the situation (Talwar & Crossman, 2011).

Moreover, parental socialization is as important as cognitive maturation in the development of lie-telling behavior. Parents do not wish to raise children who are dishonest. Parental socialization influences children's lie-telling behavior both directly and indirectly. Starting from an early age, children are explicitly taught that lie-telling is wrong and unacceptable by their parents (Bok, 1987; Lavoie et al., 2016; Talwar & Crossman, 2011). Although parents condemn lie-telling, their lie-telling behavior differs from the conceptual messages they deliver to their children (Lavoie et al., 2016). Indeed, parents endorse lie-telling as a strategy to manipulate their children's emotions and behavior (Heyman, 2009, 2013). While adults condemn lying, they still lie, and children may observe these lies. Thus, children may learn that while honesty is endorsed by others, there are times when one can rationalize and excuse lying.

The Relation Between Children's Understanding of Lies and Their Actual Lie-Telling Behavior Children's understanding of the concept of lies and the development of their actual lietelling behavior has been discussed above. One question that needs to be addressed is whether children's understanding of the concept of lies and their negative evaluations of lie-telling is related to their actual lie-telling behavior. Research on children's lying behavior has found that while they endorse honesty and recommend others to tell the truth, they will still lie (Talwar et al., 2002). Talwar et al. (2002) investigated the relationship between 3- and 7-year-old's conceptual knowledge of lies and their actual lie-telling behavior. The findings of the study showed that although children can identify the concepts of truth- and lie-telling, they still engage in lie-telling behavior.

It seems, then, that children's conceptual and moral knowledge of lies and their evaluations of lie-telling do not predict their actual lie-telling behavior (Talwar et al., 2002). This discrepancy between children's moral reasoning and moral actions in the context of lie-telling suggests that children may be somehow justifying or rationalizing their lies. However, research on children's lie-telling behavior has focused on cognitive correlates (Lee 2002; Talwar et al., 2007; Talwar & Crossman, 2011; Williams et al., 2016) and socialization influences (Heyman et al., 2009, 2011; Lavoie et al., 2016; Talwar et al., 2017), with few studies that look at how children morally justify and rationalize lie-telling. Specially, more research is needed to examine how children understand and justify lie-telling. A possible explanation for the mismatch between children's thoughts and actions regarding lie-telling is the social cognitive process of moral disengagement. (Doyle & Bussey, 2018; Foster et al., 2019).

Social Cognitive Theory of Moral Agency

A comprehensive theory of moral agency is needed to further understand how children learn to morally rationalize lie-telling behavior and why there is a gap between their moral

understanding of lies and their actual lie-telling behavior. Social cognitive theory of moral agency by Bandura (1990, 2002, 2016) can be a good fit to further address this question due to its integrative approach of taking personal, behavioral, and environmental factors into account when explaining the nature of moral agency (Bandura, 2002; Doyle & Bussey, 2018; Foster et al., 2019).

Social cognitive theory proposes an interactionist approach to exercise moral agency. Bandura (2016) suggests that there is an interplay between personal, behavioral and environmental determinants in the exercise of moral agency. Each of these elements function in an interdependent manner (Bandura, 2002). Therefore, moral knowledge, moral behavior and the context are connected to one another (Bandura, 2002, 2016). People hold moral values and standards which guide them to act accordingly (Bandura, 2002). People experience feelings such as self-worth and gratification when they adhere to their moral standards, whereas they feel the opposite way when they violate them. Feelings of self-condemnation, guilt and self-censure refrain people from acting against the moral standards (Bandura, 2002). Although self-condemnation has a significant influence on moral behavior, in some circumstances, external motivations override self-sanctions and cause one to selectively disengage from moral standards (Bandura, 1990).

Moreover, it is important to acknowledge the fact that disengaging from moral standards does not work in an all-or-nothing principle, as people who have high moral standards can still engage in immoral actions (Bandura, 2002, 2016). The deactivation of moral standards is a selective process which is heavily influenced by the social situation. Specifically, this process is

referred to as moral disengagement which consists of several cognitive mechanisms (Bandura, 1990, 2002, 2016).

Mechanisms of Moral Disengagement

Moral disengagement refers to the process of selective deactivation of self-sanctions in particular situations. It allows one to behave in ways that contradict with their moral standards and values without feeling self-condemnation, guilt or remorse. In other terms, it refers to the discrepancy between one's moral reasoning and moral behavior (Bandura, 1990, 2002, 2016). It is important to acknowledge that moral disengagement is a context-dependent and selective process that occurs frequently in everyday life. Moral disengagement consists of eight mechanisms that are highly interrelated with one another; hence, in specific situations, multiple mechanisms operate together (Bandura, 2002, 2016).

Mechanisms of moral disengagement are grouped in four loci: the behavior locus, the agency locus, the outcome locus and the victim locus (Bandura, 1990, 2002; Bussey, 2020). The mechanisms of the behavior locus allow one to reinterpret immoral conduct through the mechanisms of moral justification, euphemistic labeling, and advantageous comparison. The moral justification mechanism allows one to come up with reasons or excuses that make the immoral conduct look more tolerable than it actually is (e.g., "It's alright to lie to keep myself out of trouble."). In the euphemistic labeling mechanism, immoral conduct is redefined via using more acceptable words for defining the action (e.g., "Hiding the truth to keep myself out of trouble is ok because I'm not lying, I'm just keeping a secret."). The advantageous comparison mechanism allows one to make their transgression look more acceptable by comparing it to

another reprehensible act (e.g., "I find telling a lie for myself OK because it is not as bad as bullying someone."; Bandura, 1990, 2002; Bussey, 2020).

The mechanisms within the agency locus allow one to minimize their personal agency and feel less responsible for their wrongdoing through displacement of responsibility and diffusion of responsibility. The displacement of responsibility mechanism permits one to feel less responsible by shifting the responsibility of their action to another person (e.g., "If my parent/teacher asks me to lie to help myself, I would do it."). In the diffusion of responsibility mechanism, this is obtained by attributing the responsibility to a group of people (e.g., "If others agree to lie for something, I would tell the same lie if it helps me."; Bandura, 1990, 2002; Bussey, 2020).

The outcome locus allows one to distort, deny or misinterpret the impact of the reprehensible action through the mechanism of disregarding consequences (e.g., "No one really gets hurt if I tell a lie for myself."; Bandura, 1990, 2002; Bussey, 2020). The victim locus permits one to view the victim as deserving of or responsible for the mistreatment against them. Dehumanizing refers to choosing a target who is devalued and often stereotyped or stigmatized by the perpetrator of the immoral behavior. The perpetrator engages in an immoral act towards the target without feeling any remorse or guilt, since they perceive the target as a sub-human being (e.g., "It is OK to lie to mean people because mean people don't deserve respect."). In the blaming the victim mechanism, a morally reprehensible act is justified via accusing a target of provoking the perpetrator to act in that way (e.g. "If someone is bad to me, they are wrong, so it's fine to lie about them"; (Bandura, 1990, 2002; Bussey, 2020).

Given that moral disengagement is a context-dependent process, the transgression context determines which mechanisms are activated. The frequency and severity of using specific mechanisms of moral disengagement varies depending on the transgression (e.g., bullying, lying, etc.) (Bussey, 2020). Just like adults, children as young as 6 years old use these mechanisms to excuse their wrongdoings (Doyle & Bussey, 2018). To better understand the link between children's moral reasoning and moral behavior, looking further at the development of the moral disengagement process and the contexts in which children tend to use these mechanisms to justify their wrongdoings is crucial.

To engage in moral disengagement, one needs to make meaningful connections between moral standards and moral behavior. As such, a certain level of cognitive maturation and exposure to social experiences is required. Cognitive skills such as perspective taking, self-regulation, and understanding of mental states and intentions allow children to understand the consequences of their immoral behavior and the effects of their behavior on others. Only when children have these abilities will they activate mechanisms of moral disengagement to maintain a positive view of themselves (Bussey, 2020).

Moral disengagement has been found to be related to problematic and transgressive behaviors in childhood and adolescence, such as bullying (Obermann, 2011; Wang et al., 2017), aggression (Paciello et al., 2008) and underage drinking (Quinn & Bussey, 2015). This suggests that moral disengagement allows children to selectively override their internalized moral standards and justify their wrongdoings. Therefore, moral disengagement might be an important predictor of childhood and adolescent problematic behaviors. One of the earliest transgressions children engage in is lie-telling. Although occasional lie-telling is normal, frequent and persistent

lie-telling can signal some behavioral problems such as conduct disorder or aggression in childhood (Foster et al., 2019; Stouthamer & Lober, 1986; Talwar & Crossman, 2011).

Therefore, the relationship between moral disengagement and lie-telling requires more attention in terms of understanding children's justifications for their lies.

Relationship between Lie-Telling and Moral Disengagement

Social cognitive theory emphasizes the interplay among multiple factors (e.g., personal, behavioral, environmental) in defining moral agency (Bandura, 2016). Similarly, the influences of cognitive (e.g., Theory-of-Mind, executive functioning), social (e.g., parental socialization) and environmental (e.g., low socio-economic status) factors on the development of lie-telling behavior have been emphasized, but the interplay between these factors has not been examined (Foster et al., 2019; Talwar & Crossman, 2011). Social cognitive theory, specifically the mechanisms of moral disengagement, can potentially provide a framework to understand the complex nature of the development of lie-telling behavior (Foster et al., 2019). Thus, Foster et al. (2019) proposed that the concept of moral disengagement could explain why children lie and why they act dishonestly despite knowing that it is wrong. Empirical evidence and methodological advancements, however, are needed to explore the applicability of moral disengagement as a framework to explain children's lie-telling tendencies.

To date, only one empirical study has examined moral disengagement in relation to children's perceptions of lying behavior. Doyle and Bussey (2018) presented the first empirical evidence that demonstrates the relationship between lie-telling and moral disengagement. In their study, 6- and 9-year-olds completed a moral disengagement telling scale specific to the context of lie-telling that the authors developed. The scale originally consisted of 16 items. After performing an exploratory factor analysis, they removed four items. Therefore, the final version

of the scale contained only seven of the eight moral disengagement mechanisms. Items related to the attribution of blame mechanism were not included in the final version of the scale due to having factor loadings lower than .30 (Doyle & Bussey, 2018).

In Doyle and Bussey's (2018) study, participants were presented with two different stories in which the main character was asked to recount either a coached false denial or a coached false allegation. After each vignette children were asked whether they would tell the truth or a lie. The results showed that children's tendency to use moral disengagement mechanisms was linked to their hypothetical lie-telling behaviors. Specifically, children who believed the character would tell a lie reported higher levels of endorsement of moral disengagement mechanisms (Doyle & Bussey, 2018).

In addition to presenting the first empirical evidence of the relationship between lietelling and moral disengagement, Doyle and Bussey (2018) also created the first scale that aimed to assess the moral disengagement in the context of lie-telling among children. However, more research is warranted to replicate and extend these findings.

There are some limitations regarding their scale that need to be addressed. For example, due to low factor loadings, they reduced their scale from 16 items to 12 items, thereby removing items related to the attribution of blame mechanism. Moreover, their scale approaches antisocial lie-telling as a broad and general concept. However, antisocial lie-telling is a layered behavior that can be engaged in selectively in order to protect or to benefit oneself or another person (Talwar & Crossman, 2011). Therefore, a scale measuring moral disengagement specific to antisocial lie-telling should comprise more specific and diversified items that address different types of antisocial lies.

The Current Study

Given the crucial function that moral disengagement has in understanding children's justifications for lying, it is necessary to have a psychometrically sound measurement of this concept specific to antisocial lie-telling in children and adolescents. Therefore, the aim of the proposed study is to design, develop and measure the reliability and validity of the *Moral Disengagement of Lying Scale*.

During the design process of the scale, Doyle and Bussey's (2018) Lie-telling Moral Disengagement Scale was used as a template, since it is the only moral disengagement scale specified for antisocial lie-telling behavior to date. We expanded and refined Doyle and Bussey's (2018) scale in multiple ways. Specifically, we included items relevant to the attribution of blame mechanism, included two different types of lies (i.e., self-oriented and other oriented), designing the scale for a broader age group (i.e., 6 to 16 years old) and increased the number of items to 48 by creating six questions for each of the eight mechanisms.

First, our scale was designed for 6- to 16-year-olds. This age range was selected because children start telling different types of antisocial lies, both self- and other-oriented, around middle childhood (DePaulo & Jordan, 1982; Talwar & Crossman, 2011). In addition, research has shown that there is a relationship between 6-year-olds' propensity to morally disengage and endorsement of antisocial lie-telling (Doyle & Bussey, 2018). However, it is important to note that Doyle and Bussey (2018) targeted only 6- and 9-year-olds in their study, whereas we broadened this age range to participants between 6 and 16 years old. A broad age range was selected because children's understanding of the concept of lies changes and develops over time (Talwar & Crossman, 2011). Their early understanding of lies is based on more concrete

constructs such as accuracy of the facts given (Bussey, 1992; Stricahartz & Burton, 1990; Xu et al., 2009). As they develop socially and cognitively, children start to base their understanding of lies more on abstract constructs such as the speaker's intent (Bussey, 1992; Xu et al., 2009). This shows that their understanding of lies changes through middle childhood to adolescence and becomes more sophisticated (Talwar & Crossman, 2011). Moreover, similar to lie-telling, moral disengagement is a process that demands some level of social and cognitive maturation (Foster et al., 2019; Talwar & Crossman, 2011). Thus, to understand how children's moral reasoning changes from childhood to adolescence and which cognitive changes they undergo in terms of learning to suppress their moral standards about lie-telling and start justifying their lies as a social strategy, it is crucial to have a measure of moral disengagement that captures a broad age such as 6 to 16 in the context of lie-telling (Foster et al., 2019).

Second, we included two different types of antisocial lies (self-oriented and other-oriented) on our Moral Disengagement of Lying Scale. Research has shown that children not only tell lies to cover up their own transgressions but also another person's transgressions (Pipe & Wilson, 1994; Talwar et al., 2004; Talwar et al., 2011). This suggests that children tell antisocial lies for both self-oriented and other-oriented purposes. Previous research on children's tendency to tell lies for others examined how the motivational context can potentially affect their antisocial lie-telling behavior. However, children's reasoning behind telling antisocial lies for others remained unexamined. By including both self- and other-oriented antisocial lies in our scale, we aim to examine which mechanisms children tend to use when justifying lies told to conceal their own or another's transgression. It is also important to note that previous psychometric research on moral disengagement has reported that using context-specific measures

instead of broader measures is more effective for capturing an individual's propensity to morally disengage since it is a context-bound process (Barchia & Bussey, 2011; Bussey, 2020; Doyle & Bussey, 2018). Similar to moral disengagement, children's antisocial lie-telling behavior is also sensitive to context since it is influenced by factors such as the consequences for themselves and others (Talwar & Crossman, 2011). In order to capture the moral disengagement process in the context of lying more accurately and to understand children's underlying cognitive mechanisms for telling lies, we included both self- and other-oriented antisocial lies in our scale.

Third, Doyle and Bussey (2018) had a missing moral disengagement mechanism (i.e., attribution of blame mechanism) due to its low factor loading on their scale. In order to increase the construct validity of the scale, we added the missing mechanism to our scale. Since we increased the number of items and specified the antisocial lie-telling context, we expect higher correlations among the items. Moreover, research has shown that, among school-aged children, use of the attribution of blame mechanism is highly correlated with bullying (Thornberg & Jungert, 2014), suggesting that children use this mechanism. Therefore, presenting the attribution of blame mechanism in more specified lie-telling situations and increasing the number of items will give us an opportunity to observe whether children use this mechanism for telling lies to conceal their own and others' transgressions.

Overall, the present study comprises the initial phase of the development of the Moral Disengagement of Lying Scale for children and adolescents. Assessing moral disengagement in the context of lie-telling will contribute to our understanding of why children engage in lie-telling behavior despite knowing that it is wrong and how the underlying cognitive mechanisms that allow lie-telling without feeling guilt or self-censure develop and function. Understanding

children's reasoning and justifications of lie-telling can help educators and professionals develop strategies and interventions to prevent chronic lie-telling in children as well as finding alternative ways to promote honesty in youth.

Hypotheses

The first hypothesis (H1) attempts to look into the question of whether Moral Disengagement of Lying is a reliable and valid measure of children and adolescents' propensity to morally disengage in the context of lie-telling. To investigate the structure of the Moral Disengagement of Lying scale, we will run an Exploratory Factor Analysis, consistent with Doyle and Bussey's (2018) findings, we hypothesize a one-factor solution which "represents the global construct of moral disengagement" (Doyle & Bussey, 2018, p. 96). Although moral disengagement consists of eight different mechanisms, they are all part of an overarching concept, and they are highly interrelated with one another (Bandura, 1986, 1991, 2002).

The second hypothesis (H2) addresses the age differences in children and adolescents' levels of moral disengagement in the context of antisocial lie-telling. Previous studies of moral disengagement in the context of transgressions such as aggression (e.g., Paciello, 2008), bullying (e.g., Obermann, 2011) and underage drinking (e.g., Quinn & Bussey, 2020) reported mixed findings regarding age differences in the levels of moral disengagement. These mixed findings can be explained via the limited age range that has been used, with the majority focusing on early and late adolescence (Bussey, 2020). The only empirical study that looked at children's levels of moral disengagement reported a main effect of age and showed that 6-year-olds were more likely than 9-year-olds to endorse lie-telling moral disengagement (Doyle & Bussey, 2018). The focus of the current study is to develop a scale for use with children and adolescents between 6 and 16 years old. In line with the research on lie-telling, we expect a main effect of age. Specifically, we

expect that as children get older, they will show higher levels of moral disengagement. Research has shown that the frequency of lie-telling increases as children get older and peaks around adolescence (Talwar & Crossman, 2011). Children's moral reasoning regarding lie-telling also matures and becomes more refined as they get older. Together, these findings suggest that although children gain more knowledge about lie-telling as they mature, they still tell lies. The Moral Disengagement of Lying Scale allows us to see how children utilize mechanisms of moral disengagement to justify antisocial lie-telling from childhood through adolescence.

The third hypothesis (H3) attempts to answer the question whether there are any differences in children's' propensity to morally disengage for two different types of antisocial lies (i.e., self-oriented and other-oriented). Based on studies examining children's antisocial lietelling behavior (Pipe & Wilson, 1994; Talwar et al., 2004; Talwar et al., 2011), we expect younger children to show higher levels of moral disengagement for their own transgressions (i.e., self-oriented lies) and older children to show higher levels of moral disengagement for others' transgressions (i.e., other-oriented lies). For other-oriented items on Moral Disengagement of Lying Scale, the theme of lying for a friend is used. Since friendship becomes an important domain of socialization for school-aged children and especially for adolescents (Vandell, 2002), we tailored moral disengagement for other-oriented lies to a friendship context. The early lies children tell either protect or benefit them, whereas as they grow up, they start telling lies for others too, such as by keeping secrets for their friends (Talwar & Crossman, 2011). Sharing and keeping secrets are considered important signs of reliability in the context of friendships during adolescence (Liberman & Shaw, 2018), and tattling (i.e., telling the truth about a friend's transgression) is viewed less positively by older children (Talwar et al., 2016); thus, we would

expect older children to have higher levels of moral disengagement, especially for other-oriented lies.

Methods

Participants

The study was approved by the Research Ethics Board at McGill University (#20-08-001). One hundred and twenty-four children and adolescents participated in the study. The ages of the participants ranged between 6 to 16 (74 girls, 49 boys; M_{age} = 9.42 years, SD =2.48 years) See Table 1 for detailed distribution of age groups. Participants were recruited through the McGill Infant Research Group (MIRG) database and the Talwar Child Research Laboratory database. Data collection took place between October 2020 and April 2021.

Measures

The Moral Disengagement of Lying Scale

This scale was included to assess children's endorsement of each of the eight moral disengagement mechanisms within the context of telling self-oriented and other-oriented lies. There were six items per moral disengagement mechanism. Three of those items represented self-oriented lies (e.g., "It is alright to lie to keep myself out of trouble"), and the other three represented other-oriented lies (e.g., "It is fine to lie if I need to help myself"). Overall, the scale consisted of 48 items.

The Moral Disengagement and Lie-Telling Scale by Doyle and Bussey (2018) was used as a reference to create this scale. We expanded and modified Doyle and Bussey's (2018) scale in several ways. First, we included items for the attribution of blame mechanism that was

removed from Doyle and Bussey's (2018) scale. Second, we included an equal number of items for self-oriented lies and other-oriented lies across all moral disengagement mechanisms, creating a total of 48 items as compared with 12 items in Doyle and Bussey's (2018) scale. Half of the items were contextualized to lies told for self-oriented motivations (e.g., "It's alright to lie to keep myself out of trouble"), whereas the other half were contextualized to lies that are told for other-oriented motivations (e.g., "It's alright to keep my friends out of trouble"). However, Doyle and Bussey's (2018) scale contained 12 items and the amount of the moral disengagement items that represented the different types of lies were imbalanced in terms of the number of the items. They presented some items which were self-oriented (e.g., "It is ok to lie to someone who you cannot trust") and some items that reflect the lies that were other- oriented in nature (e.g., It's OK to lie to protect someone's secret). In addition, the lie-telling orientation was ambiguous for some moral disengagement items (e.g., Making up a story is not really lying). Overall, we increased the number of items and included a consistent number of items representing two types of lie-telling motivations (i.e., self-oriented and other oriented).

The participants were told that they were going to be presented with some statements that represent beliefs others may hold about lie-telling and that there were no right or wrong answers. For each item, they were asked to indicate the degree to which they agree with it using a Likert scale ranging from 1 = do not agree to 5 = agree completely (see Appendix A).

Moral Disengagement and Lie-Telling Scale (Doyle & Bussey, 2018)

This scale was included to assess the convergent validity of the Moral Disengagement of Lying Scale developed for this study. This scale measures children's endorsement of each of the seven moral disengagement mechanisms within the context of antisocial lie-telling behavior and

consists of 12 items (see Appendix B). Participants were shown a Likert scale ranging from 1 = do not agree to 5 = agree completely. This scale initially contained 16 items. After exploratory factor analyses were performed, the researchers removed four items which had low factor loadings in a stepwise manner (Doyle & Bussey, 2018). The final version of the scale contained 7 of the 8 moral disengagement mechanisms; items related to the attribution of blame mechanism were not included in the final version of the scale due to having lower factor loadings than .30. In addition, for the final version of their scale, they reported Cronbach's alpha as .80 (Doyle & Bussey, 2018).

Procedure

Participants were scheduled for an appointment that took place on Zoom, a teleconferencing platform, with a researcher. Prior to the appointment, parents were asked to sign a consent form on behalf of their children to participate in the study.

During the appointment, the researcher introduced themselves to the participants, provided participants with information about the study, and obtained verbal assent from them. Participants were made aware that they could stop the study at any point and that their answers remain confidential. The researcher presented the Moral Disengagement of Lying Scale and the Moral Disengagement and Lie-Telling Scale (Doyle & Bussey, 2018), and counterbalanced them across participants. The duration of the study was approximately 40 minutes long. After participants completed the study, both participants and their parents were debriefed about the purpose of the study. Families were given a \$15 e-gift card for their participation.

Results

Three participants failed to provide responses on several items for the Moral Disengagement of Lying Scale, which resulted in missing data and removed by pairwise deletion procedure (n = 3, 2.3% of all responses). Data were analysed with IBM SPSS Statistics (Version 25).

Exploratory Factor Analysis

Exploratory factor analysis (EFA) was performed with Principal Axis Extraction and Direct Oblimin Rotation. These extraction and rotation methods were chosen since moral disengagement items were assumed to be correlated with each other. Consistent with previous research, a one factor-solution was hypothesized since mechanisms of moral disengagement are connected with one another and moral disengagement represents a broad and overarching construct (Bandura, 1986; Doyle & Bussey, 2018). Therefore, a one-factor solution was specified.

An exploratory factor analysis with principal axis factoring was conducted on the 48 items with oblique rotation (direct oblimin). The Kaiser-Meyer-Olkin measure verified the sampling adequacy for the analysis, KMO = .89, and all KMO values for individual items were more than .73, which is well above the acceptable limit of .5 (Field, 2009). Bartlett's test of sphericity was significant, (1128) = 4523.449, p < .001, indicating that correlations between items were sufficiently large for principal factor extraction. A one-factor solution was specified, and since all items loaded higher than .40, none of them were removed. The final model explained 41.50% of variance, which demonstrates a conceptually meaningful factor solution. Factor loadings for lie-telling moral disengagement items are presented in Table 2. The scale had

high reliability, Cronbach's α = .969. In addition, as predicted, there was a statistically significant, strong correlation between the Moral Disengagement of Lying Scale and Doyle and Bussey's (2018) Lie-Telling Moral Disengagement Scale, r (123) = .82, p < .001, which suggests that the two measures were measuring a common construct and the Moral Disengagement of Lying Scale has high construct validity. The first hypothesis regarding to validity and reliability of Moral Disengagement of Lying Scale was confirmed.

Age and Moral Disengagement Scores

The second hypothesis predicted an increase in moral disengagement in the context of lie-telling by age. A linear regression was performed to understand the effect of age on children's moral disengagement of lie-telling scores. There was independence of residuals, as assessed by a Durbin-Watson statistic of 1.854. The assumption of homoscedasticity was met by assessing a plot of standardized residuals versus standardized predicted values. Residuals were normally distributed as assessed by visual inspection of a normal probability plot. Age accounted for 2.9% of variation in moral disengagement of lying scores with adjusted $R^2 = 2.1\%$, a trivial effect size according to Cohen (1988). Moreover, age did not significantly predict moral disengagement scores F(1, 123) = 3.702, p = .057. Therefore, the second hypothesis was not confirmed.

Self-Oriented Versus Other-Oriented Lies

A paired-samples t-test was performed to determine whether there is a statistically significant mean difference between the self-oriented and other-oriented moral disengagement scores in the context of antisocial lie-telling. An extreme outlier was detected, and it was removed from the analysis. The difference scores between self-oriented and other-oriented moral disengagement of lying were normally distributed as assessed by Shapiro-Wilk's test (p = .454). Participants scored significantly higher on other-oriented moral disengagement items (M = .454).

53.5887, SD = 18.93034) than on self-oriented moral disengagement items (M = 49.8952, SD = 19.72692) in the context of antisocial lie-telling, 95% CI [2.12736, 5.25973], t (123) = 4.668, p < .001, d = .419. The results obtained from the paired-samples t-test supported the third hypothesis that the scores for other-oriented items are higher than the self-oriented items.

Discussion

The main objective of this study was to develop and validate measure of the Moral Disengagement of Lying Scale. An exploratory factor analysis revealed a psychometrically sound and interpretable one-factor solution for moral disengagement and lying that was consistent with previous research (e.g., Doyle & Bussey, 2018). The first lie-telling moral disengagement scale was proposed by Doyle and Bussey (2018). It consisted of 12 items that represented seven of the moral disengagement mechanisms with 32.58% of variance explained by lie-telling moral disengagement items (Doyle & Bussey, 2018). Our aim was to expand and refine their scale by including two types of antisocial lies, increasing the number of items, and applying it to a broader age group of 6- to 16-year-olds. As such, we created a scale that consisted of 48 items representing eight of the moral disengagement mechanisms. It supported a meaningful one-factor structure for antisocial lie-telling moral disengagement that explained 41.50% of variance, which better captures moral disengagement in the context of lie-telling. These results suggest that the Moral Disengagement of Lying scale is a conceptually meaningful, comprehensive, valid and reliable scale that measures children's and adolescents' endorsement of moral disengagement in the context of antisocial lie-telling behavior.

It is important to note that we retained the eliminated mechanism in Doyle and Bussey's (2018) scale (i.e., attribution of blame). Doyle and Bussey (2018) explained the loss of the

attribution of blame mechanism as due to its low relevance to antisocial lie-telling behavior since it emphasizes holding a target accountable for one's transgression. They suggested that the attribution of blame mechanism may be more applicable to white lies (Doyle & Bussey, 2018), lies that are told to another person with social conventional motives such as protecting the other person's feelings (Talwar & Crossman, 2011). Although we did not include items about lying to another person to be polite to them (i.e., white lies), we had items about lying for another person to protect them from either harm or negative consequences (i.e., other-oriented lies). Therefore, the presence of other-oriented lies might have helped us to retain the attribution of blame mechanism.

The second objective of the study was to examine the developmental trends in children and adolescents' moral disengagement scores in the context of antisocial lie-telling. Although we hypothesized an increase in moral disengagement as children get older, in the current study, age did not predict moral disengagement in the context of antisocial lie-telling. This finding might be explained by the lack of adolescent participants in our current sample. Our current sample mainly consisted of children between 8 and 10 years of age; an even distribution across a larger age range may be needed to capture age differences in moral disengagement (Bussey, 2020).

Another explanation for this finding might be the context-sensitive nature of moral disengagement (Doyle & Bussey, 2018). Previous studies reported mixed findings about the relationship between moral disengagement and age differences across different contexts. Some studies found that moral disengagement increased with age. For example, Paciello et al. (2008) reported an increase in the propensity to morally disengage towards mid-adolescence in the context of aggression. Similarly, a longitudinal study by Wang et al. (2017) reported that moral disengagement predicts bullying behavior among middle and high school students and that older

children had a higher propensity to use moral disengagement to justify their wrongdoings compared to younger age groups. Other studies, in contrast, found that moral disengagement decreased or remained stable with age. Quinn and Bussey (2015) reported a decrease in tendency to morally disengage towards mid-adolescence in the context of underage drinking, and Obermann (2011) did not report any age differences among middle and high school students in the context of bullying. Given that moral disengagement is a process that is sensitive to context, Bussey (2020) suggests that we may not find to find a consistent and a general trend for the development of moral disengagement.

Another objective of this study was to examine the differences between children and adolescents' levels of moral disengagement for different types of lies (i.e., self-oriented and other-oriented). Our findings suggest that children and adolescents showed higher levels of moral disengagement for other-oriented lies compared to self-oriented lies. Other-oriented lies refer to lies told for another person, such as telling a lie to protect someone or keeping somebody's secret. This finding suggests that children and adolescents are more likely to disengage from their moral standards regarding honesty when lying for a friend. Lies told for others might include motivations such as helping a person to avoid undesirable situations (e.g., "I think it is alright to lie because embarrassing my friend in front of the class by telling the truth is much worse"). Therefore, the motive of helping another person via telling a lie may be perceived as more acceptable compared to lying for self-interest. In addition, it is important to note that in the Moral Disengagement of Lying Scale, other-oriented lie-telling items were presented in a friendship context (e.g., "It's alright to lie to keep my friends out of trouble"). The participants in the current study consisted of school-aged children and early adolescents, for whom friendships become an important domain of socialization (Vandell, 2002). Research with children suggests

that, starting from 4 years old, children show a tendency to keep secrets to maintain in-group cohesion. They perceive keeping secrets as an indicator of loyalty (Misch et al., 2016). Similarly, adolescents also approach secret keeping as an important sign of trust among friends and a way to strengthen social bonds (Lavoie et al., 2017; Liberman & Shaw, 2018). Other factors such as being likable and desirable among peers might also influence children's and adolescents' decisions to lie for a friend and disengage from their moral standards regarding honesty.

Implications

Although the concept of moral disengagement is becoming more prevalent in literature on child and adolescent development, little is known about its relationship to antisocial lie-telling behavior. The Moral Disengagement of Lying Scale is an instrument that measures moral disengagement in the context of antisocial lie-telling across a broad developmental range. This scale serves as a conceptually meaningful instrument that could be used in future research to further examine how children justify and rationalize their antisocial lie-telling behavior and to better understand the outcomes and antecedents of antisocial lie-telling in children and adolescents.

Furthermore, practitioners could use The Moral Disengagement of Lying Scale to develop strategies to promote honesty. Although emergence of lie-telling behavior has been considered as a developmental milestone which signals cognitive maturation, when it is used frequently as strategy to manipulate others' behavior it can turn into a problematic behavior during adolescence (Talwar & Crossman, 2011). Research has shown that disengaging from moral standards is a cognitive process which is heavily influenced by social experiences and the context. Therefore, it is mostly learned, acquired gradually and open for intervention (Foster, 2019; McAlister et al., 2000). Therefore, instead of punishment, strategies that emphasize the

merits of moral values such as honesty (Talwar et al., 2016) and practicing empathy (Smetana et al., 2015) could decrease children's tendency to excuse their wrongdoings (Foster et al., 2019).

In addition, this study showed that children and adolescents scored higher on moral disengagement items which consist other-oriented antisocial lies compared to self-oriented antisocial lies. As previously discussed, this finding suggests that children and adolescents might have a propensity to justify antisocial lie-telling behavior when it is told for another person. This is of concern for cases where children may conceal illegal or harmful actions of friends, such as bullying, stealing or other antisocial behaviors. This research confirms other research that suggests that older children (8 and above) may view "tattling" on another friends' transgression more negatively (Talwar et al., 2016). Together, these findings could have implications situations as in which children and adolescents may be inclined to withhold information or lie for another. One case is bullying, such as interventions with children and adolescents such as bullying prevention programs which tell children to report bullying when they witness. However, if children are more likely to lie for a friend and moral excuse these lies, even viewing truth-telling (i.e., "tattle") negatively, then such attitudes need to be directly addressed in educational bullying prevention programs to overcome these attitudes and moral disengagement. The fact that children and adolescents are more likely to detach from their moral values regarding honesty when it comes to lying for another person may also have implications for legal cases where children are asked to testify. For instance, in child abuse cases, children might provide false reports for another person if they are coached to tell a lie by an adult (Brennan, 1994; Talwar & Crossman, 2012). Similarly, in custody cases, children may provide false reports to conceal parents' transgressions or provide fabricated truths in favor of one parent if they are told to do so (Lyon et al., 2008; Talwar & Crossman, 2012). Therefore, understanding how children justify

their other-oriented antisocial lies is crucial for legal professionals to develop interviewing strategies for sensitive legal situations that require children's truthful and accurate testimonies. However, more research is needed to understand specifically in which circumstances and for whom children are willing to disengage from their moral values.

Limitations and Future Directions

Although the Moral Disengagement of Lying Scale provided a psychometrically sound measure of moral disengagement in the context of antisocial lie-telling behavior, future studies should provide further confirmation of the global factor structure via using Confirmatory Factor Analysis (CFA). Moreover, this study showed that children and adolescents were more likely to have higher moral disengagement scores in the situations where they tell lies for another person, specifically for friends in this study. Future studies might consider specifying other-oriented lies and create subscales of moral disengagement that include other-oriented lie items involving parents, unfamiliar adults and siblings. This would help researchers to explore specifically for whom children would be more willing to disengage from their moral standards.

Future research should explore the relationship between children's actual lie-telling behavior and their levels of moral disengagement via using The Moral Disengagement of Lying Scale as an instrument. By using this scale in relation to children's actual lie-telling behavior, it will help researchers understand the motivations that lead children to lie and help with creating interventions to promote children's honesty.

Conclusion

Moral disengagement has been proposed to explain the gap between children's moral reasoning on lie-telling and their actual lie-telling behavior (Foster et al., 2019). However, up to date there was only one empirical study that addressed the relationship between children's

judgements of antisocial lie-telling and their moral disengagement processes (i.e., Doyle & Bussey, 2018). We addressed limitations related to assessment and measurement of moral disengagement processes in Doyle and Bussey's (2018) study in the current study. The present study offered a new expanded measure of moral disengagement specified for antisocial lie-telling for use with children aged 6 to 16 years. The Moral Disengagement Lying Scale captures children's and adolescents' justifications of lies for themselves or for another person in daily situations. Therefore, this scale can be used to further understand how children excuse telling lies for themselves and others and to develop strategies to promote honesty in youth. Moreover, this study demonstrated that both children and adolescents are more likely to excuse lies told to benefit or help another person. This finding is crucial in terms of its legal implications that were reported above. Overall, the Moral Disengagement of Lying Scale may facilitate future studies on children's lie-telling as a valid and reliable instrument.

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Table 1Participant Age Distributions

| Age | n | % |
|--------------|----|-------|
| 6-year-olds | 14 | 11.4% |
| 7-year-olds | 11 | 8.9% |
| 8-year-olds | 26 | 21.1% |
| 9-year-olds | 24 | 19.5% |
| 10-year-olds | 16 | 13.0% |
| 11-year-olds | 6 | 4.9% |
| 12-year-olds | 8 | 6.5% |
| 13-year-olds | 7 | 5.7% |
| 14-year-olds | 5 | 4.1% |
| 15-year-olds | 5 | 4.1% |
| 16-year-olds | 1 | .8% |

Table 2Factor Loadings for Items of the Moral Disengagement of Lying Scale

| Items | | | Factor Loadings |
|-------|---|--|--------------------|
| 1. | Moral Justification (Other-Oriented) | It's alright to lie to keep my friends out of trouble. | .46 |
| 2. | Euphemistic Labeling (Other-Oriented) | It's not really lying when I exaggerate (change) the truth or make up a story to cover up for my friend (so my friend doesn't get in trouble). | .40 |
| 3. | Advantageous Comparison | I find telling a lie for my friend OK because it is not | .65 |
| | (Other-Oriented) | as bad as bullying someone. | |
| 4. | Displacement of Responsibility (Other-Oriented) | It is okay to lie for my friend if my parent asks me to do it. | .49 |
| 5. | Diffusion of Responsibility (Other-Oriented) | If others agree to lie for a friend, I would tell that same lie too. | .53 |
| 6. | Disregard of Consequences (Other-Oriented) | People won't mind if I tell a lie to help my friend. | .59 |
| 7. | Dehumanization (Other-Oriented) | I would tell a lie to a bully for my friend, because bullies are no good. | .60 |

| 8. | Attribution of Blame | If someone hurts my friend, it's okay to lie about them | .59 |
|-----|-----------------------------|---|-----|
| | (Other-Oriented) | to help my friend because they asked for it. | |
| 9. | Moral Justification | Ide OV to lie to meete at may be an allege and | .62 |
| | (Other-Oriented) | It's OK to lie to protect my friend's secret. | |
| 10. | Euphemistic Labeling | Telling a lie for my friend is OK because I am only | .59 |
| | (Other-Oriented) | hiding the truth to be polite. | |
| 11. | Advantageous Comparison | I think it is alright to lie for my friend because | .66 |
| | (Other-Oriented) | embarrassing them is much worse. | |
| 12. | Displacement of | If my teacher asks me to lie to help my friend, I will do | .54 |
| | Responsibility | it. | |
| | (Other-Oriented) | 11. | |
| 13. | Diffusion of Responsibility | I shouldn't get punished for telling lies to help my | .60 |
| | (Other-Oriented) | friend, everyone does it. | |
| 14. | Disregard of Consequences | Nothing bad will happen if I lie for my friend. | .64 |
| | (Other-Oriented) | rouning odd will happen if I lie for my friend. | |
| 15. | Dehumanization | I would lie to my friend's enemy. | .61 |
| | (Other-Oriented) | I would lie to my friend's chemy. | |
| 16. | Attribution of Blame | If someone is bad to my friend, they are wrong so it's | .64 |
| | (Other-Oriented) | fine to lie about them to help my friend. | |
| 17. | Moral Justification | It's fine to lie to help my friend. | .68 |
| | (Other-Oriented) | The factor is to help my menu. | |
| 18. | Euphemistic Labeling | Hiding the truth to keep my friend out of trouble is ok | .61 |
| | (Other-Oriented) | because I'm not lying, I'm just keeping a secret. | |
| | | | |

| 19. Advantageous Comparison | Telling a lie for my friend is not very bad. If I tell the | .67 |
|---------------------------------|--|-----|
| (Other-Oriented) | truth, my friend might feel hurt, which is worse. | |
| 20. Displacement of | I think it is alright to hide the truth if an edult I know | .47 |
| Responsibility | I think it is alright to hide the truth if an adult I know asks me to do it. | |
| (Other-Oriented) | asks me to do it. | |
| 21. Diffusion of Responsibility | It's OV to lie to halp friends, everyone does it | .74 |
| (Other-Oriented) | It's OK to lie to help friends, everyone does it. | |
| 22. Disregard of Consequences | No one really gots burt if I lie for my friend | .69 |
| (Other-Oriented) | No one really gets hurt if I lie for my friend. | |
| 23. Dehumanization | It is OK to lie to someone who is mean to my friends | .71 |
| (Other-Oriented) | because mean people don't deserve respect. | |
| 24. Attribution of Blame | If someone lied about my friend, it's okay to spread | .65 |
| (Other-Oriented) | lies about the liar because they started it. | |
| 25. Moral Justification | It's alright to lie to keep myself out of trouble. | .67 |
| (Other-Oriented) | it's arright to he to keep mysen out of trouble. | |
| 26. Euphemistic Labeling | It's not really lying when I exaggerate (change) the | .66 |
| (Other-Oriented) | truth or make up a story to cover up for myself (so I | |
| (Other-Oriented) | don't get into trouble) | |
| 27. Advantageous Comparison | I find telling a lie for myself OK because it is not as | .81 |
| (Other-Oriented) | bad as bullying someone. | |
| 28. Displacement of | If my parent/teacher asks me to lie to help myself, I | .68 |
| Responsibility | would do it. | |
| (Other-Oriented) | would do it. | |
| | | |

| 29. Diffusion of Responsibility | If others agree to lie for something, I would tell the | .57 |
|---------------------------------|---|-----|
| (Other-Oriented) | same lie if it helps me. | |
| 30. Disregard of Consequences | D 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | .68 |
| (Other-Oriented) | People won't mind If I tell a lie to help myself. | |
| 31. Dehumanization | I would tell a lie to a bully for myself, because bullies | .70 |
| (Other-Oriented) | are no good. | |
| 32. Attribution of Blame | If someone hurts me, it's okay to lie about them | .60 |
| (Other-Oriented) | because they asked for it. | |
| 33. Moral Justification | It's OK if I lie to protect my secret. | .68 |
| (Self-Oriented) | it's OK if The to protect my secret. | |
| 34. Euphemistic Labeling | Telling a lie for myself is OK because it is only a | .63 |
| (Self-Oriented) | make-believe (pretend) story that I created. | |
| 35. Advantageous Comparison | I think it is alright to lie because embarrassing myself | .59 |
| (Self-Oriented) | in front of the class by telling the truth is much worse. | |
| 36. Displacement of | I don't mind lying if I am told to, if I benefit (get | .72 |
| Responsibility | something good) from it. | |
| (Self-Oriented) | | |
| 37. Diffusion of Responsibility | I shouldn't get punished for telling lies that everyone | .57 |
| (Self-Oriented) | else tells too. | |
| 38. Disregard of Consequences | Nothing bad will happen if I lie for myself. | .62 |
| (Self-Oriented) | | |
| 39. Dehumanization | It's OK to lie to my enemies. | .68 |
| (Self-Oriented) | - | |

| 40. Attribution of Blame | If someone is bad to me, they are wrong so it's fine to | .70 |
|---------------------------------|---|-----|
| (Self-Oriented) | lie about them. | |
| 41. Moral Justification | | .67 |
| (Self-Oriented) | It's fine to lie if I need to. | |
| 42. Euphemistic Labeling | Hiding the truth to keep myself out of trouble is ok | .70 |
| (Self-Oriented) | because I'm not lying, I'm just keeping a secret. | |
| 43. Advantageous Comparison | Telling a lie is not very bad. If I tell the truth, I might | .67 |
| (Self-Oriented) | get hurt, which is worse. | |
| 44. Displacement of | It's OK to lie about something I did wrong, my parents | .62 |
| Responsibility | | |
| (Self-Oriented) | don't think it's a big deal. | |
| 45. Diffusion of Responsibility | It's OK to lie for myself, everyone does it. | .64 |
| (Self-Oriented) | it's OK to he for mysen, everyone does it. | |
| 46. Disregard of Consequences | No one really gets hurt if I tell a lie for myself. | .59 |
| Self-Oriented) | No one really gets must if I ten a ne for mysen. | |
| 47. Dehumanization | It is OK to lie to mean people because mean people | .73 |
| (Self-Oriented) | don't deserve respect. | |
| 48. Attribution of Blame | If someone lies about me, it's okay to lie about them as | .66 |
| (Self-Oriented) | well because they started it. | |
| | | |

Appendix A

The following statements are beliefs others may hold. Indicate how much you agree with each item. There are no right or wrong answers. Please answer as honestly as you can. Thank you.

1. It's alright to lie to keep my friends out of trouble.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

2. It's not really lying when I exaggerate (change) the truth or make up a story to cover up for my friend (so my friend doesn't get in trouble).

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

3. I find telling a lie for my friend OK because it is not as bad as bullying someone.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

4. It is okay to lie for my friend if my parent asks me to do it.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

5. If others agree to lie for a friend, I would tell that same lie too.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

6. People won't mind if I tell a lie to help my friend.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

7. I would tell a lie to a bully for my friend, because bullies are no good.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

8. If someone hurts my friend, it's okay to lie about them to help my friend because they asked for it.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

9. It's OK to lie to protect my friend's secret.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

10. Telling a lie for my friend is OK because I am only hiding the truth to be polite.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

11. I think it is alright to lie for my friend because embarrassing them is much worse.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

12. If my teacher asks me to lie to help my friend, I will do it.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

13. I shouldn't get punished for telling lies to help my friend, everyone does it.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

14. Nothing bad will happen if I lie for my friend.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

15. I would lie to my friend's enemy.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

16. If someone is bad to my friend, they are wrong so it's fine to lie about them to help my friend.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

17. It's fine to lie to help my friend.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

18. Hiding the truth to keep my friend out of trouble is ok because I'm not lying, I'm just keeping a secret.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

19. Telling a lie for my friend is not very bad. If I tell the truth, my friend might feel hurt, which is worse.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

20. I think it is alright to hide the truth if an adult I know asks me to do it.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

21. It's OK to lie to help friends, everyone does it.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

22. No one really gets hurt if I lie for my friend.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

23. It is OK to lie to someone who is mean to my friends because mean people don't deserve respect.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

24. If someone lied about my friend, it's okay to spread lies about the liar because they started it.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

25. It's alright to lie to keep myself out of trouble.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

26. It's not really lying when I exaggerate (change) the truth or make up a story to cover up for myself (so I don't get into trouble)

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

27. I find telling a lie for myself OK because it is not as bad as bullying someone.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

28. If my parent/teacher asks me to lie to help myself, I would do it.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

29. If others agree to lie for something, I would tell the same lie if it helps me.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

30. People won't mind If I tell a lie to help myself.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

31. I would tell a lie to a bully for myself, because bullies are no good.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

32. If someone hurts me, it's okay to lie about them because they asked for it.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

33. It's OK if I lie to protect my secret.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

34. Telling a lie for myself is OK because it is only a make-believe (pretend) story that I created.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

35. I think it is alright to lie because embarrassing myself in front of the class by telling the truth is much worse.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

36. I don't mind lying if I am told to, if I benefit (get something good) from it.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

37. I shouldn't get punished for telling lies that everyone else tells too.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

38. Nothing bad will happen if I lie for myself.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

39. It's OK to lie to my enemies.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

40. If someone is bad to me, they are wrong so it's fine to lie about them.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

41. It's fine to lie if I need to.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

42. Hiding the truth to keep myself out of trouble is ok because I'm not lying, I'm just keeping a secret.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

43. Telling a lie is not very bad. If I tell the truth, I might get hurt, which is worse.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

44. It's OK to lie about something I did wrong, my parents don't think it's a big deal.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

45. It's OK to lie for myself, everyone does it.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

46. No one really gets hurt if I tell a lie for myself.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

47. It is OK to lie to mean people because mean people don't deserve respect.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

48. If someone lies about me, it's okay to lie about them as well because they started it.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

Appendix B

The following statements are beliefs others may hold. Indicate how much you agree with each item. There are no right or wrong answers. Please answer as honestly as you can. Thank you.

1. It is alright to lie to keep your friends out of trouble.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

2. Making up a story is not really lying.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

3. It is OK to tell a lie because it is not as bad as bullying someone.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

4. It is OK to tell lies if someone else tells you to do it.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

5. It is not serious to tell small lies because they don't hurt anybody.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

6. It is OK to lie to somebody who has behaved badly.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

7. It is OK to lie to protect someone's secret.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

8. Telling a lie is OK because it is only a make-believe story.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

9. It is alright to lie because stealing something is much worse.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

10. If a group of people agree to tell a lie, but only one person gets caught lying, then that person should not get punished.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

11. People do not mind if you tell lies to them.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |

12. It is OK to lie to someone who you cannot trust.

| 1 | 2 | 3 | 4 | 5 |
|--------|------------|-------|------------|------------|
| Do not | Agree a | Agree | Agree very | Agree |
| agree | little bit | | much | completely |