

2019

Moral Development in the Online Context

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Moral Development in the Online Context

by

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Bachelor of Arts, Brock University, 2016

THESIS

Submitted to the Department of Psychology in partial fulfillment of the requirements for

Masters of Arts in Developmental Psychology

Wilfrid Laurier University

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Abstract

Past research has found strong evidence that individuals behave differently when they are online compared to when they are in face-to-face interactions. These differences may be caused by factors such as anonymity, remoteness from interactions and reduced empathy. The current study attempts to expand on these past research findings by examining moral development and specifically the relationships between moral emotions, moral identity and antisocial behaviour in the online context. In total, 392 participants were placed into three separate age groups: early adolescence ($n = 99$, aged 12.42-14.33), late adolescence ($n = 180$, aged 17.17-22) and early adulthood ($n = 113$, aged 22.06-35.25). Participants were assessed with a questionnaire measuring moral identity and moral emotions using hypothetical scenarios in both the online and the face-to-face context. It was established that both moral identity and moral emotions were lower in the online context regardless of age group. Cross-context differentiation also increased with age for the two variables. In addition, the relationship between moral identity and both intention to perform and performance of antisocial behaviours was mediated by moral emotions. The findings of the present study confirm more research is needed to investigate how the online context affects moral development.

Keywords: Moral emotions, moral identity, antisocial behaviour, Internet

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Moral Development in the Online Context

The Internet was introduced to the broader public around the mid 1990's. In the year 2000, 52% of US adults reported using the Internet in general. Since then, the use of the Internet has risen to the point that approximately 88% of US adult's aged 18-29 use some form of social media (Pew Research Center, 2018). In addition, for teens aged 13-17, 92% state they go online daily, while 24% report using social media "almost constantly" (Smith & Anderson, 2018). Although these findings come from research based in the USA, it is likely that Canadians show a similar pattern. When the Internet was first developed, some research focused on what exactly this introduction might mean for society. For example, Walther's (1996) discussed that communication through the Internet may result in more impersonal communication, a result of the loss of nonverbal cues. As a consequence of this anticipated increase in impersonal communication, the paper goes on to suggest that all communication through the Internet should be detached and straight to the point (Walther, 1996). Walther's suggestion was clearly made before the expansion of technology has increased the need and the desire for people to interact online through the use of various communication outlets (e.g., social media, video apps, chat rooms, blogs etc.). With the use of Internet technology expanding dramatically over the past two decades and the increase in importance of online communication, it has become imperative that psychological research investigates if and how individuals' behaviour differs in the face-to-face context versus the online context. Research needs to determine what factors influence online behaviour and whether these factors differ from face-to-face interactions.

It has been argued that being online puts individuals at a greater risk for acting immorally as it allows for more anonymity, distance from interactions (both spatial and temporal) and reduced empathy (Carrier, Spradlin, Bunce & Rosen, 2015; Christie & Dill, 2016; Zimmerman

& Ybarra, 2016). While it is not established yet if being online changes an individual's moral behaviour, recent research has shown that when individuals are online they tend to act less inhibited compared to their usual behaviour when in face-to-face interactions. Suler (2005) described this tendency as "the online disinhibition effect." By observing how individuals tend to behave online, Suler describes generous, kind behaviour online as "benign disinhibition" while rude, angry behaviour online is described as "toxic disinhibition." Both of these effects suggest that the way individuals act online and in face-to-face interactions are not the same (Suler, 2005). It is not clear why individuals tend to act in either way (i.e., toxic or benign disinhibition) and clearly more research is needed to determine the root causes of these behavior changes.

Previous research suggests that an individual's moral identity and moral emotions change across contexts (Krettenauer, Murua & Jia, 2016). Accordingly, the question is: Do these two constructs also differ in the online context as compared to the face-to-face context? The current study attempts to answer this question by investigating individual's self reported moral identity and their anticipation of moral emotions in response to hypothetical scenarios. The study investigates these differences in an age period where individuals attain increasing proficiency in Internet use: adolescence and early adulthood. Moreover, the study attempts to determine if the readiness to engage in antisocial behaviour online is predicted by one's moral identity and anticipated moral emotions. The current study also attempts to examine the mediating effects of moral emotions on moral identity and antisocial behaviours and intentions in the online context. Finally, the current research attempts to examine relationships with the activities individuals choose to participate more in online and moral behaviours.

Frequency of Internet usage and activities online

Although research has been performed on how individuals differ from face-to-face

contexts and the online context, it is important to determine how this relatively new context is affecting individuals more specifically in regards to moral development. It is especially important given the statistics of how many people are becoming involved in technology and using the Internet. According to the Canadian Internet Registration Authority (CIRA) as of 2018, 90% of Canadians use the Internet, with 52% of Canadian households reporting to have five or more devices connected to the Internet. Further, 74% of Canadians report spending at least three to four hours online per day with the most common uses of the Internet being: emailing (89%), social media (61%), reading about the news or current events (55%), watching movies, TV shows, or videos (39%) and online video gaming (24%; CIRA, 2019). When specifically examining negative activities online in Canada, CIRA reports that 14% of people have reported intentionally accessing pirated film or TV content online. According to the report, individuals blame their readiness to pirate material online on convenience, expensiveness of paid online content and that some content is not available in their regions for purchase. In addition to pirating, 33% of Canadians report having witnessed or experienced cyberbullying on the Internet with this percentage rising when focusing on 18-34 year olds (58%; CIRA, 2019). To add to these statistics on Canadian residents, research on the American population has also found some interesting results. According to Pew Research Data, the typical teenager (between the ages 13 and 17) sends about 30 texts a day, with 88% of teens reporting they own some form of cellular device (Smith & Anderson, 2018). This research has also found that 83% of teens report feeling more connected to their friends because of their relationship through social media, with 70% of these teens specifically saying it makes them more connected to their friend's feelings (Anderson & Jiang, 2019). As for the negative effects of the online context, PEW also reports that 88% of teens believe people share too information much online, while 26% of the participants reported

that they have fought with a friend regarding something that happened online. Interestingly, 42% of teens report having had an experience where something negative was posted about them and they did not have control of this posting. Finally, when it comes to video gaming, 84% of teen boys say the conversations they have online while gaming makes them feel more connected to their friends and the majority of video gamers report feeling relaxed and happy when playing games (82%; Anderson & Jiang, 2019). These statistics provide a broad picture of what people are doing online and further encourages the need for future research to focus on relationships, interactions and development with respect to the online context.

In Suler's (2005) paper, the term *cyberdisinhibition* was used to describe the idea that individuals behave differently online as compared to face-to-face interactions, primarily because they are able to stay anonymous. Waytz and Gray (2018) pointed out that individuals are more likely to feel emotions (positive or negative) when interacting with a friend online versus interacting with a stranger they do not know. These two findings suggest that when relationships online are more personal, individuals care more, however, when the relationship is between strangers individuals may lack understanding of the thoughts and feelings of others. This may result in individuals acting in more deviant ways online, as they are able to disconnect from their online interactions and return to other face-to-face interactions easily and potentially with little or no perceived consequences. Research has found support for this idea. Zimmerman and Ybarra (2016) found that participants who were anonymous were much more tempted to engage in aggressive behaviours online compared to non-anonymous participants. This finding has been replicated in several other studies looking at anonymity in general, not necessarily online (Christopherson, 2007; Eastwick & Gardner, 2009; Hayne & Rice, 1997). The above findings outline a clear need for research to understand what is causing these changes between contexts

and also what additional factors may be related to these antisocial behaviours.

Empathy

When looking at research on both moral development and the online context a key variable relevant in both areas is empathy. Research has provided evidence for empathy being related to both morally relevant behaviour and antisocial behaviour online (Carrier et al., 2015; Waytz & Gray, 2018). Empathy has also been found in previous research to be related to moral emotions, a moral development construct related to morally relevant behaviour (Tangney et al., 2007). Preston and Hofelich (2012) define empathy as the ability to experience and understand another person's feelings or emotions. Research has identified two separate types of empathy: affective and cognitive. Affective empathy refers to the ability to experience other people's emotions while cognitive empathy is the ability to understand other people's emotions (Preston & Hofelich, 2012). Tangney and colleagues (2007) explored moral emotions and moral behaviour while also incorporating how empathy plays a role in this relationship. The researchers suggest that while guilt may actually encourage other-oriented empathy, shame has the tendency to do the opposite. More specifically, because shame has a tendency to encourage the individual to refer to their "bad self" as acting poorly, shame may actually disrupt the empathetic process (Tangney et al., 2007). However, in general, empathy has been found in previous research to inhibit aggression and other harmful behaviour and it is clear that empathy is important for moral development (Feshbach & Feshbach 1969; Miller & Eisenberg 1988).

Previous research has found that Internet usage may be linked both positively and negatively with empathetic feelings online. To begin, research has found that the ability for Internet users to remain anonymous and communicate through electronic devices reduces the ability to access nonverbal behaviours in the online world, such as body posture and facial

expression (Carrier et al., 2012). However, other research has found that when participants are communicating with individuals who they already consider their “offline” friend, empathy may actually be improved through the use of technology. More specifically, online technology may have the ability to increase relationships and form more meaningful interpersonal understanding when individuals already know the people they are communicating with in the face-to-face context. Although some research has found a positive relationship between online activity and empathy (Waytz & Gray, 2018), there is also other research pointing at negative consequences of the online context on empathy.

Firstly, Carrier and colleagues (2012) examined how “virtual empathy” differs from “real-world empathy.” In this study, real-world empathy was measured using the Basic Empathy Scale (BES) and virtual empathy was measured using a scale derived from the BES to include the online context. The research found that real world empathy and virtual empathy were significantly positively correlated, however, real world empathy was higher for both males and females. Interestingly, the research also found that video games reduced real-world cognitive empathy for both females and males, and reduced specifically real-world affective empathy for females (Carrier et al., 2012). Finally, Konrath and colleagues (2011) pointed out the importance of empathy and its interaction with technology by discovering that when compared to college students from the late 1970s to the early 1980s, current college students are less likely to express both empathetic concern and perspective taking. The author’s suggest this may be related to changes in technology use and how individuals communicate. In addition to the previously mentioned research on empathy, a more recent paper by Waytz and Gray (2018) looked at how online technology can make Internet users less sociable. The article examines previously collected data to determine that countries with higher Internet availability are more likely to

report lower feelings of empathy. The researchers also found that time spent using the Internet and time spent e-mailing was (marginally) negatively associated with empathy. These findings provide an initial background that the impact of technology on moral development may depend on how it is used (Waytz & Gray, 2018). Based on these research findings, it may be assumed that the online context has a negative influence on empathy that may, in turn, impact moral emotions and moral identity in the online context. The current study attempts to go beyond these findings on empathy by examining moral emotions and identity in the online context, and also how these constructs may be related to morally relevant behaviour.

Moral emotions and moral behaviour

Moral emotions can either be viewed as anticipatory emotions where an individual assesses a possible scenario and anticipates how they will feel, or they can be a result of an actual behaviour (Tangney et al., 2007). These emotions can be either negative (i.e., guilt or shame) or positive (i.e., pride or satisfaction) with the former being more important in developmental research. In general, research has found that in order for an individual to properly anticipate emotions, theory of mind and the ability to consider the perspectives of others as well as yourself is necessary (Krettenauer, Malti & Sokol, 2008). In a meta-analysis by Malti and Krettenauer (2013), moral emotion attributions such as shame and guilt were found to be related to morally relevant behaviour in both children and adolescents. More research is needed to determine if these findings extend to context related differences. The present study examines this possibility by comparing face-to-face interactions with online interactions.

A few research studies have looked at how emotion expectations are related to aggression in adolescence. Lochman and Dodge (1994) used a sample of 296 participants that were classified by their teachers as aggressive or nonaggressive. Participants were presented with

short vignettes and asked to provide potential solutions to a problem for a protagonist to use. These participants were then asked to indicate the degree to which they felt they would experience specific emotions (i.e., fear, anger, happiness, and sadness). The situations focused on areas such as verbal and physical aggression, as well as areas such as bargaining and compromise. It was found that when compared to nonaggressive boys, the boys who were labeled as aggressive indicated they would feel happier in social situations that were designed to elicit negative feelings (i.e., fear, anger or sadness). In another more recent study, Arsenio, Gold, and Adams (2004) found that participants with oppositional defiant or conduct disorders expected to feel happier after acts of instrumental and proactive aggression. These findings support the idea that moral emotions play an important role in behaviours and moral judgments.

Most research on anticipatory moral emotions focuses on negative emotions, primarily shame and guilt. Shame is often defined as a more intense emotion compared to guilt because it is a direct result of an individual's entire self being evaluated negatively (Stets & Carter, 2012). This often results in an individual who feels shame feeling worthless and wanting to hide, escape or strike back. The result of an individual feeling shame can be subdivided into three different reactions: (1) a general negative self-view (i.e., believing one is untrustworthy), (2) upward comparison to others, and (3) a desire to disappear or hide from a given situation. Conversely, guilt often results in individuals focusing on their bad behaviour, not their bad self. This emotion often leads people to feel remorseful and to attempt to repair what they have done wrong (Stets & Carter, 2012). An individual who feels guilt will usually behave in one of three ways: (1) becoming self-critical, (2) expressing an intention to make up for what they have done, or (3) expressing an intention to address future behaviour. Although these two emotions have strong differences, they are similar in that they keep individuals consistent in their moral behaviours

and reactions.

Moral identity and moral behaviour

A separate line of research has focused on the construct of moral identity, which has become highly influential construct in the field of moral development and more precisely, moral emotions. Moral identity has been described as “the degree to which being a moral person is important to an individual’s identity” (Hardy & Carlo, 2011). Essentially, it is used to describe individual differences in how much a person values being moral (i.e., honest, compassionate, generous, etc.) compared to more external values not deemed to be moral such as being extraverted or adventurous. Since being introduced by Blasi (1983), moral identity research has essentially attempted to bridge the gap between moral judgment and moral action. In fact, research has found that individuals with a strong moral identity tend to care more about matters, which have been deemed morally relevant (Blasi 1983; Johnston & Krettenauer, 2011; Stets & Carter 2011). Additionally, Krettenauer et al., (2016) found evidence that moral identity significantly increases in the adult years when looking across three separate contexts (family, school/work and community). Overall, it has been made clear through past research that moral identity is important for researching moral actions and moral judgments.

Researchers in the past have used two different approaches when examining moral personality and identity: the trait-based approach and the socio-cognitive approach. The trait-based approach assumes that moral identity is stable across separate contexts and also time periods in an individual’s life. Thus, researchers who accept the trait-based approach assume that moral identity is stable (Krettenauer & Hertz, 2015). Alternatively, other researchers take the socio-cognitive approach, which assumes that moral identity is specific to different situations and schemas. Essentially, from a socio-cognitive approach, an individual’s moral identity is seen

as a complex knowledge structure that is deliberate and can be influenced (Aquino & Reed, 2002; Lapsley & Narvaez, 2004). For the purpose of the present study we will be focusing on a socio-cognitive approach, as we are attempting to determine if there are developmental and context differences in moral identity.

Previous research has found that individuals who have a strong moral identity are more likely to engage in prosocial behaviour (Hardy & Carlo, 2011; Jennings, Mitchell, & Hannah, 2015). A meta-analysis by Hertz and Krettenauer (2016) summarized a total of 111 studies looking at the link between moral identity and moral behaviour. The findings suggest that moral identity significantly predicts moral behaviour, although the effect size is small to moderate. Given these findings it can be assumed that moral identity is important for determining how an individual will behave in scenarios involving (im)moral actions. It is suggested that because moral identity is not seen as an extraordinarily strong predictor of moral actions, more research needs to be done to investigate potential moderating and mediating effects that might be present, which is a goal of the current study.

It has also been found in previous research that moral identity is context dependent to some extent. Krettenauer et al., (2016) looked at three different social contexts: family, work/school, and community/society. The study also examined these differences across four separate age groups: adolescence (14 – 18 years), emerging adulthood (19 – 25 years), young adulthood (26 – 45 years) and middle age (46 – 65 years). The researchers found a positive correlation between an individual's moral identity and their age. As individuals grow older their moral identity increases (Krettenauer et al., 2016). Interestingly, the researchers also found that the moral values that define a person's moral identity shift with age. More specifically, values such as benevolence, self-direction and rule-conformity tended to be more important amongst

older participants while tolerance and achievement were more important for younger participants. However, it is not clear if this is a developmental change or simply due to different cohorts participating in the study (Krettenauer et al., 2016).

A more recent study looked at moral identity motivation and age related changes. Krettenauer and Victor (2017) examined individuals between the ages of fourteen to sixty-five and looked at moral identity motivation from two categories: (1) external motivation which is based on self-interest and focused on a desire for people to be seen as a good person, and (2) internal motivation which is based on what is important for the self and is focused on a desire to care for others primarily because you value the act of helping. Interestingly, it was found that external moral identity motivation decreases with age, while internal moral identity motivation increases with age (Krettenauer & Victor, 2017). Essentially, these findings suggest that as an individual matures, they are less likely to have a strong moral identity because of what others think and instead it is caused by their own internal desires to be a good person.

Moral identity and moral emotions

Research on moral identity and moral emotions has found that these two constructs may be related to both prosocial and antisocial actions. Based on this previous research on moral identity and moral emotions, it could be predicted that individuals who have a stronger moral identity will exhibit stronger emotions in response to moral or immoral behaviours (Krettenauer, 2011; Tracy & Robins, 2004). More specifically, it should be expected that individuals would feel strong negative emotions when performing antisocial acts, perhaps stronger than the positive emotions one might feel when performing a prosocial act. It is definitely worth investigating whether this is the case and whether moral emotions play a role in mediating the relationship between moral identity and immoral behaviours.

Johnston and Krettenauer (2011) found evidence for this idea by using a mediation analysis to investigate moral emotions and moral identity. The research found that moral emotion expectancies mediate the relationship between moral identity and antisocial behaviours but not prosocial behaviours (Johnston & Krettenauer, 2011). In addition, Kavussanu, Stanger and Ring (2015) looked at the mediating effect of anticipated guilt in the relationship between moral identity and antisocial sports behaviours. The results confirmed that participants who had a higher moral identity were more likely to indicate they feel guilty for performing an antisocial behaviour during a sporting event (Kavussanu et al., 2015). Thus, there is evidence that moral emotions expectancies may mediate the relationship between moral identity and antisocial behaviours in other contexts.

Additionally, Stets and Carter (2012) researched identity theory and its relation to moral identity and moral emotions. The research found that individuals who have a high moral identity score are more likely to behave morally, while individuals who have low moral identity scores were less likely to behave morally. This is consistent with previous research. The interesting addition this study brings is that individuals who received feedback from others that did not match their moral identity standard were more likely to report feelings of guilt and shame (Stets & Carter, 2012). That is, whether behaviour failed to meet the moral standard, or if it was judged as exceeding expectations did not matter as both forms of feedback resulted in negative emotions. It was also found that when a situation was defined as morally meaningful, respondents who behaved immorally were more likely to experience these negative emotions as well (Stets & Carter, 2012).

Moral emotions and identity online

In addition to research looking at moral identity and moral emotions in the face-to-face

context, some researchers have begun examining these variables in the online context. A study looking at both moral emotions and moral identity on the topic of cyber bullying yielded interesting results. Perren and Gutzwiller-Helfenfinger (2012) found that a lack of moral emotions and moral values is predictive of cyber bullying, even when controlling for traditional face-to-face bullying. This suggests that the inability for the victim and the attacker to have direct contact may reduce the anticipation of feeling moral emotions. The researchers speculate that the absence of direct contact between the bully and the victim may reduce feelings of remorse and reduce the ability to anticipate the negative consequences of their behaviour. More research is needed to determine how other emotions such as guilt and shame may play a role in other immoral behaviours online.

Finally, research by Krettenauer and Pandori (2016) looked at overall moral identity in the online context. The results provide preliminary evidence that moral identity is significantly lower in the online context when it is compared to the family and friend context. They concluded that individuals are more at risk to engage in immoral behaviours when they are online. There is a potential for online moral identity to have an effect on other contexts (i.e., face-to-face interactions), and that quality is more important than quantity of online activity (Krettenauer & Pandori, 2016). Overall, based on the previously mentioned findings in combination with the increase of individual's using technology, more research needs to focus specifically on moral emotions and moral identity changes as individuals move from face-to-face interactions into the online context.

The present research

The present study addresses three main goals while extending previous research and theories on empathy online by investigating moral emotions and moral identity in the online context. The

first goal of the current study is to examine mean differences in moral identity and emotions between the face-to-face context and the online context. Based on previous research showing that individuals' moral identity and moral emotions are context dependent (Krettenauer et al., 2016), as well as preliminary research that found differences in the online context for moral identity (Krettenauer & Pandori, 2016), it was expected that moral identity and moral emotions would be lower in the online context as compared to face-to-face contexts. Age-related increases in moral emotions and identity were also examined to extend previous research findings (Krettenauer et al., 2016).

The second goal was to determine the relationship between moral identity in the online context and (self-reported) online behaviour, and to investigate if this relationship is mediated by moral emotions. Previous research has found evidence that this relationship is in fact mediated by moral emotions (Kavussanu, Stanger & Ring, 2015; Johnston & Krettenauer, 2011). Based on these findings we predict that the relationship between moral identity and online behaviours will be mediated by one's overall moral emotions and also specifically guilt and shame.

The final goal of the current study is to determine if the relevant study variables are associated with different Internet activities (i.e., social media, communication, video games, video watching). This is an exploratory question as there is no specific background research suggesting what kind of relationships we might find.

Method

Participants

The final sample of the present study consisted of 392 individuals (232 females) sampled from three different age groups: early adolescence (12.42 – 14.33 years), late adolescence (17.17 – 22 years), and early adulthood (22.08 – 35.25 years). The sample mean was 19.53 years ($SD =$

4.84).

The youngest age group was recruited through their current public school (i.e., grades 7 and 8). Participants of the two older age groups were recruited through the Psychology Research Experience Program (PREP) at Wilfrid Laurier University ($n = 194$), and through social media posts on Facebook, Snapchat and Instagram ($n = 99$). All participants provided consent before participating and received different compensation depending on how they were recruited. Individuals recruited within the public school board received \$7 for their participation, while the participating school also received \$7 for each student consenting to participate. Individuals recruited through the PREP system received course credit for their participation. Individuals recruited through social media were entered into a draw where the first four drawn received \$200 (first name drawn), \$100 (second name drawn), or \$50 (third and fourth names drawn).

Among the early adolescent age group, a total of 99 participants (68% female) were included with approximately 87% born in Canada. The mean age for this group was 13.33 years, $SD = .47$. For the late adolescence group, there were a total of 180 participants (59.4% female) and approximately 79% were born in Canada. The mean age for this group was 19.61 years ($SD = 1.14$). Finally, for the young adulthood age group, there were a total of 113 participants (51.3% female) and approximately 80% were born in Canada. The mean age for this group was 24.81 years ($SD = 1.96$). It is important to note that seven participants did not report their exact age and were placed into age groups based on how they were recruited (i.e., participants recruited through the school board were placed in the early adolescent age group, participants recruited through the PREP system were placed in the late adolescent age group and participants recruited through social media were placed in the early adulthood age group). A chi-square test was performed to determine the relationship between participant gender and age group. The test

revealed a significant relationship, $\chi^2(2, N = 384) = 6.32, p = .042$. Thus, the three age groups were not fully balanced with regard to gender. Because of this imbalance, in the current study gender was used as a control variable whenever differences between age groups were examined.

Participant's socioeconomic status (SES) was determined using the International Standard Classifications of Occupations (ISCO, 2004). First, both the participants' mother and fathers occupation was classified into a numerical 4-digit ISCO code ranging from 0 to 9,999 using the ISCO database. This score was then coded into a Socio-Economic Index of Occupational Status (ISEI) score expressed as a metric ranging from 10 to 90 with higher scores indicating a higher social status group (Ganzeboom, De Graaf & Treiman, 1992). For the current study, ISEI scores were used to determine if there was a significant difference in SES between the three age groups. Using a one-way analysis of variance (ANOVA), it was found that there were no significant differences in SES between the early adolescent group ($M = 52.10, SD = 16.54$), late adolescent group ($M = 49.36, SD = 16.19$) and the early adulthood group ($M = 50.63, SD = 14.41$). As a result of these findings, SES was not included as a covariate.

Measures

The study consisted of a questionnaire that took approximately 30 to 45 minutes to complete. The questionnaire was used to measure a variety of behaviours and moral characteristics, all of which were measured using standardized response formats. The questionnaire measured participants online behaviour, self-reported moral identity in three different contexts, anticipated moral emotions and moral disengagement, and social desirability. Both moral emotions and disengagement were measured using hypothetical scenarios of antisocial behaviours presented in both the online and face-to-face context, however, for the purposes of the current study, moral disengagement was not examined. Due to requests from the

school board, the questionnaire presented to the youngest age group was shortened to reduce the length and also eliminate items deemed inappropriate for that age. In addition, the questionnaire for the youngest age group did not include a measure for antisocial behaviours and intentions in the face-to-face context.

Moral Emotions. A procedure previously used by Krettenauer and Casey (2015) to measure moral pride was used to create a measure for moral emotions in the current study. Krettenauer and Casey (2015) assessed these variables by presenting participants with short scenarios describing various types of (im)moral behaviour (e.g., bullying, stealing, etc.). Following the presentation of each scenario, participants were asked to rate their overall feeling and then to rate on a 5-point scale various reasons for why they would feel good or bad in that specific situation. For the purpose of the current study, modifications to this procedure were made to focus on negative emotions, specifically shame and guilt. Modifications were also made to include the online context.

In the current study, participants were presented with thirty short scenarios describing everyday situations. Fifteen of the scenarios pertained to the online context while fifteen were in the face-to-face context. Scenarios described situations such as stealing, cheating and bullying. Each specific behavior (e.g., bullying, theft) was described once in the face-to-face context and once in the online context in order to make sure that the antisocial behaviours described in both contexts were parallel.

After being presented with the short scenarios, participants were first asked how they would feel about themselves in this situation on a 7-point scale from 1 = *extremely bad* to 7 = *extremely good*. Participants were then presented with statement characteristic for guilt feelings and one statement reflecting shame-prone thoughts and asked how much they agree with these

statements on a 5-point scale with 1 = *strongly disagree*, 2 = *somewhat agree*, 3 = *neither disagree nor agree*, 4 = *somewhat agree* and 5 = *strongly agree*.

According to Stets and Carter's (2012) research, guilt and shame can be subdivided into different reaction tendencies. For the current research, guilt statements reflected (1) self-criticism, (2) the desire to make amends, and (3) the intention to behave differently in the future. For example, a self-criticized reaction would be "*I should put more effort into developing my own thoughts and ideas when writing assignments,*" an expressed desire to make up for what was done would be "*I want to apologize and make sure my classmate is OK*", and addressing of future behaviour would be "*In the future I should reconsider and pay for the movie.*"

For shame, Stets and Carter (2012) have also identified three different reactions: (1) a global negative self-evaluation (i.e., believing one is untrustworthy), (2) upward comparison to others, and (3) a desire to disappear or hide. An example of a negative self-view reaction would be "*I feel like the meanest person on earth*", an example of comparison to others would be "*Others would not have done this,*" and finally, an example of an expression of hiding would be "*I want to avoid my friend now.*"

The following is an example of a scenario presented in the face-to-face context to participants. "*Imagine: You show inappropriate photos of your friend to other people.*" The guilt reaction to this statement would be "*I want to tell my friend what I've shown people and apologize*" and the shame reaction would be "*I want to avoid my friend now.*" The parallel scenario for the online context would be as follows. "*Imagine: You send inappropriate photos of your friend to other people via text message.*" The guilt reaction would be "*I want to apologize to my friend and attempt to stop the photo from going any further,*" while the shame reaction would be "*I don't want to see my friend for the next couple of days.*"

The three scales derived from this procedure are: (1) the strength of the overall emotional reaction in the face-to-face context ($\alpha = .91$) and the online context ($\alpha = .89$) (2) the strength of the guilt prone thoughts in the face-to-face context ($\alpha = .87$) and the online context ($\alpha = .87$) and (3) the strength of the shame reactions in the face-to-face context ($\alpha = .79$) and the online context ($\alpha = .72$). The scales were coded so that a higher score for the strength of the emotional reaction indicates a more negative reaction to the situation, a higher score of guilt indicates higher feelings of guilt and a higher shame score indicates higher feelings of shame.

Moral Identity. Moral identity was measured based on a questionnaire version of the Moral Identity Interview (Krettenauer et al., 2016). In the Moral Identity Interview participants are asked to define their own moral identity by choosing from a list of 80-value attributes. These attributes were selected based on previous research investigating individual's prototypical conceptions of a moral person (Hardy, Walker, Olsen, Skalski, & Basinger, 2011; Lapsley & Lasky, 2001; Smith, Türk Smith, & Christopher, 2007; Walker & Pitts, 1998). Examples of these attributes include: honest, dependable, reliable, caring, fair, grateful, sincere (see Table 1 for full list of value attributes presented to participants). Krettenauer et al., (2016) classified these value attributes according to the value domains as defined by Schwartz' (1992) circumflex model of human values. The 80 value attributes could be grouped in the following twelve domains: (1) benevolence-dependability, (2) universalism-tolerance, (3) benevolence-caring, (4) self-direction, (5) conformity-rules, (6) universalism-concern, (7) conformity-interpersonal, (8) achievement, (9) face, (10) tradition, (11) hedonism, and (12) security-personal. Participants are first asked to rate all 80 of the attributes according to how well they define a moral person. Then, participants are asked to select 12 to 15 attributes that according to them define the core of a highly moral person. In the interview, participants were shown a diagram of three-nested circles.

The inside circle was labeled as “very important to me”, the second circle was labeled as “important to me”, and the third circle was labeled “somewhat important to me.” Participants were shown this in a randomized order for the three separate contexts (i.e., family, friends and work/school).

For the current study, two major modifications were made to this interview procedure. First, a questionnaire version of the interview was created, and second the work/school context was replaced with the online context. All participants in the two older age groups were presented the questionnaire in an online format. Participants in the late adolescence and young adulthood age group were presented with a total of 80 attributes and asked to select ones they believe make a highly moral person. These attributes were then used to assess the self-importance of morality separately in the face-to-face contexts of family and friends and the online context.

In the present study, as a warm up procedure participants were first asked to freely list three to five characteristics that they believe characterize a moral person. Subsequently, participants were asked to rate all 80 value-attributes according to how well they describe a highly moral person using a 5-point scale from 1 = *not at all* to 5 = *extremely well*. All attributes were presented to participants in a random order. After selecting the 12-15 most important attributes, participants were presented with a diagram depicting the importance of these attributes in each of the three contexts. For the family context the heading read “*How important is it for you to be ____ when you are with your family?*” the friends context read “*How important is it for you to be ____ when you are with your friends?*” and the online context read “*How important is it for you to be ____ when you are online?*” For each of the contexts, participants chose from a 5-point scale, 1 = *unimportant to me*, 2 = *somewhat important to me*, 3 = *important to me*, 4 =

very important to me, and 5 = extremely important to me. The ordering of the three contexts was randomized.

Additionally, modifications were made to the questionnaire for the young adolescent age group. These modifications were made to make the questionnaire procedure easier and less fatiguing for this age group. This questionnaire was also presented as a hardcopy version for the younger age group. This was primarily due to the lack of technology available in the school. The list of 80 attributes was reduced to a list of 12 attributes. This short list was formulated using the twelve most commonly selected attributes by the younger age group (i.e., ages 14-18) in the Krettenauer et al., (2016) study. These attributes included: non-judgmental, trustworthy, fair, genuine, compassionate, forgiving, honest, accepting, selfless, responsible, caring and knows what is right/wrong.

Scores related to the attributes were calculated by creating an overall sum score using the average of the values that were chosen in each context. Analyses found that the most important attributes for the two older age groups are as follows: trustworthy (47.8%), ethical (47.8%), knows right from wrong (45.4%), honesty (45.1%), respectful (43%), makes the right choices (34.5%), has integrity (34.5%), responsible (33.1%), truthful (32.4%), honorable (30%), loyal (30%), and genuine (29.7%).

Media Usage. Parts of the Media and Technology Usage and Attitude Scale by Rosen et al., (2013) were used in order to determine technology usage of participants. The questionnaire has good reliability and validity and can be used as either a single scale or it can be used with multiple subscales measuring frequency of smartphone usage, general social media usage, internet searching, e-mailing, media sharing, text-messaging, video gaming, online friendships, Facebook friendships, phone calling, and watching television (Rosen et al., 2013). Of the original

60 items, only eighteen were used in order to focus on the frequency of Internet usage and online activities.

Participants were asked to indicate how often they do things on any technological devices on a 9-point scale (i.e., phone, tablet, laptop, computer, etc.). The final scale included 18 items. The scale ranges from 0 = *never*, 1 = *once a month*, 2 = *once a week*, 3 = *several times a week*, 4 = *once a day*, 5 = *several times a day*, 6 = *once an hour*, 7 = *several times an hour*, and 8 = *all the time*. Examples of items include: “*How often do you check for text messages or instant messages?*” or “*How often do you search the Internet for images, videos, or photos?*” A high score on this scale indicates high technology usage, while a low score indicates low technology usage. This scale was found to be reliable (18 items; $\alpha = .80$; $M = 5.3$; see Appendix).

Immoral Behaviour Checklist. Antisocial behaviour was assessed using two separate scales. The first scale focused on actual behaviour in the past and the second scale focused on readiness to engage in this behaviour in the future. For the first scale participants were presented with a list of 17 things people sometimes do or do not do. Participants were asked how often they have done these things in the past on a 4-point scale with 0 = *never*, 1 = *once or twice*, 2 = *a few times*, and 3 = *several times*. Items were specific to the online context and to antisocial behaviours such as over-charging, stealing, spreading rumors, negative comments and posting of inappropriate items. An example would be “*Have you ever sent someone a threatening message (i.e., via text, social media, email, etc.)?*” The first scale was used to create an overall score of antisocial behaviour online with a higher score indicating higher antisocial behaviour (17 items; $\alpha = .78$).

The second scale consisted of 17 statements relating to the same behaviours as the previous scale, but for this one participants were provided examples of antisocial behaviours

online and were asked to indicate on a 4-point scale between 0 = *I would never do this*, 1 = *I possibly would do this*, 2 = *I likely would do this*, or 3 = *I surely would do this*. This scale is parallel to the previous scale and includes the same items with an emphasis on whether they would possibly perform these behaviours in the future. There were two scales included in the current study because it is important differentiate between what people did in the past and on what people may potentially do in the future. Individuals may not have had the opportunity in the interpersonal context to perform these behaviours so it is important to look at whether if given the opportunity, participants would perform the behaviour. An example would be “*I would consider accessing someone’s online account without their permission.*” This scale was used to create an overall score of antisocial behaviour intentions online with a higher score indicating higher intention to perform antisocial behaviour online (17 items; $\alpha = .84$).

Children’s Social Desirability Scale (CSD-S; Baxter et al. 2004). Social desirability was measured using the CSD-S developed by Baxter et al. (2004). The scale is used to assess whether participants are likely to answer questions in a socially desirable way. Participants were presented with the CSD-S which is the short scale adapted from the CSD scale. The short scale includes 14 items selected from the original 46 items of the long scale (Miller et al., 2014). Participants were asked questions such as “*Do you always listen to your parents,*” or “*Have you ever broken a rule*” and required to select either “*yes*” or “*no.*” The CSD-S Scale scores range from 0 to 14 with a higher score indicating a higher tendency to choose the socially desirable answer. This scale has been used in previous research with individual’s aged 8 to 16 (Conway, Gomez-Garibello & Talwar, 2016). The scale’s internal reliability for the current study was .78 ($M = 1.2$).

Results

To investigate the relationships among the study variables, bivariate correlations were calculated. Next, three 2x3 Mixed Analyses of Covariance (ANCOVA) were run to determine differences in moral identity and moral emotions across age groups while controlling for gender and CSD-S. Third, two mediation analyses were performed to determine if moral emotions mediate the relationship between moral identity, and both antisocial intentions online and performed antisocial behaviours online. Finally, correlations between frequency of Internet usage and various online activities were calculated with the relevant study variables. In examining the means and standard deviations, we can see that the overall sample reported consistently lower moral emotions in the online context ($M = 5.40, SD = .88$) compared to the face-to-face context ($M = 5.73, SD = .87$). The same trend can be seen when comparing moral identity in the online context ($M = 3.72, SD = .96$) to moral identity in the face-to-face family relationship context ($M = 4.25, SD = .68$) and the face-to-face friends relationship context ($M = 4.15, SD = .74$). Finally, it should be noted that the overall mean scores for both antisocial intentions ($M = 1.47, SD = .42$) and behaviors ($M = 1.50, SD = .39$) were relatively low. See Table 2 for a full list of means and standard deviations of the variables.

Correlational analyses

Correlational analyses were used to determine relationships between the separate contexts for moral identity, moral emotions and antisocial behaviours and intentions online. Table 3 summarizes findings of these analyses. As expected, individuals moral identity in both contexts were significantly, positively correlated. More specifically, moral identity in both the face-to-face family and friends contexts were strongly associated, $r(384) = .75, p < .001$. Moral identity in the online context was also strongly correlated with both moral identity in the face-to-face

context of friend relationships, $r(383) = .60, p < .001$, and family relationships, $r(384) = .51, p < .001$. A significant negative correlation was found between moral identity online and both antisocial intentions online, $r(384) = -.26, p < .001$, and antisocial behaviours online, $r(383) = -.23, p < .001$, suggesting that individuals with a higher moral identity may be less likely to intend to perform antisocial behaviours. Individuals who reported antisocial behavior in the past online were also more likely to intend antisocial behavior in the future online, $r(385) = .75, p < .001$. For overall strength of moral emotions, there was a significant, negative correlation with both antisocial intentions, $r(374) = -.49, p < .001$, and antisocial behaviours online, $r(373) = -.50, p < .001$. Furthermore, both shame in the online context and guilt in the online context were positively correlated $r(385) = .53, p < .001$. In addition, shame in the online context was negatively related to both antisocial intentions, $r(385) = -.18, p < .001$, and behaviours, $r(384) = -.23, p < .001$, online. This significant negative relationship was also found between guilt in the online context and both antisocial intentions, $r(385) = -.36, p < .001$, and behaviours online, $r(384) = -.40, p < .001$. Interestingly, no significant relationships were found between shame and guilt in the face-to-face context and antisocial intentions and behaviours online. Considering the significant relationship between social desirability and various study variables, social desirability will be included as a covariate in the main analyses (See Table 3).

Moral emotions across contexts and age

For moral emotions, two separate analyses were performed. The first set of analyses focused on the strength of moral emotions and the second set of analyses focused more specifically on shame and guilt. To begin, a 2 x 3 Mixed ANCOVA was performed to examine both context and age group related differences in strength of moral emotions, with gender and CSD-S included as covariates. Both main effects were statistically significant. First, there was a

significant main effect of context, $F(1, 364) = 20.02, p < .001; \eta^2 = .05$, indicating that the strength of moral emotions was significantly different between the online context and the face-to-face context. The analysis also found a main effect of age, $F(2, 364) = 15.57, p < .001; \eta^2 = .07$. In addition, a significant interaction was found between age and context, $F(2, 364) = 15.68, p < .001; \eta^2 = .08$. As demonstrated in Figure 1, the strength of emotional reaction in the online context was significantly lower across all three age groups relative to the strength of emotional reaction in face-to-face context. This main effect was further qualified by the two-way interaction, indicating that differences for overall emotions in the online and face-to-face context were smaller in early adolescence than in late adolescence and early adulthood. In addition to the above findings, a significant interaction with moral emotion context type and CSD-S was found, $F(1, 364) = 6.15, p = .01; \eta^2 = .02$. This interaction indicates there are differences in scores on social desirability between the two separate contexts. This finding can be further be interpreted by examining the correlations between CSD-S and moral emotions in the online context, $r(374) = .26, p < .001$, and the face-to-face context, $r(374) = .16, p = .002$. This suggests that the effect of social desirability seems to be stronger in the online context for moral emotions when compared to the face-to-face context.

In order to further examine age related differences, follow up paired-samples t-tests were performed to examine moral emotions within the two contexts and between the three age groups. For the early adolescence age group, overall strength of emotional reaction online differed significantly from overall strength of emotional reaction in the face-to-face context, $t(92) = -2.91, p = .004; d = .16$. For the late adolescence age group, strength of emotional reaction online differed significantly from strength of emotional reaction in the face-to-face context, $t(170) = -12.68, p < .001; d = .40$. For the early adulthood age group, strength of emotional reaction online

differed significantly from the strength of emotional reaction in the face-to-face context, $t(110) = -13.24, p < .001; d = .57$. Thus, the effect sizes tended to increase with age indicating that the differences between the contexts become larger as individuals grow older.

For the second set of analyses, a 2 x 3 Mixed ANCOVA examined moral emotions (i.e., guilt and shame) across the two contexts (i.e., online and face-to-face) and across the three separate age groups. Context was the within-subjects variable and age group was the between-subjects variable with gender and social desirability included as covariates. The procedure found a significant main effect of context, $F(3, 1125) = 7.60, p < .001; \eta^2 = .02$, indicating that moral emotions differed across the two contexts. Second, the procedure revealed a main effect of age, $F(2, 375) = 27.11, p < .001; \eta^2 = .13$, indicating that moral emotions differed across the three age groups. Finally, a significant interaction was found between context and age, $F(6, 1125) = 3.81, p = .002; \eta^2 = .02$. These findings are displayed in Figure 2, which shows shame in the online context decreasing slightly between early adolescence and early adulthood and guilt in the online context being lower in late adolescence compared to the early adolescent group, but increasing slightly for in early adulthood age group. No significant interactions were found between the two covariates (i.e., gender and CSD-S) and context.

Follow up paired-sample t-tests were performed to examine differences between guilt and shame. It was revealed that guilt in the online context was significantly different from guilt in the face-to-face context, $t(384) = 11.64, p < .001; d = .28$. There was also a significant difference between shame in the online context and shame in the face-to-face context, $t(384) = -4.41, p < .001; d = .18$. Finally, it was found that guilt in the online context was significantly different from shame in the online context, $t(384) = 27.81, p < .001; d = 1.38$. These findings suggest that

individuals are more likely to anticipate feelings of guilt in the online context compared to feelings of shame.

Paired samples t-test were also performed to examine context differences within the three separate age groups. For early adolescence, it was revealed that guilt in the online context was significantly different from guilt in the face-to-face context, $t(98) = -5.60, p < .001; d = .28$. There were no significant differences between shame in the online context and shame in the face-to-face context, $t(98) = .486, p = .628; d = .04$. Finally, it was revealed that guilt in the online context was significantly different from shame in the online context, $t(98) = 18.60, p < .001; d = 1.57$.

For the late adolescence age group, paired samples t-tests revealed that guilt in the online context was significantly different from guilt in the face-to-face context, $t(172) = -5.54, p < .001; d = .21$. Shame in the online context was significantly different from shame in the face-to-face context, $t(172) = -3.13, p = .002; d = .18$. Finally, it was revealed that guilt in the online context was significantly different from shame in the online context, $t(172) = 15.83, p < .001; d = 1.30$.

Lastly, for the early adulthood age group, it was found that guilt in the online context was significantly different from guilt in the face-to-face context, $t(112) = -10.46, p < .001; d = .43$. Shame in the online context was also significantly different from shame in the face-to-face context, $t(112) = -5.03, p < .001; d = .33$. Finally, it was revealed that guilt in the online context was significantly different from shame in the online context, $t(112) = 15.89, p < .001; d = 1.56$. As demonstrated in Figure 2, the early adolescent age group was consistently higher for both guilt and shame in both contexts while the late adolescent age group was consistently lower in

both contexts for shame and guilt. Moreover, guilt was consistently higher in both contexts across all age groups.

Moral identity across contexts and age-groups

To investigate age-related differences in moral identity across separate contexts, a 3x3 Mixed ANCOVA was conducted. For analyzing moral identity, the face-to-face context was subdivided into two different relationship contexts: (1) the friend relationship context and (2) the family relationship context. For the ANCOVA, context was the within-subjects variables and the three age groups (adolescence, emerging adulthood and young adulthood) were the between-subjects variables. Gender and CSD-S were included as covariates. The results revealed a significant main effect of context, $F(2, 746) = 24.99, p < .001; \eta^2 = .06$, indicating that the online context and the two face-to-face contexts (i.e., friends and family) differed significantly for moral identity. The procedure also revealed a significant interaction: moral identity context by age group, $F(4, 746) = 2.94, p = .02; \eta^2 = .02$, indicating that context differences for moral identity were different for the three age groups. The results indicate there was no main effect of age ($p > .05$). Figure 3 displays the interaction between moral identity context and age group. As demonstrated in the figure, the online context remains stable across the three age groups while moral identity in the face-to-face friend relationship context tends to decrease with age. Moreover, with regards to the covariates, a significant interaction between gender and context, $F(2, 746) = 5.25, p = .005; \eta^2 = .01$, was found, along with a second significant interaction between CSD-S and context, $F(2, 746) = 7.08, p = .001; \eta^2 = .02$. These findings suggest there are differences in how males and females self-report their moral identity between the separate contexts. Additionally, the results also suggest differences in self-reported moral identity depending on individuals social desirability scores, in line with the previous finding for

differences in the effect of CSD-S on moral emotion context. In examining the correlations between CSD-S and moral identity, only moral identity in the online context has a significant relationship with CSD-S, $r(383) = .13, p = .01$. This may suggest future research should be examining the potential for a social desirability scale that is not influenced by the online context.

Paired-samples t-tests were performed to compare moral identity contexts separately for the three age groups. For the early adolescence age group, there was a significant difference between moral identity in the online context and moral identity in the face-to-face context of family relationships, $t(97) = -3.68, p < .001; d = .33$. There was also a significant difference between the moral identity online and moral identity in the face-to-face context of friends, $t(96) = -5.52, p < .05; d = .47$.

For the late adolescence age group, there was a significant difference between moral identity online and the face-to-face context of family, $t(172) = -8.96, p < .001; d = .72$. There was also a significant difference between the moral identity online and the face-to-face context of friends, $t(172) = -6.74, p < .001; d = .50$.

Finally, for the early adulthood group, there was a significant difference between moral identity online and moral identity in the face-to-face context of family, $t(112) = -8.31, p < .001; d = .81$. There was also a significant difference between the moral identity in the online context and the face-to-face context of friends, $t(112) = -6.21, p < .001; d = .53$. These results suggest that moral identity is significantly lower in the online context compared to both the family and friends face-to-face contexts in all of the age groups examined. As indicated by the effect sizes, these differences increased with age.

Moral emotions as a mediator on the influence of moral identity on antisocial behaviours and intentions

For analyzing the mediating effects of moral emotions, conditional process analyses as described in Preacher and Hayes (2013) were conducted. This mediation analysis was completed under model 4, with a 95% confidence interval and with 5000 bootstrap samples. First, moral identity online was entered as the independent variable, antisocial behaviour online was entered as the dependent variable, and moral emotions strength was entered as a mediator. For the second analysis the independent variable and the mediator remained the same while antisocial behaviour intentions were entered as the dependent variable. Both analyses included gender and social desirability as covariates due to their relationships with the variables. Results of these two analyses are summarized in Figure 4a and 4b.

For the first analysis, the path from moral identity to moral emotions was significantly positive, $b = .233, p < .001, CI [.146, .321]$ while the path from moral emotions to antisocial intentions online was significantly negative, $b = -.194, p < .001, CI [-.241, -.148]$. The direct effect of moral identity online on antisocial intentions online was significantly negative, $b = -.051, p = .015, CI [-.092, -.010]$ and this relationship was slightly weakened by the indirect effect of moral emotions online, $b = -.045, CI [-.070, -.024]$. The model accounted for 27.35% ($R^2 = .2735$) of the variance in antisocial intentions online and the findings suggest that a partial mediation occurred. Specifically, moral identity online significantly predicted antisocial intentions online and this relationship was mediated by moral emotions online.

For the second analysis, the path from moral identity to moral emotions was again significantly positive. The path between moral emotions online and performed antisocial behaviour was significantly negative, $b = -.193, p < .001, CI [-.236, -.150]$. The direct effect of moral identity online on performed antisocial behaviours was not significant $b = -.035, p = .073, n.s., CI [-.073, .003]$. However, the indirect effect of moral emotions on the relationship between

moral identity and performed antisocial behaviour was statistically significant, $b = -.045$, $CI [- .070, -.024]$. This model accounted for 27.74% ($R^2 = .2774$) the variance in performed antisocial behaviour online and suggests full mediation. Thus, the finding suggests that moral identity predicts moral emotions, which in turn influence performed antisocial behaviours in the online context. Therefore, the hypothesis that moral emotions mediate the relationship between moral identity and antisocial online behaviour was supported.

Relationships with frequency of Internet usage and online activities

In order to explore how the study variables moral emotions, moral identity and antisocial behaviour are related to online activities, four variables were created from the Internet Usage questionnaire that represent various form of online activities: (1) Communication (3 items; $\alpha = .71$) (2) Social Media (6 items; $\alpha = .80$), (3) Playing Video Games (3 items; $\alpha = .83$) (4) Video Watching (3 items; $\alpha = .56$). Calculating the mean score of the relevant items created these variables. For the communication variable the following items were included: (1) *how often do you check for text messages or instant messages*, (2) *how often do you send and receive text messages or instant messages*, and (3) *how often do you check emails*. For the social media variable the following items were included: (1) *how often do you read or look at social media postings (i.e. Facebook, Snapchat, Instagram, etc.)*, (2) *how often do you comment on social media postings, status updates, photos, etc.*, (3) *how often do you check Facebook or Instagram pages or other social networks*, (4) *how often do you browse social media profiles and photos*, (5) *how often do you post a social media status update*, and (6) *how often do you post photos to social media*. For the video games variable the following items were included: (1) *how often do you play video games with other people in the same room*, (2) *how often do you play video games by yourself*, and (3) *how often do you play video games with people online*. Finally, for the

video watching variable the following items were included: (1) *how often do you watch TV shows and movies online*, (2) *how often do you search the Internet for images, videos or photos*, and (3) *how often do you watch video clips online*.

Gender and age differences in Internet usage. To investigate gender and age differences in Internet usage, a 2 x 3 Mixed ANCOVA was ran with CSD-S included as a covariate. First, the results evidenced statistically significant gender differences. Female scores ($M = 5.42, SD = 1.60$) for the social media variable were significantly higher when compared to males ($M = 5.04, SD = 1.70; F(1, 372) = 5.63, p = .02$). For the video game variable, males scored ($M = 4.35, SD = 2.15$) significantly compared to females ($M = 2.33, SD = 1.78; F(1, 372) = 134.07, p < .001$). Finally, gender differences were also observed for the video-watching variable with males ($M = 6.50, SD = 1.61$) scoring significantly higher when compared to females ($M = 6.01, SD = 1.52; F(1, 372) = 7.32, p = .01$). No significant gender differences were found for the communication variable ($p = .11$).

Next, results found significant age group differences for social media usage, communication and video gaming. More specifically, social media usage was highest in the late adolescence age group ($M = 5.79, SD = 1.52$), and lowest in the early adolescence age group ($M = 4.49, SD = 1.89$), with the early adulthood group being in the middle ($M = 5.20, SD = 1.32; F(2, 372) = 12.05, p < .001$). This pattern was also found for the communication variable with the late adolescence age group scoring the highest ($M = 7.75, SD = 1.36$), the early adolescence group scoring the lowest ($M = 5.70, SD = 1.73$), and the early adulthood group being in the middle ($M = 7.67, SD = 1.36; F(2, 372) = 47.83, p < .001$). This pattern was not present for the video game variable. Video game usage was highest among the early adolescence age group ($M = 4.01, SD = 2.51$), lowest for the early adulthood age group ($M = 2.66, SD = 1.91$), and in the

middle for the late adolescence age group ($M = 2.95$, $SD = 1.99$; $F(2, 372) = 28.44$, $p < .001$).

No significant age differences were found for the video watching variable ($p = .13$).

Additionally, a three-way interaction was found between age, gender and video game usage, $F(2, 372) = 5.04$, $p = .01$.

Partial correlations. To explore the relationships among these new variables (i.e., social media, communication, video game playing and video watching) and the main study variables, partial correlations were calculated while controlling for age, social desirability and gender. The social media variable was significantly correlated with both the communication, $r(359) = .53$, $p < .001$ and video watching variables, $r(359) = .36$, $p < .001$. Additionally, higher scores in the communication variable were significantly associated with higher scores on the video watching variable $r(359) = .30$, $p < .001$. Lastly, the video game and video watching variables were also both significantly related, $r(359) = .36$, $p < .001$.

When controlling for gender, social desirability and age, only a few of the online usage variables were significantly related to the relevant variables on in the current study. Table 4 displays partial correlations between the online usage variables and moral development variables while controlling for gender, age and social desirability response bias. The results found that more frequent social media usage, online communication and video watching were negatively associated with overall emotion strength. By contrast guilt, shame and moral identity online were not significantly related to any of the online usage variables. These relationships may suggest that using the Internet more often for these three activities may be related to having a lower emotional reaction to antisocial behaviours online. Next, a positive relationship was found between antisocial intentions and both video gaming $r(359) = .11$, $p = .04$ and video watching $r(359) = .15$, $p < .01$. In addition, antisocial behaviours were positively associated with both

social media usage, $r(359) = .14, p = .01$, and video watching $r(359) = .16, p = .00$. Although these correlation values are small, these findings provide preliminary evidence that different Internet activities may be related to antisocial behaviours and intentions online.

Lastly, relationships between overall Internet usage and the study variables were calculated. Higher Internet usage in general was significantly associated with lower overall strength of moral emotions, $r(359) = .15, p = .01$, stronger antisocial intentions, $r(359) = .12, p = .02$, and more frequent antisocial behaviours online $r(359) = .18, p = .00$. This finding is perhaps the most important in regards to Internet usage as it outlines that no matter what the activity, the relationships between frequent Internet usage and lower emotional reactions to antisocial behaviours, antisocial intentions and actual performance of antisocial behaviours, remain significant.

Discussion

The present study explored the potential impact of Internet use and online activities on moral development. First, we examined differences in moral emotions and moral identity between face-to-face interactions and online interactions. This included examining self-reported moral emotions and moral identity within different contexts and across different age groups. Second, the study investigated whether moral emotions mediate the relationship between moral identity and antisocial online behaviours and intentions. Finally, this research examined relationships between online activities and moral emotions, moral identity, as well as antisocial intentions and antisocial behaviours online. Findings are discussed considering these three major objectives.

Previous research has demonstrated that the anticipation of moral emotions is related to morally relevant behaviour and this is consistent across various age groups (Arsenio et al., 2004;

Johnston & Krettenauer, 2011). In the present study, the overall strength of moral emotions was lower in the online context when compared to the face-to-face context. As a reminder, the scenarios and antisocial behaviours presented to measure moral emotions were strictly parallel between the face-to-face context and the online context. Thus, these findings indicate there are clear differences in how individuals respond emotionally to the same behaviours depending on whether they appear in face-to-face versus online contexts. Previous research suggests that such differences may be attributable to factors such as anonymity, remoteness from interactions, and reductions in empathy online (Carrier et al., 2012; Christie & Dill, 2016; Suler, 2005; Waytz & Gray, 2018; Zimmerman & Ybarra, 2016). These factors may influence how people feel remorse and also how people anticipate the consequences of their actions, potentially affecting emotional reactions (Christopherson, 2007; Eastwick & Gardner, 2009; Hayne & Rice, 1997; Perren & Gutzwiller-Helfenfinger, 2012). Lower emotional strength in the online context may also help explain the higher rates of antisocial behavior in online contexts, as past research has found that lower moral emotion attributions are associated with higher levels of antisocial behaviours (Malti & Krettenauer, 2013).

When examining guilt and shame separately it was found that both forms of moral emotions were consistently lower in the online context compared to the face-to-face context. In addition, individuals who reported lower feelings of guilt and shame in response to immoral scenarios reported higher levels of past antisocial behavior and behavioral intentions in the online context. This finding supports the current study's hypothesis and is consistent with Johnston and Krettenauer's (2011) findings. Expanding on previous research on face-to-face interactions, guilt feelings were higher compared to shame in both contexts (Tangney et al., 2016). As guilt is more likely to result in individuals expressing self-criticism, the intention to

make up for one's misbehavior and correcting one's future behaviour (Stets & Carter, 2012), these findings indicate that immoral behavior in online interactions is potentially subject to self-corrections based on corresponding emotional appraisals.

In addition to moral emotions, moral identity was also examined between the face-to-face context and the online context. Moral identity in the face-to-face context was split into the friend relationships context, and the family relationships context. Previous research found that moral identity is context dependent to some extent, which is consistent with the socio-cognitive approach to studying moral identity (Aquino & Reed, 2002; Lapsley & Narvaez, 2004; Krettenauer et al., 2016; Krettenauer & Victor, 2017). The current study extended these findings to the online context. Individuals self-reported level of moral identity was lowest in the online context when compared to the two face-to-face relationship contexts. In line with past research, moral identity in both the friends and family relationship contexts were found to be consistently high (Krettenauer & Victor, 2017). These findings demonstrate that the online context potentially can weaken moral motivations and emotions within that context as they are related to individuals' moral identity.

The use of the Internet and mobile technology has become widespread by children and young teenagers. Consequently, it is important to determine how moral emotions and moral identity online may be related to age. All three forms of moral emotions showed a decrease across the three age groups in both contexts. One interpretation could be that as individuals mature, they may become less impacted by negative behaviours of others, feeling fewer negative moral emotions in response. In contrast, moral identity showed no significant age related differences; similar to past research documenting little age related change in moral identity in adolescence and early adulthood (Krettenauer & Hertz, 2016). In addition to the previously

mentioned age effects, it was found that the differences between the two contexts for moral emotions increased with age. Changes in effect sizes indicated that these differences were small in early teenage years but increased substantially during adolescence and early adulthood. For moral emotions, this increase in cross-context differentiation may be a result of differences for the level of importance or emphasis individuals place on certain forms of interactions within contexts, as they grow older. More research is needed to investigate the mechanisms involved in this relationship.

A similar trend was found when looking at moral identity in the three contexts. When examining the three separate age groups, the difference between moral identity in the online, and the face-to-face friends and family relationship contexts was smallest in the youngest age group and largest in the oldest age group. This is particularly true for the differences between the online context and the face-to-face family relationship context as the effect sizes increased from small to large between the three age groups (effect sizes also increased in relation to the friends context but these increases were smaller). This finding resonates with Krettenauer and Victor's (2017) findings that moral motivations tended to become more internal as individuals age. Perhaps individuals focus more on internal desires to do good deeds and these desires may be stronger in face-to-face interactions. Additionally, it could be that the online context results in more external motivations for meeting society's standards, which could in turn have an effect on moral identity portrayed between these two contexts. Furthermore, it may be that older individuals are more familiar with online technology resulting in a stronger ability to place emphasis on the contexts they deem more important. The results for both moral emotions and moral identity showing increased cross-context differentiation may also be a result of factors such as anonymity and remoteness exerting their influence over extended periods of time.

In addition to these contextual findings, revealing relationships were found between moral emotions and moral identity online, on the one hand, and antisocial behaviours and intentions online, on the other. Lower self-reported moral identity in the online context was associated with an increased likelihood to perform or intention to perform antisocial behaviours while online. In addition, lower overall strength of moral emotion expectancies were related to higher antisocial behaviours and intentions online. This finding extends previous research by Johnston and Krettenauer (2011), which found a similar relationship between moral emotion expectancies and delinquent activities. It confirms that moral identity and moral emotions in the online context are no less consequential for actual behavior in the online context as compared to face-to-face contexts.

The current study also expanded on past research investigating the mediating properties of moral emotions. Previous research provided evidence for moral emotions mediating the relationship between moral identity and self-reported levels of antisocial behaviour for interactions within face-to-face contexts (Johnston & Krettenauer, 2011; Kavussanu et al., 2015). The results provide evidence for this relationship when predicting antisocial behavior in the online context. The strength of moral emotion expectancies in response to hypothetical antisocial behaviours in the online context was found to mediate the relationship between moral identity online and both antisocial behaviours and intentions online. These findings also extend the idea that moral emotions are activated by moral identity, and in response may specifically influence antisocial intentions and performed behaviours in the online context (Johnston & Krettenauer, 2011).

The final goal of this study was to examine whether there are differences between moral emotions, moral identity and antisocial behaviours and intentions online depending on the

frequency and type of activities being performed when online. Different Internet activity groups were created by combining items from an online behaviour measure that asked about the frequency of various Internet activities. Four typical forms of online usage were distinguished: (1) use of social media, (2) communication via email or phone, (3) watching videos and movies, and (4) playing video games. In addition, overall Internet use frequency was examined. Interestingly, all variables, with the exception of video game playing, were found to be associated with lower moral emotion strength online. This finding is consistent with previous research finding that time spent emailing, as well as higher Internet use in general, are negatively associated with feelings of empathy (Waytz & Gray, 2018). Future research should focus on determining the processes behind the relationship between Internet usage and moral emotions.

In addition to the above findings, antisocial intentions online were found to be positively related to video gaming, video watching and general Internet usage, while antisocial behaviours online were only positively correlated with video watching and overall Internet usage. It may be that online use in general may influence empathy online resulting in higher or lower occurrences of antisocial intentions and behaviours online. These findings may also be explained by considering the factors that may make online antisocial behaviours “easier” to perform and also result in fewer chances of getting caught. For example, when individuals are presented with the option of illegally downloading a movie online or stealing a movie in person, the former results in fewer chances of being caught resulting in fewer consequences. In addition, as individuals use the Internet more and more, they may become immune to the fact that they are committing an antisocial, or even illegal act because their chances of learning from the consequences are reduced online. It is important to note that all correlations between the Internet activity variables and the relevant study variables were relatively small. Additionally, it should be noted that the

reliability for the video watching variable was relatively low and results with this variable should be examined with caution. Nonetheless, these findings provide the first evidence for frequency of Internet usage and of different Internet activities being associated with morally relevant behaviours and related constructs.

Limitations and Future Directions

This study is not without limitations. To begin, the current study used a cross-sectional design and correlational results. These two limitations make it impossible to examine individual changes over time and it also precludes the ability to examine causal effects of the study variables. Particularly in research that involves technology, there may be a potential for cross-sectional studies such as this one to be confounded with cohort effects. Future research should attempt to investigate longitudinal changes in order to determine how moral emotions, moral identity and antisocial behavior in the online context change over time. Second, for the three age groups, different recruitment strategies were used. This may negatively impact comparability of the three separate age groups. Related to this limitation, the number of participants in each age group and the distribution of gender groups across age groups were not balanced. Thus, future studies will have to be more restrictive in their recruitment strategies in order to properly balance gender and age. It may also be beneficial to expand the age range under study in order to determine any differences in later developmental periods. Finally, it is important to point out that moral emotions were measured as anticipated emotions in relation to hypothetical scenarios. It may be that the anticipated responses differ from actual emotional responses in real life events.

Future research should address these limitations. In addition, it will be important to investigate more variables that could potentially illuminate the relationships between the variables under study. For example, as previously mentioned empathy plays an important role in

moral development. At the same time it potentially is an important contributing factor to differences in moral behavior in the online context versus face-to-face contexts. In the future, research should include measures of empathy to determine if and how it is involved in these relationships. Furthermore, the current study investigated Internet behaviours very broadly. Future research should look to include more specific items pertaining to significant Internet activities in order to improve our understanding how these activities may be related to antisocial behaviours. This would help to examine whether differences in moral development do exist online depending on how individuals use the Internet as Waytz and Gray (2018) suggest. Finally, a suggestion for future research would be to use an experimental design. The current study provides interesting results that should be expanded, as the online context will likely continue to gain importance in people's everyday activities. Therefore, in order to draw definite causal conclusions on how online contexts influence moral behavior it is necessary to examine individual's behaviours online experimentally and to compared it to actual behavior in face-to-face interactions.

Conclusions

It is clear that society has come a long way since Walther's (1996) recommendation that all online communication tends to be impersonal and concise. Instead, more people than ever are using the Internet for a broad range of activities and it has become an important means of communication. These changes outline the need for research to examine relationships within this new context and what it may mean for moral development. The current research provides initial support for the importance of investigating the online context, specifically in relation to morally relevant behaviours and constructs. The findings provide the first evidence that both moral emotions and moral identity tend to be lower when individuals are online compared to face-to-

face with others, and this difference becomes more prolific as individuals grow older. These findings confirm that there is a difference in how individuals behave online and further research is needed to examine this relationship. Relationships were also found between different Internet activities and moral emotions, moral identity and antisocial behaviour outlining a key area that needs to be examined further.

The current study also provides further evidence for Suler's (2005) determination that there are differences in how people behave online. Whether these differences are caused by factors such as anonymity, remoteness from interactions and inability to see nonverbal cues and facial reactions, the need for research on the effect of online interactions on moral development is evident. As these factors may have different effects on moral personality development, the need for research to examine this area is undeniable.

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Table 1
List of Attributes and Frequency of Times Chosen

Attribute	Times Chosen	Attribute	Times Chosen
Trustworthy	140	Virtuous	43
Ethical	140	Wise	42
Knows what is right wrong	133	Friendly	41
Honest	132	Good	40
Respectful	126	Cooperative	37
Makes the right choice	101	Faithful	37
Has integrity	101	Has high standards	36
Responsible	97	Modest	36
Truthful	95	Altruistic	35
Honourable	88	Educated	33
Loyal	88	Consistent	32
Genuine	87	Loving	32
Empathic	86	Knowledgeable	31
Open minded	84	Upstanding	30
Considerate	82	Tolerant	29
Fair	80	Courteous	27
Nonjudgmental	79	Exemplary	26
Compassionate	77	Optimistic	26
Selfless	68	Benevolent	25
Humble	74	Confident	25
Understanding	73	Obedient	25
Follows the rules	71	Intelligent	24
Law abiding	68	Courageous	23
Accepting	68	Independent	22
Dependable	65	Strong	21
Sincere	63	Nice	21
Just	62	Grateful	20
Reliable	62	Proper	18
Self disciplined	62	Self assured	17
Caring	61	Persevere	13
Forgiving	51	Sociable	13
Rational	51	Cheerful	13
Helpful	47	Proud	12
Kind	46	Happy	11
Hard working	45	Religious	11
Listens	45	Sharing	11
Conscientious	44	Healthy	8
Generous	44	Fun	7
Patient	43	Clean	6
Righteous	43	Thrifty	3

Note. N = 293

Table 2
Means (and Standard Deviations) of Overall Sample and by Age Group for Relevant Study Variables

Variable	Overall	Early adolescence (12.42 – 14.33 years)	Late adolescence (17.17 – 22 years)	Early adulthood (22.08 – 35.25 years)
Exact age (in years)	19.53 (4.50)	13.33 (.47)	19.61 (1.14)	24.81 (1.96)
Moral emotions (online)	5.40 (.88)	5.93 (.79)	5.19 (.84)	5.27 (.81)
Moral emotions (face-to-face)	5.73 (.87)	6.05 (.76)	5.54 (.91)	5.76 (.82)
Guilt (online)	3.87 (.66)	4.20 (.60)	3.68 (.66)	3.84 (.61)
Guilt (face-to-face)	4.05 (.68)	4.36 (.55)	3.82 (.71)	4.11 (.61)
Shame (online)	3.00 (.58)	3.27 (.57)	2.90 (.55)	2.93 (.56)
Shame (face-to-face)	3.11 (.64)	3.25 (.57)	3.00 (.62)	3.14 (.71)
Moral identity (online)	3.72 (.96)	3.80 (1.00)	3.77 (.93)	3.58 (.97)
Moral identity (family)	4.25 (.68)	4.10 (.72)	4.36 (.68)	4.23 (.61)
Moral identity (friends)	4.15 (.74)	4.20 (.84)	4.18 (.73)	4.03 (.67)
Antisocial intentions	1.47 (.42)	1.35 (.46)	1.50 (.39)	1.55 (.41)
Antisocial behaviours	1.50 (.39)	1.30 (.37)	1.54 (.44)	1.58 (.36)
Social desirability	16.92 (2.80)	18.52 (3.17)	16.53 (2.47)	16.11 (2.23)

Note. $N = 393$

Table 3
Bivariate Correlations for Relevant Study Variables

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
(1) Moral emotions online													
(2) Moral emotions face-to-face	.90**												
(3) Guilt online	.58**	.60**											
(4) Guilt face-to-face	.56**	.65**	.89**										
(5) Shame online	.22**	.22**	.53**	.45**									
(6) Shame face-to-face	.12*	.16**	.38**	.38**	.71**								
(7) Moral identity online	.32**	.32**	.31**	.28**	.22**	.14**							
(8) Moral identity family	.19**	.19**	.23**	.22**	.11*	.07	.51**						
(9) Moral identity friends	.30**	.30**	.32**	.30**	.19**	.12*	.60**	.75**					
(10) Antisocial intentions	-.49**	-.48**	-.36**	-.34**	-.18**	.03	-.26**	-.24**	-.31**				
(11) Antisocial behaviour	-.50**	-.47**	-.40**	-.37**	-.23**	.13*	-.23**	-.20**	-.32**	.75**			
(12) Age in years	-.26**	-.13*	-.20**	-.14**	-.22**	-.05	-.06	.11*	-.07	.19**	.27**		
(13) Gender (2 = female)	.26**	.24**	.28**	.25**	.22**	.21**	.24**	.12*	.19**	-.21**	-.17**	-.13*	
(14) CSD-S	.25**	.16**	.06	.01	.03	-.06	.13*	-.09	.04	-.26**	-.27**	-.32**	.12*

Note. $N = 393$; Antisocial intentions and behaviours are in the online context.

* $p < .05$

** $p < .01$.

Table 4
 Partial Correlations for Internet User Groups and Moral Development Variables

	Strength of Moral Emotions	Guilt	Shame	Moral Identity	Antisocial Intentions	Antisocial Behaviours
Social Media	-.11*	-.07	-.02	.03	.03	.14*
Communication	-.17*	-.06	-.02	.05	.03	.03
Video Gaming	-.02	-.07	.01	-.01	.11*	.08
Video Watching	-.12*	-.06	.02	.10	.15*	.16*
Online Usage	-.15*	-.09	.00	.06	.12*	.18*

Note. $N = 369$; All variables are in the online context.

Gender, age and social desirability were included as covariates

* $p < .05$

** $p < .001$

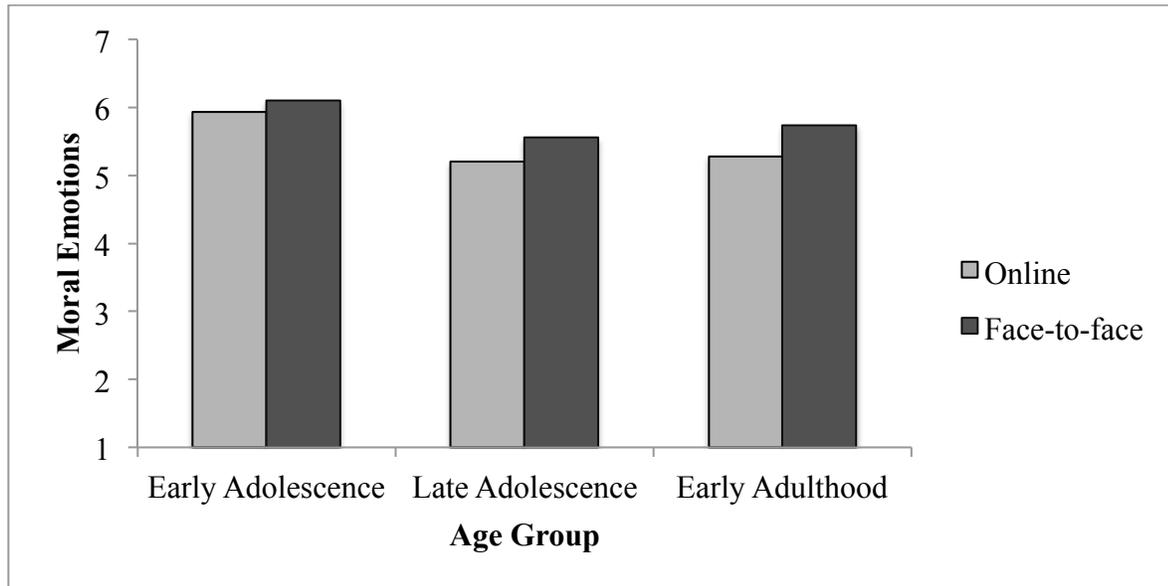


Figure 1. Cross-context differences for strength of moral emotions across age groups.

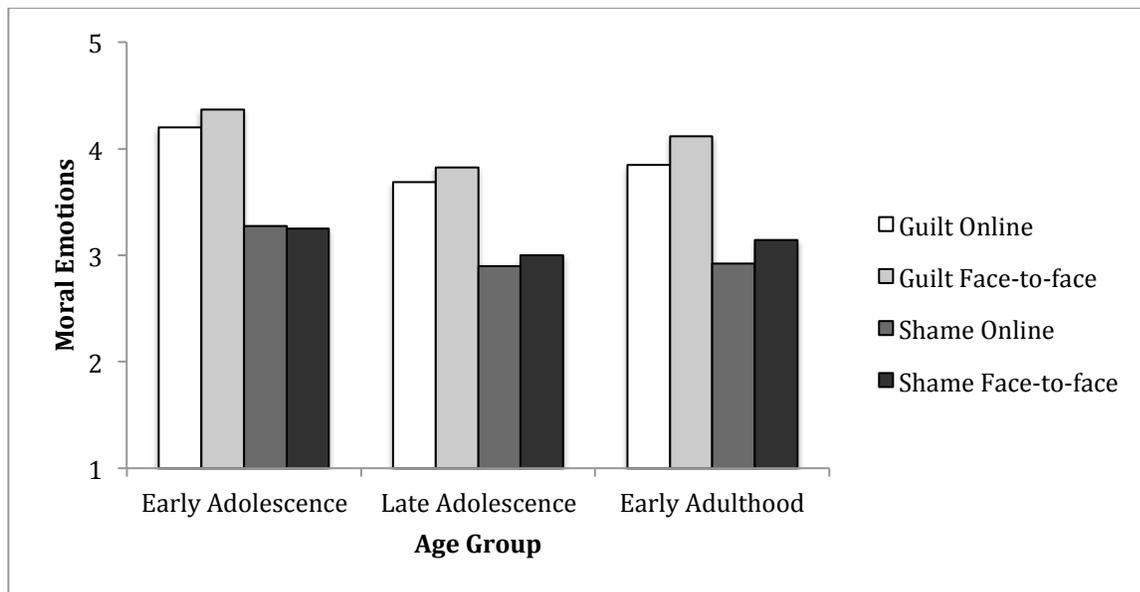


Figure 2. Cross-context differences for guilt and shame across age groups.

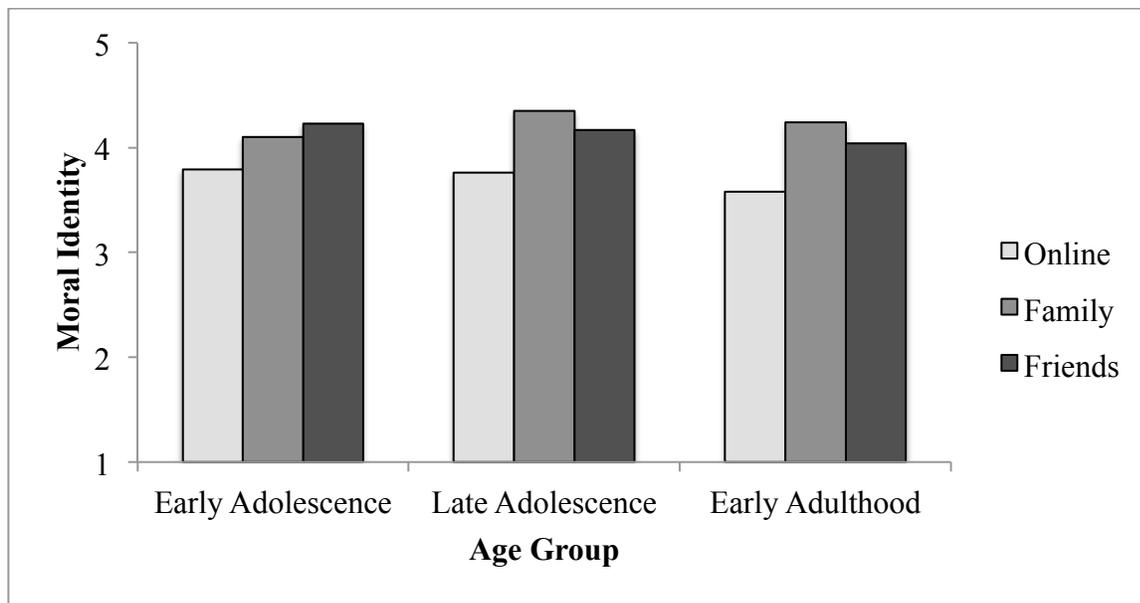


Figure 3. Cross-context differences for moral identity across age groups.

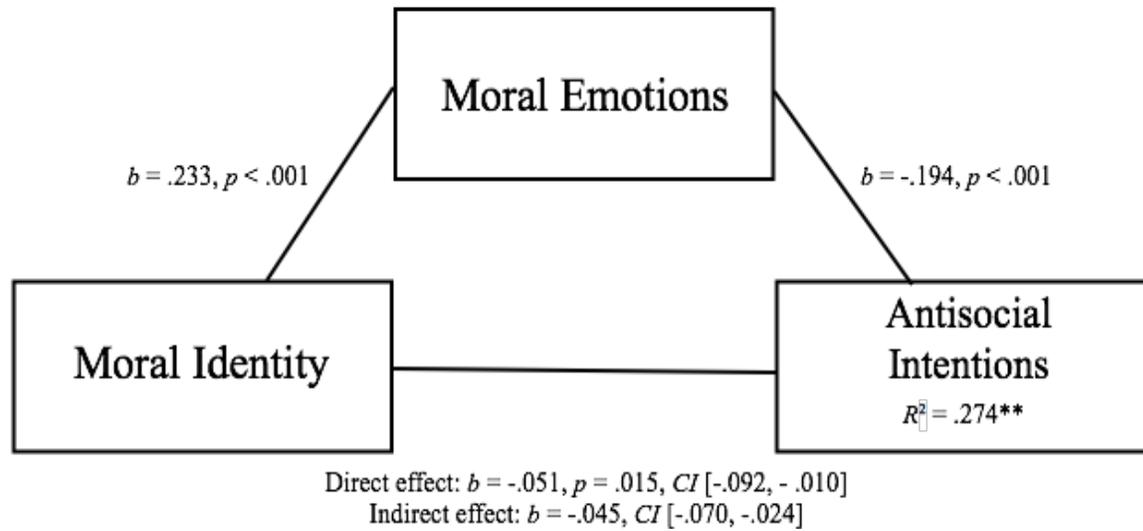


Figure 4a. Mediation model for moral identity, moral emotions and antisocial intentions online.

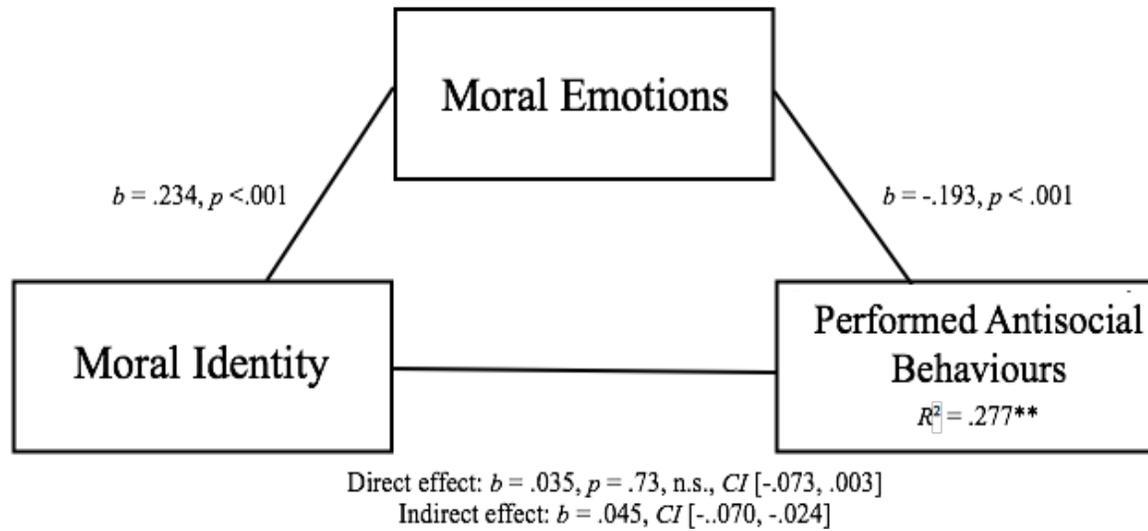


Figure 4b. Mediation models for moral identity, moral emotions and antisocial behaviours online.

Appendix A

Demographic Information

Before starting with the main part of the questionnaire, we need some information about you.

Please provide your personal code:

First two letters in your mother's first name (e.g., MARY)

Your own birthday (e.g., February 12, 1991)

First two letters in your father's first name (e.g., DAVID)

Please provide the following information about you:

Year of Birth: _____

Month of Birth: _____

Gender: female
 male

Grade Level: Grade 7
 Grade 8

Country of Birth: Canada
 outside Canada: _____

If you were not born in Canada:

For how many years have you been living in Canada? _____

What language do you mostly speak at home? English
 French
 Other: _____

What is **your father's** current occupation? (If your father is not working right now, what was his last job?) Please provide a job title and brief description of what your father is actually doing (e.g., Postman. He delivers mail to people's homes).

What is **your mother's** current occupation? (If your mother is not working right now, what was her last job?) Please provide a job title and brief description of what your mother is actually doing (e.g., Accounting officer. She manages payroll for a larger company).

Things People Do or Don't Do

In the following, you find a list of things people sometimes do or don't do. Please indicate for each behaviour, how often you have done this **in the past**.

0 = **Never**

1 = **Once or twice**

2 = **A few times**

3 = **Several times**

_____ Have you ever reported someone's post or tried to get them in trouble with the website admin without good reason for fun (e.g. Instagram, Snapchat, Facebook etc.)?

_____ Have you ever over-charged for an item when selling it online?

_____ Have you ever-downloaded commercial music or videos from an online source without paying?

_____ Have you ever made negative comments about someone's race, ethnic group or disability online?

_____ Have you ever spread a rumour about someone online?

_____ Have you ever sent someone a threatening message online (i.e. via text, social media, email, etc.)?

_____ Have you sever stolen someone's personal information online?

_____ Have you ever purchased an item online that was a knockoff but told people it was real?

_____ Have you ever created a fake identity online? (e.g. changing your name, using a different picture, changes your daily dialogue).

_____ Have you ever posted a negative comment about someone's picture on a social media application?

_____ Have you ever "screenshotted" a picture without someone's permission or without them knowing? (e.g. Snapchat, Facebook, Instagram, Twitter).

_____ Have you ever used the Internet to plagiarize? (e.g. SparkNotes, payforessay.com)

_____ Have you ever accessed someone's online account without his or her permission?

_____ Have you ever altered a photo of yourself before posting it online (e.g. photoshop, etc.)?

_____ Have you ever posted an inappropriate picture of someone else?

_____ Have you ever kicked somebody out of an online game or group conversation for no reason?

_____ Have you ever insulted somebody online for fun? (e.g. trolling).

What you Like to Do

Please indicate how often you do each of the following on any technological device (i.e., phone, tablet, laptop, computer, etc.)

- 0 = **Never**
 1 = **Once a month**
 2 = **Once a week**
 3 = **Several times a week**
 4 = **Once a day**
 5 = **Several times a day**
 6 = **Once an hour**
 7 = **Several times an hour**
 8 = **All the time**

-
- _____ How often do you check for text messages or instant messages?
- _____ How often do you play video games with other people in the same room?
- _____ How often do you meet with friends in person outside of school activities?
- _____ How often do you play games with other people online?
- _____ How often do you watch TV shows and movies online?
- _____ How often do you search the Internet for images, videos or photos?
- _____ How often do you meet people online?
- _____ How often do you check Facebook or Instagram pages or other social networks?
- _____ How often do you comment on social media postings, status updates, photos, etc.?
- _____ How often do you send and receive text messages or instant messages?
- _____ How often do you search the Internet for information and/or news?
- _____ How often do you post photos to social media (Snapchat, Facebook, Instagram, etc.)?
- _____ How often do you check you emails?
- _____ How often do you read or look at social media postings (i.e. Facebook, Snapchat, Instagram, etc.)?
- _____ How often do you watch video clips online?
- _____ How often do you play video games by yourself?
- _____ How often do you post a social media status update?
- _____ How often do you browse social media profiles and photos?

Things You May (or May not) Do in the Future

In the following, you find a list of things people sometimes do or don't do. Please indicate for each behaviour, whether you could imagine yourself engaging in it by choosing one of the following options.

- 0 = I would **never** do this
 1 = I **possibly** would do this
 2 = I **likely** would do this
 3 = I **surely** would do this

- _____ I would use an online source to plagiarize an assignment or an essay.
- _____ I would "screenshot" a picture without someone's permission or without them knowing (e.g. Snapchat, Facebook, Instagram, Twitter).
- _____ If I were able to, I would steal someone's personal information while I was online.
- _____ I would over-charge for an item when selling it online.
- _____ If I had to, I would create a fake identity online (e.g. changing your name, using a different picture).
- _____ I would spread a rumour about someone online, given the opportunity.
- _____ I would have no issues with posting a negative comment on someone's picture on Facebook, or Instagram in the future.
- _____ I would send threatening messages online (i.e. via text, social media, email, etc.) if I had to.
- _____ I would state that an item was newer than it actually is online (e.g. Kijiji, Facebook market, etc.).
- _____ I would consider insulting somebody online for fun (e.g. trolling).
- _____ I would be willing to post an inappropriate picture of someone else online.
- _____ I would consider accessing someone's online account without their permission.
- _____ I would kick somebody out of an online game or group conversation for no reason.
- _____ I would have no problems with altering a photo of myself before posting it online (e.g. photoshop)
- _____ Without hesitation, I would repost someone's post just to get them in trouble with the website admin without good reason (e.g. Facebook, Instagram, Snapchat, etc.).
- _____ I could see myself downloading music or videos online without paying in the future.
- _____ I would have no issue with saying a negative comment about someone's face, ethnic group or disability if it was while I was online.

Personal Characteristics That Are Important to You

The following part of the questionnaire is about the importance of values in your personal life. To get started we would like to ask a general question.

What characterizes a highly moral person, from your personal point of view?

Please write down 3-5 characteristics that spontaneously come to your mind:

In the following you will find a list of characteristics that people use to describe a highly moral person. Please rate each quality according to how well it describes a highly moral person on a scale from 1 = *not at all*, 2 = *a little bit*, 3 = *somewhat*, 4 = *fairly well*, and 5 = *extremely well*.

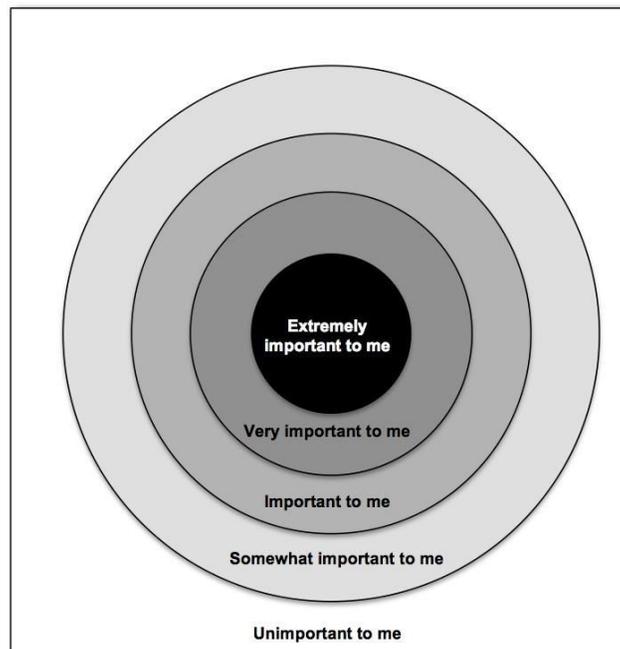
Trustworthy, Virtuous, Ethical, Wise, Knows what is right wrong, Friendly, Honest, Good, Respectful, Cooperative, Makes the right choice, Faithful, Has integrity, Has high standards, Responsible, Modest, Truthful, Altruistic, Honourable, Educated, Loyal, Consistent, Genuine, Loving, Empathic, Knowledgeable, Open minded, Upstanding, Considerate, Tolerant, Fair, Courteous, Nonjudgmental, Exemplary, Compassionate, Optimistic, Selfless, Benevolent, Humble, Confident, Understanding, Obedient, Follows the rules, Intelligent, Law abiding, Courageous, Accepting, Independent, Dependable, Strong, Sincere, Nice, Just, Grateful, Reliable, Proper, Self disciplined, Self assured, Caring, Persevere, Forgiving, Sociable, Rational, Cheerful, Helpful, Proud, Kind, Happy, Hard working, Religious, Listens, Sharing, Conscientious, Healthy, Generous, Fun, Patient, Clean, Righteous, Thrifty

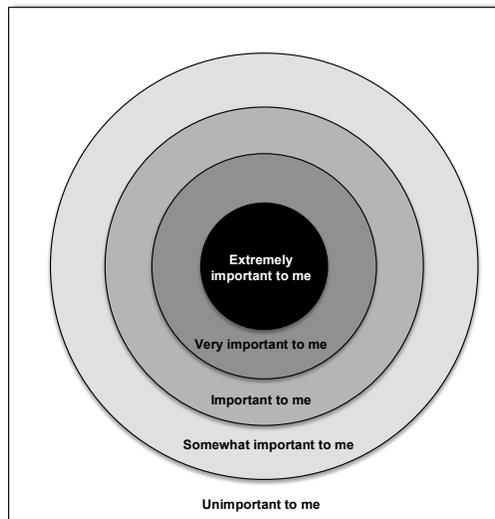
In the next step please select 12-15 of the above qualities that define the core of a highly moral person from your point of view. Please select 12-15 attributes that define the core of a highly moral person in your personal point of view.

So far we asked you about what characteristics make a moral person. We now would like to learn from you how important these characteristics are **for you in different areas of your personal life:**

- **When you are with your family.**
- **When you are with your friends.**
- **When you are online.**

Imagine the diagram below is a diagram of you. All characteristics that are extremely important to you in the various areas of your life (family, friends, online) belong to your core. Characteristics that are still important but are a less central part of you are outside the core area. Characteristics that are unimportant are outside the circle diagram; they do not belong to you.

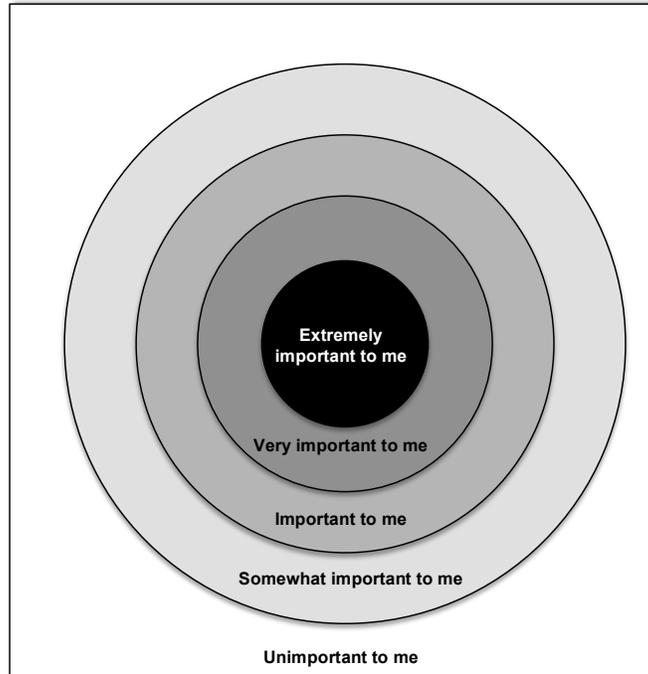




... When You Are with Your Family.

How important are the following qualities for you when you are with your family?

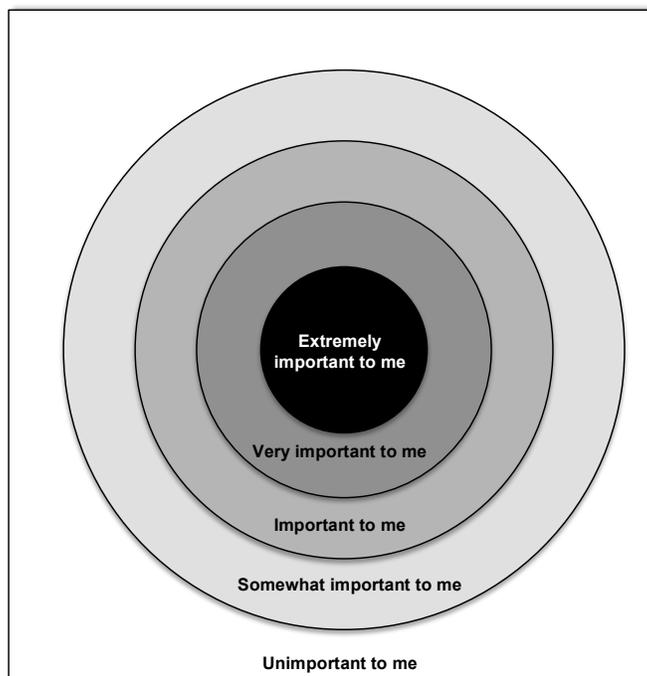
	Unimportant to me	Somewhat important to me	Important to me	Very Important to me	Extremely important to me
1 -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2 -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3 -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4 -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5 -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6 -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7 -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8 -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9 -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10 -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11 -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12 -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13 -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



... When You Are Online.

How important are the following qualities **for you** when you are with **your online**?

	Unimportant to me	Somewhat important to me	Important to me	Very Important to me	Extremely important to me
1 -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2 -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3 -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4 -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5 -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6 -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7 -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8 -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9 -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10 -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11 -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12 -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13 -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



... When You Are With Your Friends.

How important are the following qualities **for you** when you are with **your friends**?

	Unimportant to me	Somewhat important to me	Important to me	Very Important to me	Extremely important to me
1 -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2 -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3 -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4 -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5 -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6 -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7 -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8 -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9 -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10 -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11 -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12 -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13 -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How You Think and Feel

On the following pages you find descriptions of a variety of situations. After each situation, you will see statements that describe ways how you might think and feel.

Imagine: You are selling an item at a garage sale; you state that it is one year old while it is actually three years old.

How would you feel about yourself in this situation?

Extremely bad 1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7 Extremely good

Why would you feel good (or bad) about yourself in this situation?

	Strongly disagree	Somewhat disagree	Neither disagree nor agree	Somewhat agree	Strongly agree
Others would not take advantage of potential buyers. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Others would lie even more to make an item look better. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I should be honest with buyers and not lie about an item. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Imagine: You send inappropriate photos of your friend to other people via text message.

How would you feel about yourself in this situation?

Extremely bad 1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7 Extremely good

Why would you feel good (or bad) about yourself in this situation?

	Strongly disagree	Somewhat disagree	Neither disagree nor agree	Somewhat agree	Strongly agree
I don't want to see my friend for the next couple of days. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I want to apologize to my friend and attempt to stop the photo from going any further. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It is my friend's fault that an inappropriate photo exists in the first place. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other people were asking me if they could see the photo so it is their fault. --	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Imagine: You take a couple of DVDs of your favourite movies from a video store without paying.

How would you feel about yourself in this situation?

Extremely bad 1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7 Extremely good

Why would you feel good (or bad) about yourself in this situation?

	Strongly disagree	Somewhat disagree	Neither disagree nor agree	Somewhat agree	Strongly agree
I am a thief if I take things without paying. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In the future I should reconsider and pay for the movie. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Many people do this, so why shouldn't I?-----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The movie business makes enough money that I do not have to pay for every DVD I want. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Imagine: You purposefully anger somebody in an online forum.

How would you feel about yourself in this situation?

Extremely bad 1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7 Extremely good

Why would you feel good (or bad) about yourself in this situation?

	Strongly disagree	Somewhat disagree	Neither disagree nor agree	Somewhat agree	Strongly agree
I want to leave this online forum immediately. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I want to make sure that this does not happen to me again in the future. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
This is just "trolling", nothing else. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Imagine: You sell a T.V. worth \$150 online for \$300. The buyer is unaware that you are overcharging.

How would you feel about yourself in this situation?

Extremely bad 1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7 Extremely good

Why would you feel good (or bad) about yourself in this situation?

	Strongly disagree	Somewhat disagree	Neither disagree nor agree	Somewhat agree	Strongly agree
The buyer should have known better how much the TV is actually worth. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It is OK to overcharge. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In the future, I will be honest about the real price of an item.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel ashamed. Other people would not do this. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Imagine: You plagiarize on an assignment you hand in in class to be graded by your teacher.

How would you feel about yourself in this situation?

Extremely bad 1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7 Extremely good

Why would you feel good (or bad) about yourself in this situation?

	Strongly disagree	Somewhat disagree	Neither disagree nor agree	Somewhat agree	Strongly agree
Why blame me, if everyone is plagiarizing? -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Others would have cited properly cited the source. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I should put more effort into developing my own thoughts and ideas when writing assignments. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
“Copying” for a school assignment is fine. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Imagine: You find a way to download your favourite movies from an online source without having to pay.

How would you feel about yourself in this situation?

Extremely bad 1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7 Extremely good

Why would you feel good (or bad) about yourself in this situation?

	Strongly disagree	Somewhat disagree	Neither disagree nor agree	Somewhat agree	Strongly agree
Everyone else does this. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am a bad person if I take things without paying. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I promise to pay for movies in the future because that is the right thing to do. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The amount of money the movie industry loses by people downloading movies pales in comparison to what they make each year. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Imagine: Mistakenly, a woman leaves her credit card information online. You use this information to make a \$100 online purchase.

How would you feel about yourself in this situation?

Extremely bad 1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7 Extremely good

Why would you feel good (or bad) about yourself in this situation?

	Strongly disagree	Somewhat disagree	Neither disagree nor agree	Somewhat agree	Strongly agree
I am just "borrowing" her credit card for a small purchase.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I should attempt to find the person to tell them their information is online. ---	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Others would not taken advantage of the situation. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Someone leaving this information online basically asks others to take it. --	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Imagine: You emailed a bunch of people posing as a charity and obtained \$50 from them. They are unaware that you are not a charity.

How would you feel about yourself in this situation?

Extremely bad 1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7 Extremely good

Why would you feel good (or bad) about yourself in this situation?

	Strongly disagree	Somewhat disagree	Neither disagree nor agree	Somewhat agree	Strongly agree
I avoid these individuals and hide from the situation. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I want to give the money to a real charity. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Others do things that are much worse. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
People should be better informed and know what a real charity is. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Imagine: You show inappropriate photos of your friend to other people.

How would you feel about yourself in this situation?

Extremely bad 1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7 Extremely good

Why would you feel good (or bad) about yourself in this situation?

	Strongly disagree	Somewhat disagree	Neither disagree nor agree	Somewhat agree	Strongly agree
It is my friend's fault that they took an inappropriate photo of themselves. ----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I want to tell my friend what I've shown people and apologize. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I want to avoid my friend now. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Everyone was asking if they could see the photo so I had no choice. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Imagine: While passing somebody at school, you state that she looks ugly.

How would you feel about yourself in this situation?

Extremely bad 1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7 Extremely good

Why would you feel good (or bad) about yourself in this situation?

	Strongly disagree	Somewhat disagree	Neither disagree nor agree	Somewhat agree	Strongly agree
Other people say much meaner things when passing people in the hallway. ----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It does not matter how I feel about someone, I should not be so mean. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel like the meanest person on earth. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Imagine: You sell a T.V. worth \$150 at a garage sale for \$300. The buyer is unaware that you are overcharging.

How would you feel about yourself in this situation?

Extremely bad 1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7 Extremely good

Why would you feel good (or bad) about yourself in this situation?

	Strongly disagree	Somewhat disagree	Neither disagree nor agree	Somewhat agree	Strongly agree
The buyer should have checked the TV better to find out if I am overcharging. -	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Next time I sell an item I will be honest with the buyer about the price. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It is OK to overcharge for items if the buyer does not know. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am greedy and selfish. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Imagine: You plagiarize on an online assignment to be graded by a computer program.

How would you feel about yourself in this situation?

Extremely bad 1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7 Extremely good

Why would you feel good (or bad) about yourself in this situation?

	Strongly disagree	Somewhat disagree	Neither disagree nor agree	Somewhat agree	Strongly agree
I should procrastinate less so that there is no need plagiarize. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Others would not have done this. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
This is just "copying" from others. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
You should not be blamed for something everyone is doing. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Imagine: You create a fake email account to obtain online coupons.

How would you feel about yourself in this situation?

Extremely bad 1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7 Extremely good

Why would you feel good (or bad) about yourself in this situation?

	Strongly disagree	Somewhat disagree	Neither disagree nor agree	Somewhat agree	Strongly agree
I am a liar. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am not hurting anyone by obtaining online coupons. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I do not want to use these coupons. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Others use a fake ID to do much worse things. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Imagine: You provide false personal information to obtain coupons from a sales representative in a store.

How would you feel about yourself in this situation?

Extremely bad 1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7 Extremely good

Why would you feel good (or bad) about yourself in this situation?

	Strongly disagree	Somewhat disagree	Neither disagree nor agree	Somewhat agree	Strongly agree
Others use fake personal information to do much worse things. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I want to give these coupons to people who need them more than I do. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am so greedy. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am not hurting anyone by doing this. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Imagine: You spread a rumour about your classmate by passing an anonymous note in your class.

How would you feel about yourself in this situation?

Extremely bad 1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7 Extremely good

Why would you feel good (or bad) about yourself in this situation?

	Strongly disagree	Somewhat disagree	Neither disagree nor agree	Somewhat agree	Strongly agree
It is okay to spread rumours once in awhile. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It is just a rumour, it's nothing serious. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I want to stop the note from spreading any further and apologize to my classmate. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I want stay home for a few days to avoid seeing my classmate. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Imagine: You cheat to win in an in-person game (e.g. Soccer, Monopoly, etc.).

How would you feel about yourself in this situation?

Extremely bad 1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7 Extremely good

Why would you feel good (or bad) about yourself in this situation?

	Strongly disagree	Somewhat disagree	Neither disagree nor agree	Somewhat agree	Strongly agree
Nobody cares if you cheat during a game. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I want to be fair to others, even in a game. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am the worst cheater. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Everyone else is cheating so it would not be fair if I did not cheat. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Imagine: You use a cheat sheet in an in-class exam, even though it is not allowed.

How would you feel about yourself in this situation?

Extremely bad 1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7 Extremely good

Why would you feel good (or bad) about yourself in this situation?

	Strongly disagree	Somewhat disagree	Neither disagree nor agree	Somewhat agree	Strongly agree
It is not fair to cheat. In the future I want to study properly. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I need to get a good grade on this exam to impress my parents and teachers. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am worthless. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Everybody uses a cheat sheet once in awhile. I put myself at a disadvantage if I don't cheat. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Imagine: You spread a rumour about your classmate on Reddit or Yik-Yak.

How would you feel about yourself in this situation?

Extremely bad 1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7 Extremely good

Why would you feel good (or bad) about yourself in this situation?

	Strongly disagree	Somewhat disagree	Neither disagree nor agree	Somewhat agree	Strongly agree
It is just a rumour it does not cause any harm. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It is OK to spread rumours. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I want to apologize and make sure my classmate is OK. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I want to hide from my classmate and avoid contact. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Imagine: You exclude somebody from a group in-person game (e.g. Tag, Chess, etc.).

How would you feel about yourself in this situation?

Extremely bad 1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7 Extremely good

Why would you feel good (or bad) about yourself in this situation?

	Strongly disagree	Somewhat disagree	Neither disagree nor agree	Somewhat agree	Strongly agree
It is OK to exclude someone from a game. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I want to make sure that this does happen again. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am rude. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Imagine: You knocked at a few people's doors while posing as a charity and obtained \$50. People who donated were unaware that you are not a charity.

How would you feel about yourself in this situation?

Extremely bad 1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7 Extremely good

Why would you feel good (or bad) about yourself in this situation?

	Strongly disagree	Somewhat disagree	Neither disagree nor agree	Somewhat agree	Strongly agree
Others have done this before. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It is not my fault if people can be convinced so easily. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I want to give these people their money back. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I want to avoid the neighbourhood in the future. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Imagine: You find a credit card that does not belong to you on the ground. You use this credit card to spend \$100 in a store.

How would you feel about yourself in this situation?

Extremely bad 1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7 Extremely good

Why would you feel good (or bad) about yourself in this situation?

	Strongly disagree	Somewhat disagree	Neither disagree nor agree	Somewhat agree	Strongly agree
I should call the bank so they can deactivate the card and alert the owner. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am only doing this because someone leaves the card on the ground basically for me to use. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am just "borrowing" their credit card to buy a few things in the store. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am a thief. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Imagine: While writing an online exam you Google the answer, even though the rules clearly state that you must not use any extra material.

How would you feel about yourself in this situation?

Extremely bad 1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7 Extremely good

Why would you feel good (or bad) about yourself in this situation?

	Strongly disagree	Somewhat disagree	Neither disagree nor agree	Somewhat agree	Strongly agree
Everybody does this once in awhile, so really I'm at a disadvantage if I don't cheat. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am a cheater. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have to cheat to achieve good grades and to get ahead in life. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I want study harder in the future because it is unfair to cheat. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Imagine: You are meeting a new friend and you make things up about yourself in the conversation to make yourself sound better.

How would you feel about yourself in this situation?

Extremely bad 1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7 Extremely good

Why would you feel good (or bad) about yourself in this situation?

	Strongly disagree	Somewhat disagree	Neither disagree nor agree	Somewhat agree	Strongly agree
It is okay to lie about certain aspects of yourself. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I would not want to meet this person again. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I should be more truthful about myself. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A little bit of "self-promotion" is okay. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Imagine: You cheat to win in an online multi-player game (e.g. Overwatch, Candycrush, etc.).

How would you feel about yourself in this situation?

Extremely bad 1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7 Extremely good

Why would you feel good (or bad) about yourself in this situation?

	Strongly disagree	Somewhat disagree	Neither disagree nor agree	Somewhat agree	Strongly agree
It is not a big deal to cheat in a game. ---	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Everyone else cheats, so why shouldn't I? -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Even it is tempting, I should not cheat in games. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Others are much better at fair play than I. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Imagine: You try to provoke a stranger on the street.

How would you feel about yourself in this situation?

Extremely bad 1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7 Extremely good

Why would you feel good (or bad) about yourself in this situation?

	Strongly disagree	Somewhat disagree	Neither disagree nor agree	Somewhat agree	Strongly agree
This is just "poking fun". -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I want to be nicer to people I do not know and not do this in the future. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel awful and want to hide from others. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Imagine: You are updating your social media profile and you insert some things about yourself that make you look good but that are not true.

How would you feel about yourself in this situation?

Extremely bad 1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7 Extremely good

Why would you feel good (or bad) about yourself in this situation?

	Strongly disagree	Somewhat disagree	Neither disagree nor agree	Somewhat agree	Strongly agree
I hope no one will contact me. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I should be more honest with others. ---	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It is okay to lie about yourself once in awhile. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
This is "boosting" yourself, nothing else. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Imagine: You exclude or kick somebody from an online game (e.g. Clash Royale, Tetris, etc.).

How would you feel about yourself in this situation?

Extremely bad 1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7 Extremely good

Why would you feel good (or bad) about yourself in this situation?

	Strongly disagree	Somewhat disagree	Neither disagree nor agree	Somewhat agree	Strongly agree
I don't want to let similar things happen in the future again.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have terrible sportspersonship. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It is OK because it is just a game. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Imagine: You post an item for sale online, in the description you state that it is one year old while it is actually three years old.

How would you feel about yourself in this situation?

Extremely bad 1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7 Extremely good

Why would you feel good (or bad) about yourself in this situation?

	Strongly disagree	Somewhat disagree	Neither disagree nor agree	Somewhat agree	Strongly agree
Even though it is tempting, I should not give a wrong description of the item. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Others exaggerate much more when trying to sell things. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Others would be more honest in this situation. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Imagine: You comment on someone’s Facebook photo, and say that she looks ugly.

How would you feel about yourself in this situation?

Extremely bad 1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7 Extremely good

Why would you feel good (or bad) about yourself in this situation?

	Strongly disagree	Somewhat disagree	Neither disagree nor agree	Somewhat agree	Strongly agree
Others say much meaner things on people’s profiles. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Regardless of how I feel about others, I should not say mean things to them. ---	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Others would not be so mean. -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Nobody is Perfect

Below you find a list of questions. Please read each question carefully and decide if it describes you or not.

If it describes you, check the box for "YES", if not check "NO".

	YE	N O
Do you always do the right things? -----	<input type="checkbox"/>	<input type="checkbox"/>
Are there sometimes when you don't like to do what your parents tell you? -----	<input type="checkbox"/>	<input type="checkbox"/>
Do you sometimes feel angry when you don't get your way? -----	<input type="checkbox"/>	<input type="checkbox"/>
Sometimes, do you do things you've been told not to do? -----	<input type="checkbox"/>	<input type="checkbox"/>
Do you sometimes feel like making fun of other people? -----	<input type="checkbox"/>	<input type="checkbox"/>
Are you always careful about keeping you clothing neat and your room picked up? -----	<input type="checkbox"/>	<input type="checkbox"/>
Do you always listen to your parents? -----	<input type="checkbox"/>	<input type="checkbox"/>
Do you sometimes wish you could just play around instead of having to go to school? -----	<input type="checkbox"/>	<input type="checkbox"/>
Do you ever say anything that makes somebody else feel bad? -----	<input type="checkbox"/>	<input type="checkbox"/>
Have you ever felt like saying unkind things to a person? -----	<input type="checkbox"/>	<input type="checkbox"/>
Do you sometimes get mad when people don't do what you want them to do? -----	<input type="checkbox"/>	<input type="checkbox"/>
Have you ever broken a rule? -----	<input type="checkbox"/>	<input type="checkbox"/>
Are you always polite, even to people who are not very nice? -----	<input type="checkbox"/>	<input type="checkbox"/>
Do you sometimes feel like staying home form school even if you are not sick? ----	<input type="checkbox"/>	<input type="checkbox"/>