

2010

# Moral Emotion Expectancies in Adolescence: A Cross-Cultural Perspective

Fanli Jia  
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*Your file* *Votre référence*  
ISBN: 978-0-494-68704-8  
*Our file* *Notre référence*  
ISBN: 978-0-494-68704-8

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Running Head: MORAL EMOTION EXPECTANCIES

MORAL EMOTION EXPECTANCIES IN ADOLESCENCE: A CROSS-CULTURAL  
PERSPECTIVE

By

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Bachelor of Arts, University of Winnipeg, 2008

THESIS

Submitted to the Department of Psychology

in partial fulfillment of the requirements for the Master of Arts

Wilfrid Laurier University

2010

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## ABSTRACT

Cross-cultural research on moral development has documented reliable cultural differences in people's evaluations of moral and immoral actions. Prosocial actions are typically viewed as more obligatory and less discretionary in collectivistic cultures relative to individualistic cultures. While past research mostly focused on moral judgments, it largely neglected moral emotions. The present study was aimed at investigating self- and other-evaluative emotions following (im) moral actions in different situational and cultural contexts. It investigated moral emotion expectancies of Canadian and Chinese adolescents and young adults across different situational contexts. For each culture, 179 Canadian and 193 Chinese adolescents from grade levels 7-8, 10-11 and 1<sup>st</sup>-2<sup>nd</sup> year university filled out a questionnaire. Participants were provided with 16 different scenarios depicting moral and immoral actions of self and others in either prosocial or moral contexts. Emotional expectations about themselves and others were assessed following each scenario by asking adolescents to rate various positively as well as negatively charged self- and other evaluative emotions (pride, satisfaction, guilt, shame, admiration, respect, contempt, anger). Obligation/ discretion ratings and Horizontal/Vertical Collectivism-Individualism scales were measured. The main assumptions of cultural differences were confirmed in the present study that Chinese were more likely to hold a collectivist cultural view with more obligations in prosocial contexts and Canadians were more likely to hold an individualist view with more personal discretion in prosocial contexts. In a mixed model ANOVA, significant interactions between situational context (prosocial/moral), types of action (rule abiding/rule conforming) and culture were found for both self- and other-evaluative

emotions. Canadian participants expressed more intense negative self-evaluative emotions relative to Chinese participants, in particular in the prosocial context. By contrast, Chinese participants expressed more negative other-evaluative emotions than Canadian participants when confronted with the rule-violating behavior of others in both prosocial and moral contexts. However, regression analyses did not find cross-cultural differences in predicting other-evaluative emotions from self-evaluative emotions in prosocial contexts. Overall, the study points to systematic cultural differences in moral emotions; however, these differences were only partially attributable to moral judgment.

## ACKNOWLEDGEMENTS

The hard work and dedication of many people allowed this project to come to fruition. Firstly, I would like to thank Dr. Krettenauer for his supervision throughout the study. Secondly, I would like to thank all the participants. Their hard work and patience is greatly appreciated.

I owe a great deal of gratitude towards the team of researchers (Dr. Li, Northern-East Normal University, Teacher Wang, Da Qing No. 1 Secondary School, and Teacher Gao, Shang Rao Experimental High School) for their assistance with data collection in China. Their time and effort allowed this project to be completed in a timely manner. I enjoyed working as part of this dedicated team of researchers.

I wish to thank a number of people for their support during my time at Laurier. I thank Daniel Colangelo for his friendship. I thank Dr. Krettenauer for imparting to me his extensive knowledge in the field of moral development, for always offering useful suggestions, and for offering continuous positive support and care. You have inspired me as a researcher and as an individual. I look forward to the future and to continue to collaborate on research.

Finally, I thank my family. Mom, Dad, and Yu Gong – I owe the greatest thanks to you for your love and support.

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### Moral Emotion Expectancies in Adolescence: A Cross-Cultural Perspective

Morality has been heavily investigated in psychology over the last fifty years, since Lawrence Kohlberg initially proposed his stage theory of moral development. Kohlberg (1969) primarily focused on independent, individual processes of moral decision-making. Consequently, as moral reasoning advances through Kohlberg's developmentally defined stages, an individual's moral reasoning is supposed to become less dependent on outside influences (Trevino & Youngblood, 1990).

However, Kohlberg's view has been challenged by the idea that morality is an interdependent and connected phenomenon (Gilligan, 1977). This explanation has emphasized the social-cultural influences that affect an individual's morality. Precisely how social and cultural variations influence individuals' moral development remains unclear. Recently, cultural psychologists have paid great attention to the psychological details of cultural variations. A major variable distinguishing particular cultures is that of individualism versus collectivism. How persons are defined, how they live and work or study with each other, and which type of morality they hold are the main contents of individualism and collectivism (Markus & Kitayama, 1991).

Research on culture is important in moral development because it not only allows the study of the universality of psychological theories of moral development, but also expansion of the psychological constructs and process explanations invoked in understanding moral outlooks (Miller, 2007a). Cross-cultural research on social attribution has demonstrated cross-cultural differences in social inferences. In particular, it has been found that there tends to be a greater emphasis on explaining social actions and emotions in terms of dispositional traits of the person in individualist cultures,

whereas collectivist cultures are more weighted in social attribution to social role relations and other contextual factors (Miller, 1984; Miller, 2007a; Miller, Chakravarthy & Rekha, 2008; Shweder & Bourne, 1984).

Emotional attributions also require a strong cognitive component besides moral reasoning and judgment, when people face a moral conflict, and the relationship between moral actions and emotion is complex (Krettenauer, Malti & Sokol, 2008). For example, if people violate social standards, rules or goals, and attribute their transgression to themselves, they feel a sense of guilt or shame. Furthermore, people feel pride if they face a successful evaluation of a specific action and attribute this action to internal factors such as effort (Krettenauer & Johnston, 2009). Even though the development of moral emotion is inevitably set in a socio-cultural history, most research on moral emotions has been conducted in Western societies. The complex interaction between moral emotions and cultural experiences has not been addressed in the research. For example, what aspects of moral emotions are due to obligation and what to personal discretion in interpersonal responsibility, and what are the specific connections of culture to experiencing the norms as emotionally salient? How do cultural processes interact with people's moral emotions when they face either moral transgressions or prosocial situations?

In the following, in order to address the important relationship between moral emotions and cultural processes, three major steps were taken in this introduction. First, the question on what role culture plays in morality in general will be discussed. For example, benevolence and concern for the well-being of other members of the community are central moral values in the Chinese tradition (Bond, 1996). Research

indicates that Canadian mothers primarily encourage autonomy, whereas Chinese parents primarily encourage connectedness (Chen & French, 2008). Second, different domains of interpersonal morality will be discussed that have been shown to differ across cultures. In individualist cultures, prosocial actions which relate to positive morality are considered less obligatory and are more a matter of personal discretion as compared to collectivistic cultures (Krettenauer & Johnson, 2009). Third, research on moral emotion expectancies will be presented and its limitations discussed. Based on these discussions the purpose of the present study is then outlined and specific hypotheses are formulated. These hypotheses address cultural differences between Chinese and Canadian adolescents with regard to positively charged versus negatively charged self-evaluative and other-evaluative emotions in the context of prosocial and moral action. In addition, the hypotheses will address the role of culture as moderator in the relationship between self-evaluative and other-evaluative emotion expectancies.

### **Culture and Morality**

Over time, researchers in cross-cultural psychology learned that the distinction between individualism and collectivism is less marked than initially assumed and that there is room for some mixture between individualism and collectivism (Markus & Kitayama, 1991). Still, Western and non-Western cultures differ in having a principal emphasis of one type of orientation or the other (Shweder, Mahapatra & Miller, 1987). According to this concept, the United States is commonly identified as an individualistic society, and also individualism is prevalent in a number of other countries, such as Australia, Canada, England, and New Zealand (Triandis, 1990). However, collectivistic cultures predominate in China, Japan, India, and the Middle East as well as Africa, Latin

America, and Southern Europe (Triandis, 1990). It is well known that the central idea of individualistic cultures is the concept of the person as an autonomous agent, whereas the central idea of collectivism is interconnected and interdependent relationships among group members (Markus & Kitayama, 1991). A core characteristic of individualistic cultures is keeping distance from others and being independent of the social environment (Markus & Kitayama, 1991). Therefore, people's lives are focused on thinking independently, paying less attention to social conventions and showing more resistance to authority (Triandis, 1990). By contrast, people in collectivistic cultures are considered as working together for the same social goals, thinking of others, paying attention to tradition and duty, and obeying authority; therefore, status or role distinctions prevail and social harmony is preferred in these cultures (Triandis, 1990).

Morality is regarded as a part of the development of both individualist and collectivist cultures. Individualism is related to a "rights-based" morality while collectivism is connected with a "duty-based" morality (Bersoff & Miller, 1993). Moreover, in collectivism, the social duties and obligations of each single individual are more important than his or her own civil rights and freedoms (Shweder, Mahapatra & Miller, 1987).

This way of differentiating types of morality not only shows different standards of morality, but also gives us insight into cultural variations (Shweder, 1982). Regrettably, parricide, infanticide, suicide, polygamy, arranged marriages and inequalities are also parts of family relationships in Indian culture (Shweder, 1982). Nevertheless, if a culture has a morality based on duties or obligations, it naturally imposes higher standards regarding social harmony or keeping everything orderly (Shweder, 1982). Based on this

perspective, Shweder et al. (1987) compared the judgments of people from India and the United States. The Brahmans, who were Hindus, were chosen to represent India. They were living in an old temple town and their activities included temple duty. Their status was defined by their role in the ritual activities of the temple. In Shweder et al.'s study (1987), participants from India and America were presented with many descriptions of actions that could possibly be argued to be moral or social transgressions. Different judgments were found between Indians and Americans. Religious considerations were correlated with the judgments from Indians. For example, in India, a widow does not eat fish, wear jewelry and bright clothing, and a son does not get a haircut or eat chicken immediately after his father's death. Moreover, Indians think that if they violate these practices, they do serious wrong, but Americans do not.

#### **Domain specificity in interpersonal morality: obligatory versus discretionary**

Miller (2007b) defined interpersonal morality as a positive morality referring to the responsibility of meeting the needs of others. Cross-cultural research has shown that cultures give different priorities to justice-related concerns and to interpersonal responsibilities. Comparing Asian and Western cultures, Bersoff and Miller (1993) showed that individuals from India were more concerned with issues of care and gave greater priority to interpersonal responsibilities than American individuals. In contrast, Americans were more concerned with moral rules and issues of justice, and gave priority to formal moral obligations. Thus, Indians judged helping to be obligatory independent of the type of relationship, while Americans judged helping friends to be more obligatory than helping strangers.

This study was undertaken among middle-class European-American children and

adults sampled from New Haven, Connecticut and among middle-class Hindu-Indian children and adults sampled from Mysore City in Southern India (Bersoff & Miller, 1993). Using standard back-translation techniques, Indian researchers conducted data collection in India in the local language of Kannada. Recruited from a setting that emphasizes relatively traditional Hindu-Indian cultural belief and practices, the Indian sample represents a cultural group emphasizing what has been characterized as interdependent cultural views of the self (Markus & Kitayama, 1991). Recruited from an urban European-American community, the American sample, in turn, represents a cultural group that has been characterized as emphasizing more independent cultural values.

Since persons in individualistic cultures are said to emphasize the role of personal choice and individualism in interpersonal obligation, it was expected by Bersoff and Miller (1993) that Americans' assessments of interpersonal responsibilities would be considerably affected by the emotional closeness of the relationship. Reflecting the emphasis on the duty-based nature of interpersonal commitments held in collectivist settings, it was expected that the Indians' assessments of interpersonal obligations would remain relatively unaffected by the closeness of the relationship. On the whole, the findings indicated that Americans' evaluations of interpersonal responsibilities were more affected by emotional considerations than were those of Indians. Nevertheless, variations were also found within both groups. Among Americans, parent-child relationships were judged to cause obligation regardless of the affective closeness of the relationship. Among Indians, relationships between adult colleagues were regarded as entailing less of an obligation if the adults in the relationship felt distant and did not like each other

(Bersoff & Miller, 1993). Miller (1984) suggested that these differences arise from different moral codes, where Indians give priority to social duties, while Americans give priority to individual rights and personal choice. Similarly, Shweder et al, (1987) claimed that Indians perceive interpersonal responsibilities as duties, while US Americans see them as more voluntary.

The cross-cultural difference between obligatory and discretionary morality is even more salient in prosocial actions. In Miller and Bersoff (1992)'s cross-cultural study between Americans and Indians, they found that in both cultures, helping tended to be seen as highly desirable and as a perceived responsibility. However, Americans had the dominant tendency to treat helping as a matter for personal decision making, whereas Indians tended to see helping as an issue that is legitimately regulated. In other words, Americans emphasized personal freedom of choice when considering helping others in need, whereas Indians considered helping more a moral obligation. In their study, a sample of American and Hindu Indian children and adults were questioned regarding their attitudes toward prosocial situations. They compared them with regard to hypothetical scenarios, in which, for selfish reasons, agents failed to act prosocially to someone experiencing high, moderate or minor need. In a between-subject design, they portrayed the agent's relationship to others as either that of parents, best friends or strangers. Culture specific versions of the scenarios were used, with interviews among the Indian sample conducted in the local language of Kannada by native researchers. Moral domain was assessed based on responses to objective obligation and legitimate regulation criterion probes. The results indicated cross-cultural differences in the conceptualization of social responsibilities. Indians more frequently viewed responsiveness to another's

needs as an objective obligation than did Americans in all cases that involved minor needs or the moderately serious needs of friends or strangers. Cross-cultural differences in perceptions of legitimate regulation were observed, with Indians more frequently viewing behaviors as legitimately regulated than did Americans. This was also true in cases involving the moderately serious needs of children or the extreme needs of friends or strangers.

Jia, Hansen, Clark and Li (2008) replicated Miller's study by comparing Canadian and Chinese university students about interpersonal responsibilities toward parents, friends, strangers and global issues in different type of prosocial (helping, donating and volunteering) and antisocial situations (lying, cheating and stealing). The Chinese sample represented a collectivist culture and the Canadian sample represented an individualist culture, with these groups expected to maintain a similar pattern as Indians vs. Americans in Miller's study. Jia et al (2008) found that Canadians and Chinese hold different views of interpersonal responsibilities in regard to certain types of prosocial situations. Even though both Canadian and Chinese young adults evaluated failure to act prosocially as morally bad, Chinese evaluated most scenarios as morally worse than did Canadians. Most importantly, obligatory and discretionary morality in situations of prosocial actions differed cross-culturally: Chinese considered the issue of failing to help more of a moral issue than did Canadians. Conversely, more Canadians considered the issue of failing to help to be a matter of personal choice. Canadians emphasized personal freedom of choice when considering helping others (friends, in-group/out-group strangers and global issues such as volunteer in a medical position) in need; Chinese considered helping more of a moral obligation.

Research on the domain specificity of interpersonal morality demonstrated that moral rules differ with regard to their obligatoriness. In both collectivist and individualist cultures, strict obligations are usually related to issues of negative morality such as stealing, hitting and cheating. By contrast, prosocial actions are usually related to issues of positive morality such as helping, donating and volunteering that require less obligation and are deemed more a matter of personal choice (in individualist cultures) (Krettenauer & Johnston, 2009). This difference between strictly obligatory versus discretionary moral actions was well documented in previous research (Miller & Bersoff, 1992). However, the implication of this difference for emotional and motivational processes in prosocial or antisocial behaviors has been largely neglected. Piaget (1970) assumed that emotional experiences are associated with social interaction processes which influence a child's emerging construction of norms. Therefore, the question of whether the development of moral emotions is affected by cultural differences in social relationship and rule understanding needs to be investigated from an integrative perspective that combines a developmental with a cross-cultural approach.

### **Development of Moral Emotions and Emotion Expectancies**

Moral emotion expectancies (MEE) are anticipated emotions when transgressing a moral rule or conforming to it. Research in developmental psychology suggests that children have the cognitive capacities to experience empathy as well as the moral emotions of guilt and shame well before the age of seven years (Harris, 1989). However, many younger children do not anticipate these emotions in the context of moral actions before the age of seven to eight years (Arsenio, Gold & Adams, 2006). Instead, younger children tend to attribute positive emotions to someone who transgresses a moral rule in

order to achieve a personal goal (Arsenio, Gold & Adams, 2006). This phenomenon has been called the “happy victimizer expectancy”.

The first systematic study into this expectancy was conducted by Nunner-Winkler and Sodian (1988). They examined four, six and eight year old children’s attributions of emotions to an actor who had stolen something without being caught and to an actor who had the temptation to steal but resisted eventually. In the moral-judgment task which assessed children’s rule understanding, the experimenters asked “Is the protagonist allowed to do this (e.g. take the sweets or chestnuts)? Why or Why not?” The results showed that almost all children answered “no” to the question testing their rule understanding and were able to give adequate moral reasons. In the emotion attribution task, the experimenters asked “How does the protagonist feel now and why?” by showing pictures of happy and sad faces. 74% of four year olds and 40% of six year olds, but only 10% of eight year old children judged the protagonist to feel happy (positive emotion) after stealing. By the age of eight a large majority of children had coordinated moral judgment and emotion expectancies and thus, was able to anticipate negative self-evaluative emotions following a moral transgression.

One of the major critiques of Nunner-Winkler’s and Sodian’s studies addresses issues of their interview procedure. The typical question in their emotion attribution task was: “How does the victimizer or protagonist feel?” following pictures of either happy or sad faces. In addition, Nunner-Winkler and Sodian focused on emotion attributions towards the victimizer but not towards victims (Krettenauer, Malti & Sokol, 2008). Other research showed that young children are more likely to spontaneously select positive rather negative emotions in various social cognitive tasks (Harter & Buddin, 1987).

Children may have attributed mixed emotions to victimizers, but without further probing they were biased towards selecting a positive emotion outcome over a negative one (Arsenio & Kramer, 1992).

Arsenio and Kramer (1992) investigated some of these issues by using a quantitative emotion rating (five point scales) and by controlling for the participant's role in the scenario (attribution toward victims or toward the victimizer). They found a highly significant effect for participant's role. This indicated that children from an early age were able to distinguish between emotional consequences of moral transgressions for victims and victimizers. Children rated victims as feeling more negatively than victimizers. In the second part of their study, they manipulated the saliency of victim harm and included additional probe questions regarding victimizers' emotions, such as "Do you think the actor could be feeling anything else?" It was demonstrated that none of the four year old children changed their original attribution that victimizers would feel happy, so they appear to be uninfluenced by the probes. However, six and eight year old children often selected alternative-valence emotions for victimizers but not for victims. Taken together, all four years old children expected victimizers to be happy without any influence of probes and manipulations. Six years old children expected additional negative emotions in victimizers after probing. Eight years old children expected mixed and conflicted emotions for victimizers. Thus, even with more sophisticated methods it turned out that the initial findings documented by Nunner-Winkler and Sodian (1988) are robust: Younger children tend to attribute positive emotions to a moral wrongdoer who transgresses a moral rule in order to achieve a desired goal, whereas older children are better able to coordinate moral knowledge and emotion understanding and as a

consequence tend to expect negative self-evaluative emotions following a moral transgression.

Moral emotion expectancies as studied in the happy-victimizer research were shown to be systematically associated with moral behavior. Arsenio, Gold and Adams (2004) demonstrated that aggressive adolescents expected more positive and less negative emotions than non-aggressive adolescents when engaging in proactive aggression as compared with reactive aggression. Furthermore, Arsenio, Cooperman and Lover (2000) found children with higher levels of aggression-related happiness (children expected happy emotions in scenarios where a peer deliberately knocked over a block structure) were more likely to initiate aggression and were less accepted by peers. In a similar vein, Krettenauer and Eichler (2006) found that the intensity of self-attributed moral emotions predicted adolescents' self-reported delinquent behaviour, even when social desirability, gender, and age were statistically controlled. Malti, Gasser and Buchmann (2009) studied kindergarten and elementary school children who were selected as aggressive or prosocial based on teacher ratings. Compared with prosocial children, aggressive children tended to attribute fewer negative emotions to a moral transgressor. All in all, the relationship between emotion expectancies and behavior indicates that the happy victimizer phenomenon reflects important individual differences in moral functioning and moral motivation.

### **Moral Emotion Expectancies in Adolescence and the Issue of Context Dependency**

Only a few studies have investigated MEE in adolescence so far. These studies mainly focused on emotional expectancies in delinquent adolescents in a comparison to non-delinquent teenagers, but did not consider broader developmental and contextual

influences on moral emotion expectancies (Krettenauer et al., 2008). Krettenauer and Eichler (2006) investigated adolescents' self-attributed moral emotions following a moral transgression by extending research with children on the happy-victimizer phenomenon. They argued that the developmental nature of moral emotion expectancies is controversial because some researchers did not find substantial differences between responses of young adults and older children (Murgatroyd & Robinson, 1993). This may imply that there is no general developmental trend in moral emotion expectancies in adolescence. Yet, Krettenauer and Eichler (2006) found that the intensity of self-attributed moral emotions gradually increased from grade nine to 13 for some moral infractions under study, but not for all. However, the nature of this context specificity in developmental change could not be further clarified since the study used only four hypothetical scenarios (false testimony, absconding from an accident, not returning found a wallet and stealing) designed to represent a broad range of moral issues.

Arsenio, Gold and Adams (2004) argued that specific types of situations need to be given more attention, with a broad mix of different socio-moral events that might trigger different emotion expectancies. The authors demonstrated that adolescents' moral emotion expectancies depend on the nature of aggressive and nonaggressive events. Behaviorally disruptive adolescents attributed more positive and less negative emotions when engaging in proactive aggression than a comparison group of typical adolescents. Regarding situational specificity, they used a total of 20 brief vignettes of nonaggressive situations designed to elicit emotion expectancies of either happiness, sadness, anger, fear or a mixture of sadness and anger (four stories were chosen for each of the five emotion

categories). However, for the aggressive events they only used three vignettes from a previous study (Arsenio et al., 2004).

Another study by Saelen and Markovits (2008) looked at the contextual variation in adolescents' attribution of guilt (as a moral emotion), satisfaction, and fear (as nonmoral emotions) and their expectations of the probability of the nonmoral action being taken involving situations of potential moral transgression. Two different situations were examined: one described the opportunity of stealing money from a lost wallet (break a moral rule) and the other examined a situation where a promise between two peers could be broken for egoistic reasons (break a social contract) in a Bicycle scenario. They also examined two specific variables in the stories. In the first, the main actors were depicted either as friends or acquaintances. In the second, situations were described as having either few or many passersby. It was found that different forms of contextual factors, except the relative number of passersby, resulted in a different weighting of emotion attributions. For example, participants attributed a higher level of both guilt and fear in the Bicycle scenario than in the Wallet scenario. This result clearly indicates that emotion attributions are affected by situational contexts in the two scenarios, for example, the relationship between the actor and the victim in the situation.

Finally, Sy, Demeis and Scheinfeld (2003) studied contextual variations in socio-moral events by investigating four and five year old children's assessment of the emotional consequences (happiness on a five-point scale) in prosocial situations (helping and sharing), victimization (stealing and harming) and the situations of failures to act prosocially (fail to help and fail to share) across the conditions of teacher presence or absence. They found that children's emotional ratings for failures to act prosocially are

different from their emotion ratings for prosocial and victimization situations, particularly when considering the presence or absence of a teacher observer in the story. Even though this study pointed out the importance of contextual influences on children's understanding of various socio-moral events, it is not clear how participants attributed other emotion ratings such as pride, shame and so on other than happiness. It is also not clear that this contextual differentiation among these three socio-moral events would generalize to other, non-school environments, and other forms of social interaction.

Probably the most systematic study into context dependencies of emotion attributions in adolescence was done by Krettenauer and Johnston (2009). This study analyzed negatively charged self-evaluative emotions following a moral transgression as is typically done in happy victimizer research with children. At the same time, it also investigated adolescents' positively charged moral emotion expectancies when acting morally. These two types of actions were studied in different situational contexts that varied with regard to their obligatoriness. Positively versus negatively charged moral emotion expectancies systematically varied across situational contexts. In prosocial contexts (people are presented with an opportunity to help others), positively charged emotion expectancies (pride) after a moral action were higher than in temptation contexts (people feel tempted to break a moral rule out of egoistic desires).

By contrast, when transgressing a moral rule, negatively charged emotion expectancies (guilt) were more pronounced in temptation contexts than in prosocial contexts. Thus, Krettenauer and Johnston (2009) found an asymmetrical relationship between positively and negatively charged self-evaluative emotions in different contexts. According to their findings, an individual expects pride when he/she experiences a sense

of accomplishment (for instance when he/she evaluates his/her own behavior as outstanding compared to others or when an action required a significant amount of effort). These appraisals produce a sense of accomplishment that is necessary for the experience or expectation of pride. However, none of them are required for the feeling of guilt or shame. Negative self evaluative-emotions require a sense of responsibility and obligation in terms of control over an action outcome, but not necessarily a sense of accomplishment. Krettenauer and Johnston (2009) suggested that a sense of accomplishment is more likely to be experienced in situations where an action is supererogatory rather than strictly obligatory, i.e., in prosocial contexts where it is up to the individual to decide whether he/she wants to perform a moral action or not (at least in Western cultures).

To the extent that the obligatoriness of an action reflects cultural differences, culture might systematically influence people's emotion expectancies. As described above, cross-cultural research indicated that prosocial actions are considered more a matter of personal choice in individualistic cultures than in collectivistic cultures (Miller & Bersoff, 1994; Jia, et al, 2008), and thus might be more likely associated with a sense of personal accomplishment. As a consequence, people in western cultures should be more likely to experience and expect positively charged self-evaluative emotions in prosocial situations. By contrast, since prosocial actions are considered more obligatory in collectivistic cultures than in individualistic cultures, failing to act prosocially might trigger stronger negatively charged emotion expectancies in collectivistic cultures than in individualistic cultures. A different finding can be expected for strictly obligatory rules that are typically related to aspects of negative morality in collectivistic as well as in

individualistic societies (Miller, 2007a; Miller, 2007b). In this context, negatively charged self-evaluative emotions can be expected to be equally strong in both cultures, whereas positively charged emotions might be less strong consistently across cultures.

### **Self-evaluative and other-evaluative emotions**

One major perspective regarding self- and other-attribution has been left out in research on moral emotion expectancies. The question how the self might feel about OTHERS engaging in moral or immoral actions has not been considered so far. The most influential study which examined “other-evaluative” emotions in the moral domain was conducted by Rozin, Lowery, Imada and Haidt (1999). They hypothesized specific linkages between the other-evaluative emotions: contempt, anger, and disgust, and three moral codes as described by Shweder, Much, Mahapatra and Part (1997): community, autonomy and divinity. Rozin et al. (1999) asked what you would feel if you were observing certain behaviors such as “a person is seeing someone steal a purse from a blind person”. They found a universal trend in both Japanese and Americans that actions that were a violation of the community ethic (transgression of duty or respect) were most likely to elicit contempt; actions that were violations of the autonomy ethic (transgression of personal rights) were most likely to elicit anger; whereas violations of the divinity ethic (transgression of purity) were most likely to elicit disgust. Even though Rozin et al (1999) did not find any significant cultural differences, they assumed that social hierarchy in Japan should lead to a greater salience of the community ethic in the Japanese sample. They also suggested that results should be gathered from individuals other than university students and from individuals in other cultures that have moral codes different from the United States (such as India and China).

Laham, Chopra, Lalljee and Brian (2009) replicated and extended the emotion-specificity hypothesis of moral reactions proposed by Rozin et al. (1999), by examining emotional reactions to autonomy (rights) and community (hierarchy) transgressions in Indian and British university students. Emotional reactions (anger, contempt, distress, frustration, disgust, shame, disappointment and revulsion) were assessed toward autonomy and community transgressions by asking what participants feel about others engaging in such behaviors. According to Miller and Bersoff (1994), issues relating to social rule obligations are more likely to be viewed as moral by Indians than by Americans. Laham et al.'s (2009) study supports this view. They found that autonomy transgressions evoked similarly negative reactions in both Indian and British participants, whereas Indians showed greater affective reactions in regards to violations of community ethics than did British people.

Similar to research on moral emotion expectancies, research on other-evaluative emotions so far has focused mostly on negatively charged emotions such as anger, contempt and disgust. An important category of emotional experience, namely positively charged other-evaluative emotions such as admiration, awe or respect has been completely left out (Tangney, Stuewig & Mashek, 2007). It is unlikely that positively charged other-evaluative emotions simply mirror negatively charged emotions, so that individuals experience positively charged other-evaluative emotions when observing someone engaging in moral actions to the same extent they would experience negatively charged emotions when observing someone not performing these actions. Instead, it can be assumed that for other-evaluative emotions, a similar asymmetry between positively and negatively charged emotions exists as has been documented for self-evaluative

emotions by Krettenauer and Johnston (2009). Thus, actions that are beyond the call of duty and in this sense supererogatory likely trigger more positively charged other-evaluative emotions (e.g. admiration) than actions that are perceived as strictly obligatory and expected from everyone. By contrast, negatively charged other-evaluative emotions can be expected to be stronger when observing someone violating a strictly obligatory moral norm than a prosocial obligation. As the evaluation of an action as strictly obligatory or supererogatory varies across cultures, culture might interact with context dependencies of positively versus negatively charged other-evaluative emotions.

Research on the development of moral emotion expectancies in childhood and adolescence following the happy-victimizer paradigm has largely neglected other-evaluative emotions so far. There is only a study by Malti and Keller (2009) that compared emotion attributions of Chinese children with emotion attributions of Icelandic children. Malti and Keller (2009) found that children from a western culture (Iceland) identified more with the story character and projected their own feelings onto this character, whereas Chinese children tended to take the perspective of a "generalized other" when making emotion attributions to self or others. Strikingly, this finding resonates with social-psychological research on emotion inferences by Cohen and Gunz (2002). They measured emotion inferences by asking participants to recall one memory with a strong emotion of shame for self, contempt, anger, fear, sympathy and sadness for someone and rated 30 facial expressions with the six emotions. They found that Easterners are more likely to infer others' emotions by generalizing from a third person perspective on how the other person would feel when viewing his/her own behavior from the perspective of a generalized other. By contrast, Westerners are more likely to attribute

their own emotions to others, a process called egocentric projection (Cohen & Gunz, 2002). The findings of Malti and Keller (2009) as well as Cohen and Gunz (2002) suggest cultural differences in the knowledge base that individuals access in order to arrive at emotion attributions. So far such differences have only been documented in childhood and young adulthood but not in adolescence.

None of the studies that investigated other-evaluative emotions has studied the relation between self-evaluative and other-evaluative emotions so far. It is thus unclear to what extent self- and other-evaluative emotions are coordinated, whether this coordination is a developmental process and whether the correlation between self-evaluative and other-evaluative emotions is moderated by culture or not. Therefore, if culture plays a moderating role in regard to people's obligatoriness (both prosocial and moral actions are considered more obligatory in collectivist cultures, whereas people in individualist cultures consider more personal discretion in acting prosocially), a stronger correlation between self- and other-evaluative emotions might be obtained in collectivist cultures when people transgress a prosocial rule. However, a weaker correlation between self- and other-evaluative emotions might be found in individualist cultures. In other words, self- and other-evaluative emotions can be expected to be more differentiated in individualist cultures, in particular in prosocial contexts, where action is considered discretionary rather than strictly obligatory.

### **Purpose and Hypotheses**

The present study examined moral emotion expectancies in a cross-cultural context by comparing adolescents and young adults from Canada and China. As described above, very little research has been done on adolescents' emotion expectancies in a cross-cultural

context in a developmentally sensitive way regarding age differences. The study was meant to explore this largely unknown territory. It combined three different bodies of literature that have been largely separated in the past: first, findings on cross-cultural differences in interpersonal responsibilities and moral obligations; second, research on context specificities in positively versus negatively charged self-evaluative moral emotion expectancies, and third, research on cultural commonalities and differences in other-evaluative emotions.

The major goal of the study was to understand cultural differences in peoples' anticipated emotions when facing moral and prosocial actions or transgressions. The study examined positively charged self-evaluative emotions (e.g., pride and satisfaction) and negatively charged self-evaluative emotions (e.g., shame and guilt); positively charged other-evaluative emotions (e.g., respect and admiration); and negatively charged other-evaluative emotions (e.g., contempt and anger) in both prosocial and moral (i.e., obligatory) contexts in cultural comparisons of Chinese and Canadian adolescents and young adults. While doing so, the study paid particular attentions to age differences and age as a potential moderator of the proposed relationships. Specifically, the following hypotheses were tested:

(1) Context specificity of positively versus negatively charged SELF-evaluative emotions in cross-cultural comparison. As described above, a) it was expected that Chinese adolescents would view prosocial actions as more obligatory than Canadian teenagers, whereas no cultural differences were expected in the evaluation for strictly obligatory actions. These different perspectives on prosocial actions are assumed to have implications for cultural differences in emotion expectancies of self-evaluative emotions.

In both cultures, b) positively charged self-evaluative emotions (pride and satisfaction) should be anticipated as a consequence of prosocial actions. c) This tendency, however, should be more marked in the Canadian sample than in the Chinese sample. For negatively charged self-evaluative emotions (guilt and shame) a reverse effect was expected in the context of prosocial actions. d) Thus, failing to act prosocially should trigger stronger negatively charged self-evaluative emotions in the Chinese sample than in the Canadian sample. By contrast, e) no cultural differences are expected in the context of strictly obligatory moral actions. In this context, similar to the findings reported by Krettenauer and Johnston (2009), f) negatively charged self-evaluative emotion expectancies when failing to act morally were expected to be stronger than positively charged emotions when acting morally in both cultures.

(2) Context specificity of positively versus negatively charged OTHER-evaluative emotions in cross-cultural comparison. As outlined above it was assumed that the distinction between discretionary and obligatory moral actions plays an important role in other-evaluative emotions as well. It was expected that cultural differences in other-evaluative emotions mirror self-evaluative emotion expectancies. In both cultures, positively charged other-evaluative emotions (admiration and respect) should be anticipated as a consequence of prosocial actions. This tendency, however, should be more marked in the Canadian sample than in the Chinese sample. For negatively charged other-evaluative emotions (anger and contempt) a reverse effect was expected in the context of prosocial actions. Thus, failing to act prosocially should trigger stronger negatively charged other-evaluative emotions in the Chinese sample than in the Canadian sample. By contrast, no cultural differences were expected in the context of strictly

obligatory moral actions. In this context, negatively charged other-evaluative emotion expectancies when failing to act morally were expected to be stronger than positively charged emotions when acting morally in both cultures.

### (3) Relationship between self-evaluative and other-evaluative emotion

expectancies. Culture is expected to be a moderator in the relation of self- and other-evaluative moral emotion expectancies. As long as both Canadian and Chinese participants consider an action as a transgression of a moral rule, a significant correlation is expected between self and other-evaluative moral emotion expectancies in obligatory contexts. However, a weaker correlation between self- and other-evaluative emotion expectancies is predicted in prosocial contexts, for the Canadian sample, as Canadian participants are more likely to view prosocial actions as a matter of personal choice. People may expect themselves to act prosocially but may not generalize this expectation to others. A different trend is expected for the Chinese sample. In the prosocial context, there should be a stronger correlation between self- and other-evaluative moral emotion expectancies in the Chinese sample than in the Canadian sample, as Chinese participants view prosocial actions as more morally obligatory for self and others. This tendency might be amplified by the general tendency of Chinese participants to attribute emotions from the perspective of a generalized other which means that differentiation between self-evaluative and other-evaluative emotion expectancies may be more marked, whereas Canadian participants are expected to rely more strongly on egocentric projections, which means that less distinction between self- and other-evaluative emotion expectancies may be applied. As a consequence, self and other-evaluative emotions, overall, can be expected to be more strongly correlated in the Chinese sample because less distinction

between self and other perspective would be made in Chinese sample than Canadian sample theoretically.

In addition to testing these hypotheses, the present study explored age differences in self- and other-evaluative emotion expectancies, even though systematic age differences in adolescents' self-evaluative emotion expectancies have been rarely documented so far. In general, adolescent development very often is multi-directional and more strongly influenced by individual differences as well as contextual factors. This makes it much harder to detect general, age-related differences (Moshman, 2009). Still, Krettenauer and Johnston (2009) reported a slight significant decrease in positively charged self-evaluative emotion expectancies that was attributed to the development of the moral self. Similar age differences might be found with regard to other-evaluative emotion expectancies, as there might be a general trend in adolescents to be more tolerant and less evaluative of other people's behaviour (Krettenauer & Johnston, 2009). It is an open question whether similar effects can be observed in a cross-cultural context.

## Method

### Participants

The sample included 179 Canadian and 193 Chinese adolescents from grade levels 7-8, 10-11 and 1<sup>st</sup>-2<sup>nd</sup> year university. Approximately 60 people were recruited for each age group and culture. As seen in Table 1, approximately equal numbers of participants were obtained in each gender, culture and age-group. The participants ranged in age from 11.50 to 29.5 years ( $M_{age} = 15.84$ ,  $SD = 2.95$ ). The majority of Canadian participants ( $n = 165$ ; 92.2%) were Caucasian and identified themselves as European Canadian (e.g., Canadian-German, -Serbian, -Scottish. 6% identified themselves as Latino-Canadian. 5%

identified themselves as Canadian-Asian e.g. (Canadian-Singaporean or -Vietnamese. 2.2% identified themselves as African Canadian. Ethnicity in the Chinese sample was not assessed because schools from which participants were recruited are ethnically homogeneous.

For all analyses involving age, grade levels seven and eight were combined into a single age group representing junior teenagers ( $n = 125$ ,  $M_{\text{age}} = 12.86$  years,  $SD = 1.03$ ). Students from grade levels 10 and 11 were pooled to represent senior adolescents ( $n = 117$ ,  $M_{\text{age}} = 16.75$ ,  $SD = 1.052$ ). 1<sup>st</sup> and 2<sup>nd</sup> year university students represented young adults ( $n = 120$ ,  $M_{\text{age}} = 19.75$ ,  $SD = 1.048$ ).

For the Canadian sample, senior and junior high school participants were recruited from consenting schools in the Waterloo region and were paid \$10 each for their involvement in the study. University participants were students of introductory psychology classes who received either course credit or \$10 for their participation. For the Chinese sample, teenage participants were recruited from Daqing No. 1 Secondary School, Da Qing, Hei Long Jiang. Chinese university participants were recruited from first year Introductory Psychology at Northern-East Normal University in Chang Chun. It is not appropriate to compensate students individually in China according to Chinese cultural practice, so compensation of CAD \$300 was given for each Chinese school that participated in this study. After providing informed consent, participants were required to complete a written questionnaire.

Da Qing is a medium-sized, prefecture level city (21,218.73 km<sup>2</sup>) located in the north of China. The population is 2,733,584. Chang Chun (20,571.06 km<sup>2</sup>) is the capital of Ji Lin Province. The population is 7,459,463. Both cities are moderate in level of

westernization because of the location (inner cities). These two cities, Da Qing and Chang Chun, are comparable to the Kitchener/Waterloo area in social and economic respects. The majority of people are middle class, blue and white-collar workers. The sample from Northern-East Normal University in Chang Chun is similar to the sample from Wilfrid Laurier University in terms of educational level. Northern-East Normal University is an educational and research institution. Students who graduated in psychology from Northern-East Normal University mostly become teachers or researchers.

### **Measures and Procedure**

*Scenarios.* A total of 16 vignettes were used, describing everyday situations in which a moral norm is either regarded or disregarded. The situations described moral conflicts that people are typically faced with in everyday life (e.g., deciding whether or not to help someone who is hurt, wanting to steal a desirable item one cannot afford). Two different contexts (moral and prosocial contexts) were varied in this story design. Two different evaluations (self and other) were varied as well: self as an actor was considered for self-evaluations; self as an observer was considered for other-evaluations. Two different actions (regarded and disregarded) were varied in the vignettes. Thus, the vignettes followed a 2 actions (regarded vs. disregarded) x 2 situational contexts (moral versus prosocial) x 2 evaluations (self- vs. other-evaluation) design. For each situational context two scenarios depicting two different norms were used (prosocial: donating of money to a charity campaign and helping another person who is in need of physical assistance; moral: stealing an item from a store and cheating in an academic context). The 16 scenarios were presented in a randomized and counter-balanced order. There were

thus two parallel versions of the questionnaire with two separate sets of scenarios. Within sets, order of scenarios was randomized. The first eight stories and the second eight stories were flipped over in the second version of the questionnaire. Note that regarded and disregarded stories were strictly parallel. Thus, for each vignette describing an action where a moral norm was disregarded, there was a parallel story depicting the same situation characteristics with a different outcome (regarded). Two samples of vignettes are presented and the full questionnaires are in appendix B:

“Imagine, while you are strolling through a small store you see a tiny thing you really would like to have. However you don't have enough money to buy it. For a moment you consider taking the object without paying, but then you decide not to do it. So you leave the store empty handed ...” --- (moral, self-evaluation and regarded).

“Imagine, you are riding the bus on your way home from school, while you notice another student on the other side of the road crashing into a barrier and falling off her bike. It looks like the student really hurt herself. At this moment one of your classmates comes by with her bike. It seems like she is in a hurry. So, she drives past without stopping ...” --- (prosocial, other-evaluation, disregarded).

**Emotion ratings.** Following the vignettes, participants were asked to indicate how they would feel about themselves in the self-evaluative situation, and how they would feel toward the other person in other-evaluative situations. Overall, participants were asked to rate ten different emotions (satisfied, angry, embarrassed, sad, guilty, proud, shameful, admiring, contemptuous (looking down on others), and respectful) on a 9-point scale (1 = not at all to 9 = very strongly). In addition, the response option 0 = not applicable, was given. Moreover, the overall emotional experience was assessed by

asking participants to rate how they would overall feel about themselves or about the other person in each situation using a 5-point Likert type scale, ranging from 1 = *very bad* to 5 = *very good*. Scores of negatively charged emotion expectancies were reversed so that the strength of emotion expectancies could be both positively charged and negatively charged. The measure is similar to the one used by Krettenauer and Eichler (2006) and Krettenauer and Johnston (2009). For overall emotion ratings in self-evaluations, averaged across all disregarded scenarios and cultures and thus reflecting overall strength of negatively charged moral emotion expectancies, the grand mean was  $M = 4.08$ ,  $SD = 0.662$ . Averaged ratings for all regarded scenarios and cultures reflecting positively charged moral emotion expectancies were slightly lower, with a grand mean of  $M = 3.97$ ,  $SD = 0.656$ . For overall emotion ratings in other-evaluations, averaged across all disregarded scenarios and thus reflecting overall strength of negatively charged moral emotion expectancies, the grand mean was  $M = 3.98$ ,  $SD = 0.658$ . Averaged ratings for all regarded scenarios, reflecting positively charged moral emotion expectancies were slightly higher, with a grand mean of  $M = 4.04$ ,  $SD = 0.662$ .

The dependent variables in these analyses consisted of emotion expectancies with regard to various discrete emotions, as well as overall ratings. Two different strategies were used to assess positively versus negatively charged moral emotion expectancies. First, two discrete emotions that clearly represented the type of emotions under interest were selected. For positively charged self-evaluative emotion, these were pride and satisfaction,  $r = .672$ ; for negatively charged self-evaluative emotions, these were guilt and shame  $r = .627$ . For positively charged other-evaluative emotions, these were admiration and respect  $r = .701$ , whereas for negatively charged other-evaluative

emotions, contempt and anger were used,  $r = .407$ . Ratings for each of these two emotions were averaged and used as dependent variables in the main analyses. They most specifically represented the emotions of interest. However, they might be overly specific in some instances. As argued by Krettenauer and Johnson (2009), individuals might experience emotions other than pride or guilt in a self-evaluative way (e.g., sadness or anger). People also might experience emotions other than admiration or anger in the other-evaluative way. To compensate for this limitation of emotion specific ratings, the study in addition used participants' overall ratings following a moral or prosocial action. The main independent variables of the test were situational context (moral versus prosocial), type of action (disregarded vs. regarded) and culture (Canadian versus Chinese). In addition, age-group (Grade 7-8, 10-11, 1<sup>st</sup> – 2<sup>nd</sup> year university) was used as a between-subject factor.

**Domain ratings.** Three more questions were given to assess participants' view whether a particular situation depicts a moral obligation, a matter of personal discretion or a societal expectation (convention). The original assessment for such domain distinctions was first developed in Miller and Bersoff (1992)'s study, based on an interview procedure. This measure was adapted to a questionnaire format in Jia et al.'s (2008) study. In Miller's original study (Miller & Bersoff, 1992), the conceptual categories regarding whether the behavior under consideration was governed by an obligation above rule or law, was legitimately regulated, or was both were as follows: (a) behaviors regarded both as governed by an objective obligation and as legitimately regulated were considered moral issues, (b) behaviors regarded as not governed by an objective obligation yet legitimately regulated were considered social conventions, (c)

behaviors regarded as governed by an objective obligation but not legitimately regulated were considered personal-moral concerns, and (d) behaviors regarded as neither governed by an objective obligation nor legitimately regulated were considered matters of personal choice.

However, in the context of the present study these questions were modified by directly asking participants whether they (a) thought in this situation people are morally obligated, (b) have a personal choice or (c) should do what society expected them to do. The first question was "In this situation, do you think people are morally obligated not to steal/not to cheat/to help and to donate? Response options ranged on a 5 point scale from 1 = *not at all obligated* to 5 = *very strongly obligated*. The second and third questions were "In this situation, do you think it is up to each individual to decide what to do?" and "In this situation, do you think people should do what society expects them to do?" Participants had to choose one answer ranging from 1 = *yes, absolutely*, to 5 = *no, not at all*, with 3 = *not sure* in between.

#### **The horizontal/vertical individualism and collectivism scale (Triandis, 1995).**

Theoretically, Triandis (1995) argued that it is multidimensional, although the individualism-collectivism in different cultures is indubitable. He proposed that both individualism and collectivism may be further modified as either emphasizing equality (Horizontal) or hierarchy (vertical). This V-H dimension represented the idea of how the individual sees him/her as different and unequal with members of the in-group.

According to the horizontal dimension, one's self is more or less like every other.

Individuals who are high on the horizontal dimension would emphasize equality and believe that everyone should have equal rights and status. In contrast, the vertical patterns

emphasized that one's self is different from other's selves. Individuals who are high on the vertical dimension, would emphasize hierarchy and accept social order and inequality. Thus, the combination of those relative emphases with individualism and collectivism produced four distinct patterns.

Several researchers have investigated the validity of the distinctions for the four cultural patterns in both individualist and collectivist cultures. Singelis, Triandis, Bhawuk, and Gelfand (1995) used attitude items to measure the four patterns and provided preliminary support for the validity of the four subscales in factorial analysis using a sample of American university students. Triandis and Gelfand (1998) also found the four factors appeared in a Korean sample by using both attitudinal and scenario-based measurements. Furthermore, these four subscales were extensively used to distinguish the individualism and collectivism in previous literatures. Chiou (2001) found that Taiwanese and the Argentine samples were more vertically collectivist than the U.S. sample. The U.S. sample was more horizontally individualistic than the Argentine sample, which in turn, was more horizontally individualist than the Taiwanese sample. Consistently, Soh (2002) also found that the U.S. students were more HI and the Singapore Chinese students were more VC. Therefore, in the present study, only Horizontal Individualism and Vertical Collectivism subscales were purposely selected as cultural comparisons.

In the present study, the Horizontal/Vertical individualist and collectivist scale was used to determine the cultural patterns in Canadian and Chinese sample. Participants filled out a 32 item cultural-orientation scale. Following Triandis' conceptualization, four types of cultures can be identified: (1) Horizontal Individualism (HI-uniqueness), where people strive to be unique and do their own thing; (2) Vertical Individualism (VI-

achievement oriented), where people want to do their own thing and strive to be the best; (3) Horizontal Collectivism (HC-cooperativeness), where people merge themselves with their in-groups; and (4) Vertical Collectivism (VC-dutifulness), where people submit to the authorities of the in-group and are willing to sacrifice themselves for their in-group (Triandis, 1995). Although this typology was initially proposed to facilitate between-culture comparisons, it was also used to understand variations in individualism and collectivism within a culture. Each item in the subscales is rated on a 5 point Likert scale, ranging from *strongly disagrees* to *strongly agree*. Measures tapping the cultural orientations included statements such as "I'd rather depend on myself than others" (HI), "It is important that I do my job better than others" (VI), "If a co-worker gets a prize, I would feel proud" (HC), and "Parents and children must stay together as much as possible" (VC). Reliabilities of Cronbach's alpha for the Horizontal Individualism, Vertical Individualism, Horizontal Collectivism, and Vertical Collectivism were as follows: .58, .72, .67, and .59.

### **Cultural Appropriateness**

Overall, several steps were taken to ensure the cultural appropriateness of the research materials in the Chinese context. The materials were examined for cultural suitability by both Chinese and Canadians and were revised, if necessary. Finally, two culture-specific versions of the questionnaire were prepared for use in the Chinese and Canadian samples respectively. These versions differed only in minor details: ethnicity was not assessed in the Chinese sample because it was assumed that all Chinese participants are native Chinese and there were no foreign immigrants in the sample; Chinese names like "Xiao Hong" (a typical girl's name) were used in the Chinese version

of the questionnaires but “Lucy” was used in the English version. Native Mandarin Chinese speakers who were fluent in English translated the Chinese version of the research protocols into Mandarin Chinese. The translators were thoroughly instructed regarding the desired connotations of the terms to be used and were directed to use familiar words that would be readily comprehended by teenage participants. The materials were also subjected to back translation to guarantee that the meaning of the original English version of the forms was preserved.

## **Results**

### **Preliminary Analyses**

In the first step it was investigated to what extent major assumptions made in this study could be empirically corroborated. The first theoretical assumption was that Chinese participants on average should score higher in both Vertical (VC) and Horizontal (HC) Collectivism whereas Canadian participants were expected to score higher in both Horizontal (HI) and Vertical (VI) Individualism. Second, it was assumed that Chinese participants consider prosocial actions as more obligatory and less discretionary relative to Canadian participants. A similar difference was not expected for moral actions that involve negative obligations (not stealing, not cheating).

### **Cross-cultural differences in collectivism versus individualism**

First, it was checked whether the Chinese and Canadian samples differed with regard to various aspects of the individualism vs. collectivism distinction. According to Triandis’ conceptualization (Triandis, 1995), four types of cultures can be identified: 1) Horizontal Individualism (Uniqueness) where people strive to be unique; 2) Vertical Individualism (Achievement) where people strive to be the best; 3) Horizontal

Collectivism (Cooperativeness) where people merge themselves with their in-groups; 4) Vertical Collectivism (Dutifulness) where people submit to the authority of the in-group. For this analysis, an analysis of variance (ANOVA) was conducted, using the four Individualism-Collectivism scales as dependent variables. It was expected that Chinese participants on average should score higher in both Vertical (VC) and Horizontal (HC) Collectivism. By contrast, Canadian participants on average should score higher in both Horizontal (HI) and Vertical (VI) Individualism. These expectations were partially confirmed. There was a significant overall main effect of culture,  $F(4, 363) = 41.26, p < .001$ . Univariate F-tests revealed a significant difference between the two cultural groups for Horizontal Individualism (HI),  $F(1, 363) = 49.71, p < .001$  (item means in the subscale:  $M_{Chi} = 3.35, SD = .54, M_{Can} = 3.73, SD = .49$ ). Inconsistent with the predictions, however, Chinese participants scored higher on the Vertical Individualism subscale,  $F(1, 363) = 51.02, p < .001$  ( $M_{Chi} = 3.24, SD = .51, M_{Can} = 2.79, SD = .69$ ). There was no significant effect of culture for the Horizontal Collectivism (HC),  $F(1, 262) = .41, p = .52001$  ( $M_{Chi} = 3.95, SD = .44, M_{Can} = 3.92, SD = .53$ ). There was a significant difference for the Vertical Collectivism (VC),  $F(1, 363) = 54.56, p < .001$  ( $M_{Chi} = 3.57, SD = .50, M_{Can} = 3.18, SD = .52$ ). These findings confirm the results reported by Jia et al. (2008) that a high vertical individualism was found and no significant differences in horizontal collectivist subscale were found among Chinese university students. And these findings also replicated Chiou (2001)'s study that compared U.S. and Taiwanese participants. Even though Chinese participants scored higher on the Vertical Individualism than Canadian participants, a scale that strongly reflects motivation to succeed, and even though no difference in social cooperation was found (HC),

differences in uniqueness (HI) and dutifulness (VC) orientation support the view that Chinese participants overall have a more collectivistic cultural orientation.

### **Cross-cultural differences in ratings of scenarios**

In the second step, it was tested whether domain ratings of the various scenarios as used in the present study conformed to theoretical expectations. Theoretically, it was expected that actions depicting a cheating or stealing situation would be rated more obligatory than stories about making a donation and helping someone. The reverse trend was expected for the rating of personal discretion. Thus, prosocial actions (donating and helping) should be considered more discretionary than moral actions (cheating and stealing). In addition, an interaction of culture with domain was expected so that prosocial actions would be rated as more obligatory and less discretionary in the Chinese sample. To test for these differences, a mixed-model ANOVA was run with context (moral vs. prosocial) and rating (obligation and personal discretion) as within-subject factors, and culture (Chinese vs. Canadian) as a between subject factor. As summarized in Table 2, tests of significance revealed significant main effects of cultures, contexts, ratings, and as well as a two-way interaction between context and rating, a two-way interaction between rating and culture, and a three-way interaction among culture, context and rating. As expected theoretically, moral actions were rated more obligatory than prosocial actions ( $M_{\text{moral}}=3.96$ ,  $SD = .85$ ,  $M_{\text{prosocial}} = 3.46$ ,  $SD = .80$ ). However, it was not significant that prosocial contexts were considered more a matter of personal discretion than moral contexts ( $M_{\text{prosocial}}=4.08$ ,  $SD = .97$ ,  $M_{\text{moral}} = 3.97$ ,  $SD = .70$ ). A closer inspection of the cell means of the three-way interaction, together with univariate F-tests, revealed that the Chinese sample rated prosocial contexts as more obligatory than

Canadian sample,  $F(1, 368) = 127.24, p < .001$ , and less discretionary,  $F(1, 368) = 5.05, p = .02$  (see Table 3 for cell means). Moreover, Chinese sample rated moral contexts as more obligatory,  $F(1, 368) = 77.54, p < .001$ , but no culture difference was found in personal discretion ratings,  $F(1, 368) = 1.84, p = .18$ . Thus, the theoretical assumptions of cultural differences in domain ratings were consistent for the ratings of obligatoriness of prosocial actions. Prosocial actions were considered more obligatory by Chinese participants as compared to Canadian participants.

### **Main Analyses**

#### **Positively versus negatively charged self-evaluative emotion ratings**

As demonstrated by the preliminary analyses, Chinese adolescents view prosocial actions as more obligatory than Canadian teenagers. This different perspective on prosocial actions is assumed to have implications for cultural differences in expectancies of self-evaluative emotions. It was expected that positively charged self-evaluative emotion expectancies as a consequence of prosocial actions should be stronger in the Canadian sample than in the Chinese sample. This tendency; however, should be reversed in negatively charged self-evaluative emotions when failing to act prosocially.

First, context specificity of positively versus negatively charged self-evaluative emotions was analyzed by a mixed model  $2 \times 2 \times 2$  ANOVA, with context (moral and prosocial) and type of action (disregarded and regarded) as within-subject factors and culture (Chinese and Canadians) as a between-subjects factor. In a second analysis, age-group was included in the same analyses in order to test whether cross-cultural differences are consistent across age-group or not. Two Separate ANOVAS were conducted, first one with specific ratings for pride and satisfaction (averaged) and guilt

and shame (averaged), and another with overall positive versus negative ratings as dependent variables, respectively.

*Specific emotion ratings.* It was expected that positively charged self-evaluative emotions (pride and satisfaction) would be anticipated as a consequence of prosocial actions in both cultures. This tendency, however, should be more marked in the Canadian sample than in the Chinese sample, whereas negatively charged self-evaluative emotions (guilt and shame) should be stronger in the Chinese sample as a consequence of the failure to act prosocially. No cultural differences were expected in moral contexts.

Table 4 summarizes the findings of the three-way ANOVA with context (moral vs. prosocial), action (disregarded and regarded) as within-subject factors and culture (Chinese vs. Canadian) as the between subject factor for specific self-evaluative emotion ratings as the dependent variable. Main effects of culture and context were both significant, whereas the main effect of action was not. Overall, Canadian participants expressed both positively and negatively charged specific self-evaluative emotions more strongly than Chinese participants, regardless of the two contexts and actions ( $M_{\text{Can}} = 6.61, SD = 1.82, M_{\text{Chi}} = 5.85, SD = 1.76$ ). Participants expressed stronger emotions in moral contexts than prosocial contexts, regardless of culture and action ( $M_{\text{moral}} = 6.35, SD = 1.99, M_{\text{prosocial}} = 6.12, SD = 1.80$ ).

In addition, there was a strong two-way interaction between context and action. Theoretically, in moral contexts, negatively charged self-evaluative specific emotions when failing to act morally were expected to be stronger than positively charged specific emotions when acting morally. Moreover, in prosocial contexts, a reversed relationship was expected. People should feel more positively charged self-evaluative specific

emotions when acting prosocially than negatively charged self-evaluative specific emotions when failing to act prosocially. As evidenced in table 5, in moral contexts, participants scored higher in ratings of shame and guilt in disregarded action than their average score for pride and satisfaction in regarded actions,  $t(367) = 8.55, p < .001$ . In prosocial contexts, participants scored lower in ratings of shame and guilt in disregarded actions than pride and satisfaction in regarded actions,  $t(369) = 12.22, p < .001$ . From the same table, it was found that failing to act morally triggered stronger negatively charged self-evaluative specific emotions than failing to act prosocially,  $t(368) = 13.55, p < .001$ . In contrast, acting prosocially triggered stronger positively charged self-evaluative specific emotions than positively charged emotions for acting morally,  $t(368) = 8.60, p < .001$ . Therefore, the theoretical expectation of the interaction between context and action are fully supported.

However, this interaction between context and action was further moderated by cultural differences, as evidenced by a significant three-way interaction between culture, context and action. Figure 1 shows the mean scores of the three-way interaction for specific self-evaluative emotion ratings. It was expected that acting prosocially should trigger stronger positively charged self-evaluative specific emotions in the Canadian sample than in the Chinese sample. A reverse relationship of negatively charged self-evaluative emotions was expected for failing to act prosocially. Figure 1 demonstrates that Canadians on average scored slightly higher than Chinese in ratings of pride and satisfaction when acting prosocially. However this difference was not significant,  $t(369) = .96, p = .34$ . Moreover, deviating from our theoretical predictions, Chinese on average scored significantly lower on shame and guilt ratings than Canadians when failing to act

prosocially,  $t(369) = 5.15, p < .001$ . In addition, inconsistent with our prediction in moral contexts, Canadians scored higher in both regarded,  $t(368) = 5.98, p < .001$ ; and disregarded actions  $t(368) = 2.94, p = .004$  in moral contexts.

The same analyses were run including age-group as a second between-subject factor in order to explore whether cross-cultural differences are consistent across age-group or not. The findings of this analysis are summarized in Table 1 of the Appendix A. The effect of age-group was not significant overall, neither the two-way interaction between age-group and culture, nor the 4-way interaction among culture, age-group, context and action. Thus, all effects described above are consistent across the three age groups.

**Overall ratings.** Turning to overall self-evaluative emotion ratings, a mixed-model 3-way ANOVA was conducted, with context (moral vs. prosocial), action (disregarded and regarded) as within-subject factor and culture (Chinese vs. Canadian) as the between subject factor, using the overall self-evaluative emotion ratings as the dependent variable. As evidenced in Table 6, main effects were found for both culture and action. By contrast, neither the main effect of context, nor the interaction between context and culture, nor the interaction between action and culture were significant. Similar to the specific emotion ratings, Canadians expressed stronger positively and negatively charged overall self-evaluative emotions than Chinese regardless of context and action ( $M_{Can} = 4.12, SD = .56, M_{Chi} = 3.93, SD = .51$ ).

Similar to the specific emotion ratings as well, a strong two-way interaction between context and action was found. As evidenced in table 7, in the moral context, participants scored higher in overall negatively charged self-evaluative emotion ratings in

disregarded scenarios (failing to act morally) as compared to positively charged self-evaluative emotion ratings in regarded scenarios (acting morally),  $t(370) = 13.79, p < .001$ . By contrast, in prosocial contexts, participants scored lower in negatively charged overall emotion ratings in disregarded scenarios (failing to act prosocially) as compared to positively charged overall emotion ratings in regarded scenarios (acting prosocially),  $t(370) = 9.11, p < .001$ . As demonstrated in Table 7 as well, failing to act morally triggered stronger overall negatively charged self-evaluative emotions than failing to act prosocially,  $t(370) = 14.55, p < .001$ . By contrast, acting prosocially triggered stronger overall positively charged self-evaluative emotions,  $t(370) = 11.67, p < .001$  as compared to acting morally.

Most importantly, a significant three-way interaction among culture, context and action was found (see table 6). As evidenced in Figure 2, cross-cultural differences on overall emotion ratings were consistent with the specific emotion ratings. Canadians tended to score higher on overall positively charged self-evaluative emotion ratings than Chinese when acting prosocially. However, this difference was not significant,  $t(369) = .82, p = .42$ . This pattern was expected theoretically. However, in contradiction to our expectations, Chinese participants scored lower on overall negatively charged self-evaluative emotion ratings than Canadian participants when failing to act prosocially,  $t(370) = 4.19, p < .001$ . In addition, inconsistent with our prediction in moral contexts, Canadians scored higher in both regarded,  $t(369) = 3.13, p = .002$ , and disregarded scenarios,  $t(369) = 3.44, p = .001$  in moral contexts. Thus, overall emotion ratings replicated the findings regarding specific emotion ratings in self-evaluative emotion expectancies.

The same analyses were run including age-group as a second between-subject factor in overall ratings of self-evaluative emotion expectancies in order to explore whether cross-cultural differences are consistent across age-group or not. As evidenced in Table 2 of the Appendix, similar results were found to the specific emotional rating: a main effect of age-group was not significant, neither as the two-way interaction between age-group and culture, nor the 4-way interaction among culture, age-group, context and action. Therefore, cross-cultural differences were consistent across the three age-groups in overall self-evaluative emotion expectancies.

#### **Positively versus negatively charged other-evaluative emotion ratings**

It was expected that cultural differences in other-evaluative emotion expectancies should mirror self-evaluative emotion expectancies in both specific and overall ratings. Therefore, it was predicted that in both cultures, positively charged other-evaluative emotions (admiration and respect) are anticipated as a consequence of prosocial actions. This tendency, however, should be more marked in the Canadian sample than in the Chinese sample, whereas negatively charged other-evaluative emotions (anger and contempt) should be more marked in the Chinese sample as a consequence of prosocial actions. Moreover, no cultural differences were expected in moral contexts.

To test these expectations, first, context specificity of positively versus negatively charged other-evaluative emotions was analyzed by a 3-way mixed model ANOVA with context (moral and prosocial) and type of action (disregarded and regarded) as within-subject factors and culture (Chinese and Canadians) as the between-subject factor. In a second analysis, age-group was included in order to test whether the cross-cultural differences were consistent across age-group or not. Two separate ANOVAS were run

with specific ratings for admiration and respect (averaged) and anger and contempt (averaged), and with overall positive versus negative ratings as dependent variables, respectively.

**Specific emotion ratings.** Table 8 summarizes the findings of the ANOVA with context (moral vs. prosocial), action (disregarded and regarded) as within-subject factors and culture (Chinese vs. Canadian) as the between subject factor as well as the specific other-evaluative emotion ratings as dependent variables. In general, overall expressions of other-evaluative specific emotions were not differentiated cross-culturally because the main effect of culture was not significant. However, main effects of context and action were found to be significant. Participants were more likely to have stronger other-evaluative emotions in regarded actions than in disregarded actions, regardless of context and culture ( $M_{\text{regarded}} = 5.65, SD = 1.65, M_{\text{disreg}} = 5.04, SD = 1.69$ ). In addition, the pattern for the other-evaluative emotion expectancies showed that people expressed stronger emotions in prosocial than moral contexts, regardless of cultures and actions ( $M_{\text{prosocial}} = 5.98, SD = 1.44, M_{\text{moral}} = 4.71, SD = 1.63$ ).

Moreover, other-evaluative emotion expectancies mirrored the self-evaluative emotion expectancies in the two-way interaction between context and action. Table 9 revealed that the two-way interaction between context and action was statistically significant. As evidenced in Table 9, in moral contexts, participants expressed stronger negatively charged other-evaluative emotion expectancies when people failed to act morally than positively charged other-evaluative emotion expectancies when they acted morally,  $t(369) = 13.23, p < .001$ . In contrast, in prosocial contexts, participants scored lower in ratings of anger and contempt for the specific emotion when failing to act

prosocially than their scores of admiration and respect when acting prosocially,  $t(369) = 26.61, p < .001$ . From the same table, it was found that failing to act morally triggered stronger negatively charged other-evaluative specific emotions than failing to act prosocially,  $t(368) = 13.25, p < .001$ . In contrast, acting prosocially triggered stronger positively charged other-evaluative specific emotions than acting morally,  $t(368) = 29.34, p < .001$ .

However, this interaction between context and action was moderated by culture since the three-way interaction among culture, context and action was significant (see table 8). Figure 3 shows the mean scores of the three-way interaction for the specific other-evaluative emotion ratings. It was expected that acting prosocially should trigger stronger positively charged other-evaluative specific emotions in the Canadian sample than in the Chinese sample. A reverse effect of negatively charged self-evaluative emotions was expected for failing to act prosocially. Figure 3 demonstrates that Canadians on average scored slightly higher in ratings of admiration and respect than Chinese, but the difference was not significant,  $t(368) = .25, p = .81$ . Following our predictions of disregarded contexts, the Chinese sample on average scored significantly higher in ratings of anger and contempt than did Canadian sample in other-evaluative emotions when the person failed to act prosocially,  $t(369) = 5.61, p < .001$ , as well as when he/she failed to act morally,  $t(369) = 4.84, p < .001$ . In addition, inconsistent with our prediction in moral contexts, Canadians scored higher as positive emotions when the other acted morally,  $t(369) = 5.41, p < .001$ . Therefore, even though these findings in other-evaluative emotion expectancies were only partially mirrored by self-evaluative

emotion expectancies, the findings were consistent with our hypotheses in disregarded actions but not for regarded actions.

The same analyses were conducted including age-group as a second between-subject factor in specific ratings of self-evaluative emotion expectancies in order to explore whether cross-cultural differences were consistent across age-group or not (see Table 3 of the Appendix A). The main effect of age-group was not significant; neither was the two-way interaction between age-group and context, nor the two-way interaction between age-group and culture, nor any 3-way, 4-way interaction among culture, age-group, context and action. However, we found a significant two-way interaction between age-group and actions. Univariate F-tests showed a significant effect on disregarded scenarios,  $F(2, 368) = 14.17, p < .001$ , but not on the regarded scenarios,  $F(2, 368) = 2.55, p = .08$ . Post-hoc tests using Bonferroni *t*'s showed that 7-8 graders expressed stronger overall other-evaluative emotions than 10-11 graders ( $D = .88, p < .001$ ) and 1<sup>st</sup>-2<sup>nd</sup> year university students ( $D = 1.05, p < .001$ ). But there were no significant changes between 10-11 graders and 1<sup>st</sup>-2<sup>nd</sup> year university students ( $D = .12, p = 1.00$ ). (Table 4 of the Appendix A)

**Overall emotion ratings.** Turning to overall other-evaluative emotion ratings, a three-way mixed model ANOVA with context (moral vs. prosocial), action (disregarded vs. regarded) as within-subject factors and culture (Chinese vs. Canadian) as between-subject factor for overall other-evaluative emotion ratings as the dependent variable was used. Main effects were found for cultures, contexts, and actions. Table 10 demonstrates the significance levels of each effect. Consistent with self-evaluative emotion expectancies, Canadian participants overall attributed stronger emotions than Chinese

participants in overall other-evaluative emotion expectancies ( $M_{\text{can}} = 4.11, SD = .51, M_{\text{chi}} = 3.91, SD = .45$ ). Similar to the specific other-evaluative emotion ratings, participants were more likely to report stronger emotions in regarded actions than in disregarded actions regardless of context and culture ( $M_{\text{regarded}} = 4.04, SD = .47, M_{\text{disreg}} = 3.98, SD = .48$ ). In addition, opposite to self-evaluative emotion expectancies, but similar to the specific other-evaluative emotion ratings just discussed, prosocial contexts triggered stronger emotion expectancies than moral contexts, regardless of cultures and actions ( $M_{\text{prosocial}} = 4.18, SD = .41, M_{\text{moral}} = 3.85, SD = .48$ ).

Similar to the specific other-evaluative emotion ratings and mirroring self-evaluative emotion expectancies, a strong two-way interaction between context and action was found. As evidenced in table 11, in moral contexts, participants scored higher in overall negatively charged other-evaluative emotion ratings in disregarded scenarios, as compared to positively charged other-evaluative emotion ratings in regarded scenarios,  $t(370) = 18.67, p < .001$ . By contrast, in prosocial contexts, participants scored lower in negatively charged overall emotion ratings in disregarded scenarios as compared to positively charged overall emotion ratings in regarded scenarios,  $t(370) = 28.54, p < .001$ . As demonstrated in Table 11 as well, failing to act morally triggered stronger overall negatively charged other-evaluative emotions than failing to act prosocially,  $t(370) = 19.04, p < .001$ . By contrast, acting prosocially triggered stronger overall positively charged other-evaluative emotions,  $t(370) = 29.53, p < .001$ , as compared to acting morally. Finally the three-way interaction between culture, context and action turned out to be non-significant.

The same analysis was run including age-group as a second between subject factor in order to explore whether cross-cultural differences are consistent across age-group or not. As evidenced in Table 5 of Appendix A, a significant main effect of age-group was found. Post-hoc tests of Bonferroni revealed that 7-8 graders expressed stronger other-evaluative emotions than 1<sup>st</sup>-2<sup>nd</sup> university students ( $D = .12, p = .031$ ) but did not differ from 10-11 graders ( $M_{10-11} = 4.01$ ) ( $D = .06, p = .58$ ). There was a significant two-way interaction of age-group and culture, as well. Table 6 of Appendix A shows those participants who were from grade levels 10-11 and 1<sup>st</sup>-2<sup>nd</sup> year university expressed stronger overall other-evaluative emotions in the Canadian sample than the Chinese sample. Interestingly, a general decrease with age was presented in the Chinese sample, whereas this tendency was less strong in the Canadian sample. Moreover, a two-way interaction between age-group and action was significant (Table 7 of Appendix A) and the results replicated the interaction of age and action in specific other-evaluative emotion expectancies. Univariate F-tests showed a significant age effect on disregarded scenarios,  $F(2, 368) = 16.81, p < .001$ , but not on the regarded scenarios,  $F(2, 368) = 2.40, p = .12$ . Post-hoc tests using Bonferroni showed that 7-8 graders expressed stronger overall other-evaluative emotions than 10-11 graders ( $D = .24, p < .001$ ) and 1<sup>st</sup>-2<sup>nd</sup> year university students ( $D = .31, p < .001$ ). But there were no significant changes between 10-11 graders and 1<sup>st</sup>-2<sup>nd</sup> year university students ( $D = .067, p = .66$ ).

### **Relationship between self- and other-evaluative emotion expectancies**

Culture was expected to be a moderator of the relation of self- and other-evaluative emotion expectancies. As long as both Chinese and Canadians consider an action as a transgression of a moral rule, a significant correlation was expected between self- and

other-evaluative emotion expectancies. However, a weaker correlation between self- and other-evaluative emotion expectancies was expected in prosocial contexts for the Canadian sample, as they viewed prosocial actions more as a matter of personal discretion. To analyse the relationship between self-evaluative and other-evaluative emotion expectancies in both prosocial and moral contexts while taking culture as a moderator into account, two separate regressions analyses were run. First, self-evaluative emotions functioned as predictors of other-evaluative emotions along with culture (dummy-coded). In the second step, an interaction term of self-evaluative emotions with culture was included in order to test whether culture moderates this relationship in prosocial or moral contexts. The same type of regression analysis was then run for overall emotion ratings.

**Prosocial contexts.** The regression of other-evaluative specific emotion ratings on self-evaluative ratings and culture (1= Chinese, 2 = Canadians) yielded an  $R^2$  of .34,  $F(2, 366) = 93.07, p < .01$ . Self-evaluative emotion ratings predicted other-evaluative emotion ratings with a standardized  $\beta$ -weight of .56,  $t = 12.88, p < .01$ . In addition, Canadians reported less other-evaluative emotions than Chinese,  $\beta$ -weight of -.30,  $t = -6.84, p < .01$ . Including the interaction between self-evaluative emotion and culture in the second step of the analysis did not yield a significant increase in the variance accounted for,  $\Delta R^2 = .001, \Delta F(1, 367) = .81, p = .37$ . Thus, the prediction of other-evaluative emotion from self-evaluative emotion in prosocial contexts was not different for Chinese and Canadians.

Similar findings were obtained for the regression for overall other-evaluative emotion ratings on self-evaluative emotion ratings. Self-evaluative emotion ratings and

culture predicted other-evaluative emotion ratings, yielding an  $R^2$  of .26,  $F(2, 368) = 64.60, p < .01$ . Again, self-evaluative emotion ratings predicted other-evaluative emotion ratings with a standardized  $\beta$ -weight of .50,  $t = 10.93, p < .01$ . In contrast to specific emotion rating, there was no cultural difference on other-evaluative emotions,  $\beta = .06, t = 1.30, p = .19$ . Including the interaction between self-evaluative emotion and culture in the second step of the analysis did not yield a significant increase in the variance accounted for,  $\Delta R^2 = .00, \Delta F(1, 367) = .14, p = .71$ . Thus, in contradiction to the theoretical predictions, there were no cultural differences in the relation between self-and other-evaluative emotion expectancies in both specific and overall emotion ratings.

**Moral contexts.** The regression of other-evaluative specific emotion ratings on self-evaluative ratings and culture (1= Chinese, 2 = Canadians) yielded a  $R^2$  of .28,  $F(2, 365) = 70.15, p < .01$ . Self-evaluative emotion ratings predicted other-evaluative emotion ratings with a standardized  $\beta$ -weight of .54,  $t = 12.88, p < .01$ . In addition, Canadians reported slightly less other-evaluative emotions than Chinese, with a  $\beta$ -weight of  $-.09, t = -1.99, p = .05$ . Including the interaction between self-evaluative emotion and culture in the second step of the analysis did not yield a significant increase in the variance accounted for,  $\Delta R^2 = .006, \Delta F(1, 364) = 3.03, p = .08$ . Thus, the prediction of other-evaluative emotions from self-evaluative emotions was not differentiated in moral contexts between Chinese and Canadians.

However, different findings were obtained for the regression of overall other-evaluative emotion ratings on self-evaluative emotion ratings. Self-evaluative emotion ratings and culture predicted other-evaluative emotion ratings, yielding a  $R^2$  of .30,  $F(2, 368) = 78.93, p < .01$ . Again, self-evaluative emotion ratings predicted other-evaluative

emotion ratings with a standardized  $\beta$ -weight of .48,  $t = 10.67$ ,  $p < .01$ . In contrast to specific emotion ratings, Canadians reported more overall emotions on other-evaluative emotions,  $\beta = .18$ ,  $t = 4.11$ ,  $p < .01$ . Moreover, including the interaction between self-evaluative emotion and culture in the second step of the analysis did yield a significant increase in the variance accounted for,  $\Delta R^2 = .02$ ,  $\Delta F(1, 367) = 10.88$ ,  $p = .001$ . As indicated in a positive  $\beta$ -weight of .12,  $t = 3.30$ ,  $p = .001$ , the association between other-evaluative and self-evaluative emotion expectancies turned out to be stronger in the Canadian sample.

### Discussion

This research is one of the few studies that have investigated moral emotion expectancies from a cross-cultural perspective in a Western and an Eastern sample. The findings support the view that moral emotions are complex and reflect both universal trends of moral development as well as context specificities (Keller, 2004). This study also indicates that both cognitive and contextual factors influence moral emotional expectancies, along with reasoning and judgment. The present study provides an empirical examination of emotional consequences when people face everyday conflicts in different types of moral domains in a cross-cultural perspective. That is, persons in their everyday life do not consider moral obligations as strictly obligatory under all circumstances, but they take the conditions of the situation into account. In this discussion, findings are discussed in the following order: first, main effects of context, action and culture are addressed; second, a consistent interaction between context and action in emotion expectancies is discussed that was found repeatedly regardless of cultural differences; third, interactions between context, action and culture for self/other-

evaluative emotion expectancies are discussed. Fourth, age effects are addressed. Since these cultural differences turned out to be more complex than expected, the theoretical framework on cultural differences is extended; finally, limitations and further research are outlined.

### **Main trends for culture, context, and action**

Two theoretical assumptions that laid the foundation of the present study's investigation of moral emotion expectancies were confirmed in the present study. First, Chinese participants scored higher on Vertical Collectivism (Dutifulness) than Canadian participants, which reflects motivation to submit and comply with authorities of the in-group. Canadian participants, on the other hand, scored higher on Horizontal Individualism (Uniqueness) which reflects motivation of being independent and unique. These cultural differences support the view that Chinese participants overall have a more collectivistic cultural orientation in terms of dutifulness and a less individualistic orientation with regard to uniqueness, even though it was also found that Chinese teenagers strived more strongly to succeed (Vertical Individualism) and there were no cultural differences in cooperativeness (Horizontal Collectivism). These findings replicated Jia, et al. (2008), using Canadian and Chinese university students and Chiou (2001)'s studies using U.S. participants and Taiwanese participants that reported a high score in the vertical individualist subscale in both cultures, whereas no differences were found for the horizontal collectivist subscale. This finding corresponds to Bond (1996) who claimed that China is closer to a mid-point on collectivism-individualism than other collectivistic cultures.

Second, consistent with the theoretical assumptions, the hypothesis that prosocial contexts were considered more obligatory among Chinese teenagers as compared to Canadian teenagers, but more discretionary by Canadian participants as compared to Chinese participants was supported. These results suggested that the obligatoriness of prosocial actions is viewed differently in Chinese and Canadian culture. These findings were consistent with Miller's (1994) assumption in relationships between interpersonal moral codes and construal of self in different cultures. She argued that morality is linked to conceptions of self that are culturally varied between individualist and collectivist cultures (Miller, 1994). In the independent self, individuals stress personal freedom of choice as compared to the interdependent self, for which interpersonal obligation is emphasized. Therefore, individuals who tend toward an independent construal of self would be more likely to view prosocial commitments as matters of personal decision making. In contrast, those who tend to be an interdependent construal of self would be more likely to view the prosocial contexts as mandatory in their interpersonal obligations.

However, the cross-cultural differences for the discretionary rating was not significant in moral contexts. Both Canadian and Chinese participants rated moral contexts as equally high in discretion ratings. It may be because of the type of questions asked in this study. Chinese participants may have interpreted the discretionary questions in moral contexts as a personal responsibility to act morally. This interpretation is supported by a slightly significant positive correlation between obligatory and discretionary ratings in moral contexts in the Chinese sample,  $r = .15, p = .038$ , and a slight but not significant positive correlation in prosocial contexts  $r = .048, p = .51$ . However, negative correlations between obligatory and discretionary ratings in the

Canadian sample were found in both moral contexts ( $r = -.24, p < .001$ ) and prosocial contexts ( $r = -.19, p = .011$ ).

The finding that ratings of obligatoriness and personal discretion for moral actions do not form a bipolar dimension but are slightly positively correlated deviates from results reported by Miller et al. (1992). In this study, individuals reasoning about obligatoriness and personal discretion was assessed in a semi-structured interview. Responses were classified as reflecting a preference either for moral obligation or for personal direction with the categories 'personal moral' and 'social conventional' in between. Thus, a negative correlation between moral obligation and personal choice could be expected in Miller's et al., (1992) study because participants' responses were forced into mutually exclusive categories. The present study changed the classification method into continuous rating scales. As a consequence ratings of moral obligation and personal choice did not by default represent a bipolar dimension.

In the present study, negative correlations between obligatory and discretionary ratings in the Canadian sample were found in both moral contexts ( $r = -.24, p < .001$ ) and prosocial contexts ( $r = -.19, p = .011$ ). However, these negative correlations were not found in the Chinese sample. These results supported the previous cultural argument that individualist cultures view moral obligations and personal freedom as mutually exclusive, whereas this distinction is less pronounced in collectivistic cultures (Miller et al., 1992). Personal discretion in individualist cultures maybe interpreted as an interpersonal responsibility in collectivistic cultures. Moreover, individuals from collectivist cultures may feel obligated to fulfill interpersonal responsibilities. Thus, the distinction between personal discretion and moral obligation is perhaps less marked in collectivist cultures.

With regard to moral emotion expectancies general trends were obtained for context, action and culture. Findings from the present study suggest that self-evaluative and as well as other-evaluative emotional reactions differ according to contexts, action and culture. In general, even though no cultural differences were found for specific other-evaluative emotional ratings, it was found that Canadian participants expressed more intense emotions than Chinese participants with regard to all other three emotional ratings (specific ratings of self-evaluation and overall ratings of self-/other-evaluation) across all situations and actions. This finding corresponds with cross-cultural research on emotions demonstrating that people from individualist cultures express and experience more intense emotions than people from collectivist cultures, perhaps because expressing strong emotions is disruptive for group harmony (Niedenthal, Krauth-Gruber & Ric, 2006).

Moreover, a main effect of context was obtained for specific and overall self-evaluative emotional ratings and for specific other-evaluative emotional ratings. It is interesting to note that self-evaluative emotional ratings in prosocial and moral contexts did not follow the same pattern as other-evaluative emotional ratings. In the self-evaluative specific and overall emotional ratings, participants tended to express stronger emotions for moral actions. By contrast, prosocial actions triggered stronger emotional reactions in other-evaluative emotional ratings. It may fit in the theoretical expectation that moral contexts may trigger stronger reactions toward the self because it would be more likely to evoke the sense of self or moral self, but less likely to evoke a sense of others. On the other hand, prosocial contexts may trigger stronger reactions toward others

because it would be more likely to evoke a sense of commitments between self and others.

In addition, a significant effect of action was obtained for self- and other-evaluative emotions. Participants tended to express stronger self-evaluative emotions for moral failures; whereas, regarded actions triggered stronger emotions for specific and overall other-evaluative emotions. Participants were more critical of themselves (stronger negatively charged emotion expectancies in self ratings) when failing to act morally or prosocially, and more appreciative of others (stronger positively charged emotion expectancies in others ratings) when observing others acting morally and prosocially. However, these main effects of context and action need to be considered in light of significant interactions.

#### **Interaction of context and action**

The hypotheses that (a) failing to act morally triggers stronger negatively charged emotions toward both self and others than positive emotion expectancies when acting morally and that (b) acting prosocially triggers stronger positively charged emotions toward both self and others than negatively charged emotion when failing to act prosocially were supported. There was a consistent interaction between context and action for both overall and specific self- and other-evaluative emotion expectancies in the present study. This finding is consistent with research on the so called “actor-effect”, according to which decision makers are seen as more responsible for outcomes when they are the result of a decision to act actively, as compared to the decision not to intervene and not to actively pursue an action (Landman, 1987). Previous research has demonstrated that actions as compared to inactions are more salient when inferring one’s

own and other's attitudes (Fazio, Sherman & Herr, 1982). Applied to moral psychology, this effect is also known as "omission bias". Individuals judge acts of commission as morally worse and undesirable than equivalent acts of omission, even when intentions and outcomes are held constant (Sprance, Minsh & Baron, 1991; Baron & Miller, 2000). It is also considered to be more immoral when one causes harm by acting rather than not acting (Ritov & Baron, 1990). Emotional reactions have also been studied in this area. Researchers found a more intense emotion was attributed to actions than inactions (Zeelenberg, Pligt, & Vires, 2000).

In the present study, failing to act morally (stealing or cheating) was considered an action that people decide to take actively. In contrast, acting morally (not to steal or not to cheat) was considered an in-action where people decide not to transgress a moral rule. In addition, in the prosocial contexts, acting prosocially (helping or donating) was considered an active action that people decide to behave prosocially. Conversely, failing to act prosocially (not to help or not to donate) was considered an in-action. In the present study, both self- and other-evaluative emotions were stronger in the context of prosocial actions as compared to moral actions. The reversed trend was found for negatively charged overall and specific self- and other-evaluative emotional ratings that triggered more intense emotions failing to act morally than failing to act prosocially. Thus, the results as regarding to emotion expectancies were consistent with research on the "actor-effect" both for self- and other evaluative emotions.

### **Moral emotion expectancies; Interactions with culture**

Even though significant interactions between action, context and culture were found in the present study, the findings regarding cross-cultural differences between

context and action in self/other-evaluative emotion expectancies indicated that none of the hypotheses were supported. First, the hypothesis that prosocial actions should trigger stronger positively charged self/other-evaluative emotion expectancies in the Canadian sample than Chinese participants was not supported. No cultural differences were found in either self- or other-evaluative emotional ratings when acting prosocially. Both cultures attributed strong positive emotions in both self- and other-evaluations for prosocial regarded scenarios relative to other scenarios.

Second, the hypothesis that no cultural differences in positively charged emotion expectancies in moral actions should occur was not supported. It was found that Canadian participants attributed more intense positive emotions than Chinese participants in both self- and other-evaluative emotional ratings in moral regarded situations. It may be that Chinese participants are more modest toward themselves and even expect others to be more modest than themselves as compared to Canadian participants when following moral rules. Positively charged emotion expectancies were not necessary to attribute when acting morally in Chinese cultures because of the modesty. It also may be because those Chinese participants considered moral contexts as more obligatory than Canadian participants. Thus, this reasoning of obligatoriness may restrain the positively charged emotion expectancies in Chinese cultures in the moral contexts since they considered moral actions as mandatory to full-fill their obligations.

Third, the hypothesis that negatively charged self-evaluative emotion as a consequence of disregarded actions in prosocial contexts should be more marked in the Chinese sample than Canadian sample was not supported. The present study revealed that Canadian participants attributed more intensive self-evaluative emotions than Chinese

participants in situations of failing to act prosocially. This may be explained in terms of the response bias that Canadians are more accustomed to express their emotions more openly than Chinese (Takanhashi, Ohara, Antoucci & Akiyama, 2002). In addition, the same situation can be interpreted differently. Members of individualist cultures (Canadians) tend to interpret the situations of failing to act prosocially in self-evaluative terms of individual self-expression and achievement, and thus as situations in which their independent self is to be affirmed. In contrast, the members of collectivist cultures (Chinese) tend to interpret the same situations as maintaining a social harmony, so a strong negative emotional expression could disrupt an interdependent construal of self (Niedenthal, Krauth-Gruber, & Ric, 2006).

Finally, the hypothesis that other-evaluative emotion expectancies should mirror self-evaluative emotion expectancies was not supported in disregarded situations. The results of the present study found that other-evaluative emotion expectancies were opposite to self-evaluative emotion expectancies in disregarded actions in prosocial and moral contexts. It was found that Chinese participants were more critical towards others in situations of failing to act prosocially and morally, even though they were less critical toward themselves than Canadian participants in these situations. These results correspond with Mesquita and colleagues' results (Mesquita & Haire, 2004; Mesquita & Markus, 2004), which assessed the appraisals of American and Japanese participants in different emotional situations in a narrative procedure in a situation where participants had been offended, humiliated and valued. Those stories were later coded for contents, including the implications of the situation for other people. The result revealed that in a negative situation, Japanese were more likely to appraise the situation in terms of its

meaning for other people. Taken together, the present study suggests that members of collectivistic cultures are more likely to appraise emotional situations in ways that reflect concern with the general social implications when they involve other-evaluative emotions than do members of individualistic cultures that are more likely to appraise emotional situations in ways that reflect self-expression when involving self-evaluative emotions. Thus, in disregarded actions of moral and prosocial contexts, Chinese have more other-evaluative negatively charged emotion expectancies than Canadians but this is reversed in self-evaluative negatively charged emotion expectancies.

### **Age differences**

The cultural differences between contexts and actions in the present study were consistent across age-group in both self- and other-evaluative emotion expectancies (Grade 7-8, 10-11 and 1<sup>st</sup>-2<sup>nd</sup> University students), since none of the interactions involving culture and age were significant. This result replicates findings from the Krettenauer and Johnston's study (2009) demonstrating that differences between various contexts were consistent for self-evaluative emotion expectancies across younger and older adolescents at least in Canada. However, significant interactions between age and action were found for both overall and specific other-evaluative emotional ratings. For both cultural groups, older participants felt more positive toward others, since the strength of the positively charged emotion expectancies increased for the older age group. At the same time, older participants became less critical of others in disregarded action contexts. The only cultural difference between age-groups was found for overall other-evaluative emotional ratings. Canadian participants, in general, attributed stronger overall emotions in Grade 10-11 and 1<sup>st</sup>-2<sup>nd</sup> university students than Chinese participants, but this

difference was not significant for 7-8 graders. Within cultures, a gradual decrease in the strength of overall other-evaluative emotional reactions was found in the Chinese sample but not in the Canadian sample. Thus developmental change in adolescents' intensity of self- and other-evaluative emotions turned out to be context and situation specific.

Whereas the study analyzed the overall relationship between self-and other-evaluative emotions it did not address possible developmental changes in this association. Theoretically, the association between self and other-evaluative emotions, was expected to be stronger in collectivist cultures than in individualist cultures (Markus & Kitayama, 1991). This expectation was generally not supported in the present study. Investigating age-differences in this relations reveals a slight tendency that the association between self- and other-evaluative emotion expectancies increases with age in the Canadian sample but remains stable in the Chinese sample (see Table 8 A).

### **Extending the theoretical framework**

Taking all findings together, it is obvious that the theoretical framework proposed in the introduction needs to be extended in order to sufficiently account for the results. Three considerations appear to be particularly important when studying moral emotional expectancies from a cross-cultural perspective.

First, it was found that Chinese participants expected stronger negatively charged other-evaluative emotions, but less strong negatively charged self-evaluative emotions than Canadian participants. These results correspond with the idea that moral and social rule transgressions are interpreted differently in different cultures. In collectivist cultures, failing to act prosocially and morally are interpreted as a threat to group harmony. Whenever a person observes an individual who attempts to disrupt social connection or

harmony, strong negatively charged other-evaluative emotion expectancies arise. Thus, the stronger negatively charged emotion expectancies toward others in Chinese participants suggest a stronger emphasis on social harmony. By contrast, Canadian participants may view such a situation primarily as a transgression of internalized rules. Whenever a person observes the same individual in the situation above, it is not necessary or less likely for the person to have a strong negative view toward this person because of social harmony. Thus, when others transgressed the rules, less strong emotions are attributed. However, in the self-evaluative emotion expectancies, when Canadian participants envisioned themselves transgressing the rules or following the rules, they would be more likely to interpret this as an inconsistency within the self which in turn triggers stronger negatively charged or positively charged emotion expectancies relative to Chinese participants.

Second, in the present study, less strong emotion expectancies were reported by Chinese participants in both self- and other-evaluations when following moral rules. This may be because of different cultural norms regarding modesty. Chinese participants expect themselves to be modest and expect others to be even more modest because overly positive emotion expressions may create jealousy and be disruptive for group harmony (Bond, 1996). This cultural norm of modesty seems to influence emotion expectancies in particular in the Chinese cultural context. Lee and his colleagues have consistently found that Chinese and Canadian children differ in moral judgments of lying in modesty situations (Fu, Lee, Cameron, & Xu, 2001): Chinese children gave negative ratings to individuals who told the truth about their own good deeds and positive ratings to those who lied about them, whereas Canadian participants did the opposite, suggesting that the

ratings of the Chinese children reflect the influence of a Chinese cultural emphasis on self-effacement and modesty (Bond, 1996). In contrast, the ratings of the Canadian participants reflect a Canadian culture promoting self-confidence and self-esteem, somewhat similar to that of American children (Bond, 1996).

In Chinese society, the Western egalitarian notion of individual freedom is not encouraged. The definition of moral rules is focused on whether social cohesiveness and meeting collective goals (Bond, 1996). When a positive emotion harms group cohesiveness, it is no longer viewed as morally preferable and is discouraged. Thus, this culture has different rules concerning which type of emotions should be considered appropriate and which should not. It has been suggested that the Chinese culture tends to give priority to the goals and interests of a group over an individual, whereas the Western cultures tend to give priority to individuals' interests and rights (Bond, 1996). Thus, individuals in Chinese society are more likely to be modest when acting prosocially and conforming to moral rules.

Third, both Chinese and Canadians expected equally strong positive self- and other-evaluative emotions when acting prosocially. Prosocial actions were interpreted as important in both cultures but in different ways. Chinese considered them as more obligatory, while Canadians viewed them as more discretionary. Theoretically it was expected that higher ratings of obligatoriness should lead to less positively charged self-evaluative emotion expectancies because individuals are less likely to consider this action as outstanding. However, this theoretical expectation was not supported in the present study. This may be because both obligation and discretion ratings are important in individuals' emotion expectancies in prosocial actions. Chinese considered prosocial

actions as more obligatory which may trigger stronger positively/negatively charged self/other-evaluative emotion expectancies relative to Canadians who considered these actions as less obligatory.

#### **Further research/analysis and limitation**

The present study is not without limitations and needs to be extended in various directions. First, even though the present study used two different methods (specific and overall emotional ratings) to assess emotion expectancies, and it was found that results for specific and overall emotional ratings largely corresponded with each other in self-evaluative emotional ratings, this correspondence was not present for the three-way interaction between contexts, actions and cultures in overall other-evaluative emotion expectancies. It may be because the 5-point rating scales did not allow for an unconstrained expression of participants' levels of emotion for overall emotional ratings. In addition, it was found that Canadian participants attributed stronger emotion intensity than Chinese participants across all emotional ratings which may be because of different cultural norms regarding emotion expressions. Thus direct comparisons of the mean scores between the two cultural groups should be drawn only with great caution.

Second, relationship specificity was not varied in the present study but previous literatures consistently found cultural variations in different relationships between self and others in interpersonal responsibility such as close friendships (Keller, 2006; Malti & Keller, 2009), or family members and strangers (Miller & Bersoff, 1992). Research has also indicated that friendship and parent-child relationships represented quite different contexts for moral reasoning cross-culturally (Keller, Edelstein, Krettenauer Fang & Fang, 2005). However, the issue of emotional consequences in different relationships has

been neglected in this research. Different interpersonal relationships may lead to different weighting of obligatoriness and construal of self. For example, obligations may be considered less important than personal goals in situations involving strangers as compared to situations involving family members. In addition, the domain of social convention (what society expects people do) was rarely discussed in the present study. It is still not clear that what emotions people expected for themselves when they transgress a conventional rule or what emotions people expected regarding others when they observe someone transgressing a conventional rule.

Third, although this present study examined both the individualism-collectivism scale and obligatoriness-ratings in the prosocial domain, the correlation between two methods has not been discussed. In other words, it needs to be clarified whether higher scores in the uniqueness of Horizontal Individualist subscale in Canadian sample are more positively correlated to the view of personal discretion in the moral domain, while higher scores in the dutifulness of Vertical Collectivist subscale for Chinese sample are more positively correlated to the consideration of obligation in the moral domain. Post-hoc analyses revealed a moderate positive correlation between Vertical Collectivist subscale and obligation ratings in Chinese sample ( $r = .196$ ) and a moderate positive correlation between Horizontal Individualist subscale and discretion ratings in the Canadian sample ( $r = .187$ ) (see also Table 12). In future analyses, it should be examined how these two compositions can be combined into one system of cross-cultural comparisons in moral psychology and how each subscale of individualism-collectivism and obligatoriness relates to emotion expectancies.

Last but not least, it needs to be emphasized that the findings did not investigate gender differences, which is a highly controversial issue first raised by Gilligan (1977). She claimed that females are more likely to adopt a caring perspective and males are more likely to assume a justice-oriented stance (Gilligan, 1977). However, this claim has been weakly supported by empirical studies that found few effects of gender. Moreover, Miller (1994) argued that Gilligan's framework may be criticized for its relative inattention to culture meanings that may affect gender experiences and that may lead to variations in significance of gender in different cultural contexts. Future research is needed to integrate cultural considerations with gender effects. Thus, how gender differences are patterned in a specific cultural setting and how they may be manifested in culturally variable ways are critical to the focus on both, theoretically and empirically.

In sum, the findings of the present study together with the proposed extensions indicate that investigations of moral emotion expectancies in a cross-cultural perspective provide an empirical opportunity to systematically combine three bodies of literatures addressing the cultural construal of the self in terms of the collectivism-individualism distinction, differences between moral domains and research on moral emotion expectancies to enhance our understanding of the complexity of individuals' moral life.

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Table 1

*Number of Participants in Each Culture, Gender and Age-group*

University	Grade Level					
	Grade 7-8		Grade 10-11		1 <sup>st</sup> -2 <sup>nd</sup>	
Gender	Male	Female	Male	Female	Male	Female
Chinese	32	33	33	35	30	30
Canadians	31	29	32	27	30	30
Total	63	62	65	62	60	60

Table 2

*Analysis of Variance for Obligation and Personal Discretion Ratings*

Source	DF	F	P	$\eta^2$
Within Subjects				
Rating	1	38.54**	.00	.10
Action	1	72.49**	.00	.17
Rating x Action	1	99.09**	.00	.21
Error	368			
Between Subjects				
Culture	1	53.77**	.00	.13
Culture x Rating	1	65.76**	.00	.01
Culture x Action	1	2.95	.09	
Culture x Rating x Action	1	13.16**	.00	.04
Error	368			

\*  $p < .05$ . \*\*  $p < .01$ .

Table 3

*Mean and Standard Deviation (in Parentheses) for Obligatoriness and Personal Discretion Ratings in Moral and Prosocial Contexts by Culture*

Rating	Context			
	Moral		Prosocial	
	Obligation	Discretion	Obligation	Discretion
Culture				
Canadians (.62)	3.60 (.90)	3.92 (1.01)	3.03 (.69)	4.12
Chinese (.74)	4.31 (.62)	4.02 (.92)	3.87 (.67)	3.98

Table 4

*Analysis of Variance for Specific Self-Evaluative Emotion Ratings*

Source	DF	F	P	$\eta^2$
<b>Within Subjects</b>				
Context	1	10.32**	.00	.27
Action	1	3.75*	.05	.01
Context x Action	1	275.04**	.00	.43
Error	366			
<b>Between Subjects</b>				
Culture	1	24.04**	.00	.06
Culture x Context	1	4.07*	.05	.01
Culture x Action	1	.74	.39	.00
Culture x Context x Action	1	29.08**	.00	.07
Error	366			

\*  $p < .05$ . \*\*  $p < .01$ .

Table 5

*Average Scores and Standard Deviation (in Parentheses) for Self-Evaluative Specific Emotion Ratings in Two Contexts and Actions*

	Contexts	
	Moral	Prosocial
Action		
Disregarded	6.82 (2.03)	5.49 (1.99)
Regarded	5.88 (2.03)	6.74 (1.81)

Table 6

*Analysis of Variance for Overall Self-Evaluative Emotion Ratings*

Source	DF	F	P	$\eta^2$
<b>Within Subjects</b>				
Context	1	.04	.84	.00
Action	1	11.40**	.001	.03
Context x Action	1	365.46**	.00	.58
Error	369			
<b>Between Subjects</b>				
Culture	1	19.74**	.00	.05
Culture x Context	1	.65	.42	.00
Culture x Action	1	2.00	.16	.00
Culture x Context x Action	1	6.43**	.01	.02
Error	369			

\*  $p < .05$ . \*\*  $p < .01$ .

Table 7

*Average Scores and Standard Deviation (in Parentheses) for Self-Evaluative Overall Emotion Ratings in Two Contexts and Actions*

	Contexts	
	Moral	Prosocial
<b>Action</b>		
Disregarded	4.33 (.56)	3.84 (.65)
Regarded	3.73 (.71)	4.21 (.65)

Table 8

*Analysis of Variance for Specific Other-Evaluative Emotion Ratings*

Source	DF	F	P	$\eta^2$
Within Subjects				
Context	1	290.45**	.00	.44
Action	1	42.27**	.00	.10
Context x Action	1	1004.10**	.00	.73
Error	367			
Between Subjects				
Culture	1	2.17	.14	.01
Culture x Context	1	22.63**	.00	.01
Culture x Action	1	74.42**	.00	.17
Culture x Context x Action	1	14.19**	.00	.04
Error	367			

\*  $p < .05$ . \*\*  $p < .01$ .

Table 9

*Average Scores and Standard Deviation (in Parentheses) for Other-Evaluative Specific Emotion Ratings in Contexts and Actions*

	Contexts	
	Moral	Prosocial
Action		
Disregarded	5.92 (1.90)	4.46 (1.88)
Regarded	3.80 (2.30)	7.49 (1.73)

Table 10

*Analysis of Variance for Overall Other-Evaluative Emotion Ratings*

Source	DF	F	P	$\eta^2$
Within Subjects				
Context	1	165.65**	.00	.31
Action	1	4.36 *	.04	.01
Context x Action	1	1174.55**	.00	.76
Error	369			
Between Subjects				
Culture .07	1	24.43**	.00	
Culture x Context .03	1	10.59**	.00	
Culture x Action .05	1	20.57**	.00	
Culture x Context x Action .00	1	.69	.41	
Error	369			

\*  $p < .05$ . \*\*  $p < .01$ .

Table 11

*Average Scores and Standard Deviation (in Parentheses) for Other-Evaluative Overall Emotion Ratings in Two Contexts and Actions*

	Contexts	
	Moral	Prosocial
Action		
Disregarded	4.28 (.57)	3.68 (.59)
Regarded	3.42 (.73)	4.67 (.49)

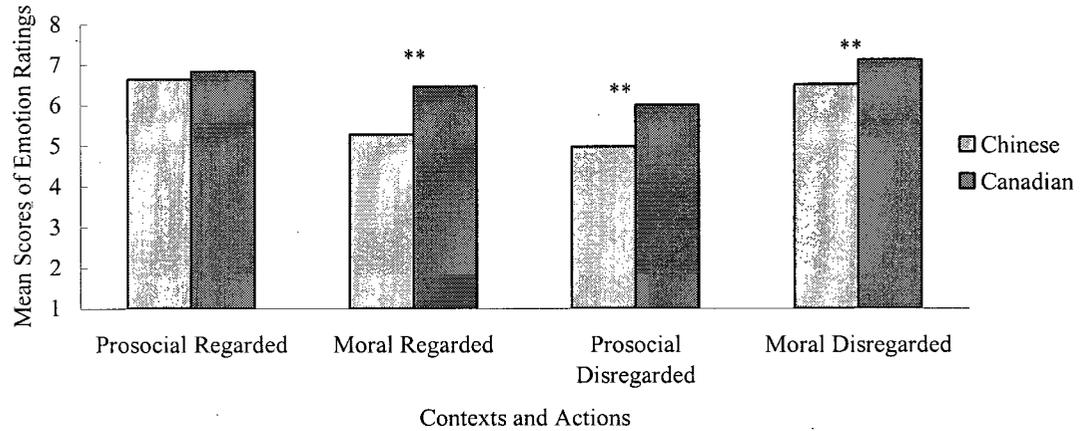
Table 12

*Correlation between HI/VC and Moral Domain Ratings in Each Culture*

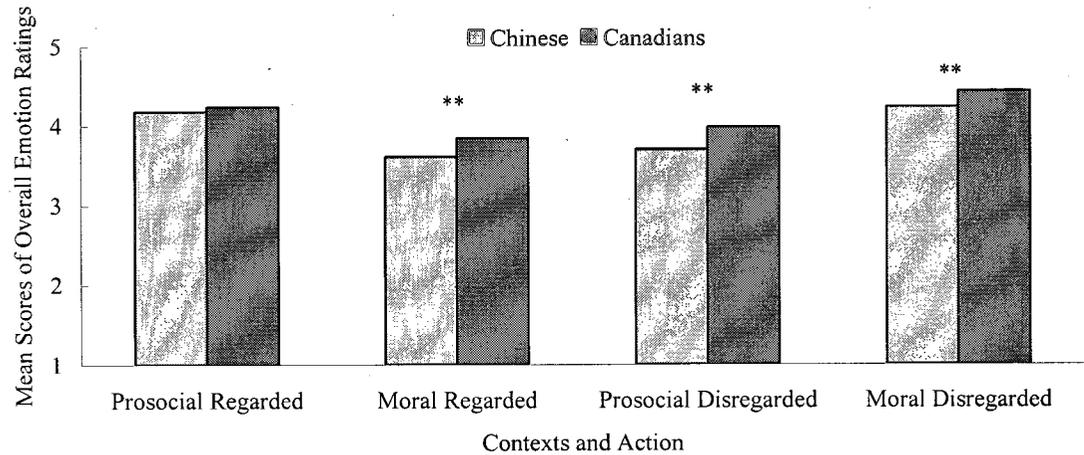
	Moral Domain	
	Obligation	Discretion
Overall		
HI	.214**	.111*
VC	.311**	-.053
Chinese		
HI	.066	.045
VC	.196*	-.028
Canadians		
HI	-.124	.187*
VC	.101	-.067

Overall Canadians N = 179; Chinese N = 193

\* p < .05. \*\* p < .01.

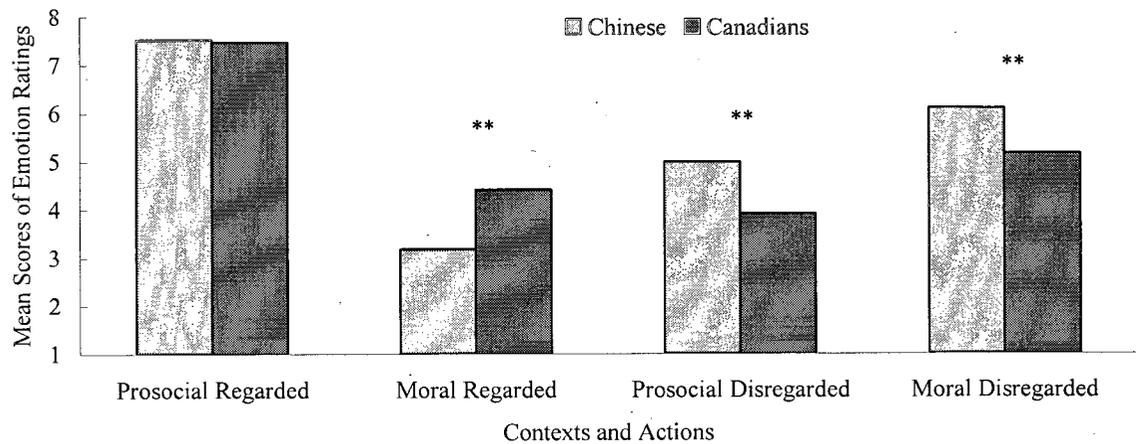


*Figure 1.* Mean scores of specific self-evaluative emotion expectancies. The results show significant differences between Canadians and Chinese participants in specific self-evaluative emotional ratings in moral regarded/disregarded, and prosocial disregarded situations: Canadians attributed stronger specific self-evaluative emotions than Chinese, but not in prosocial regarded situations.  
\*\*  $p < .01$ .



*Figure 2.* Mean scores of overall self-evaluative emotion expectancies. The results in overall self-evaluative emotion expectancies confirmed and mirrored the specific self-evaluative emotional ratings that significant differences between Canadians and Chinese participants in overall self-evaluative emotional ratings in moral regarded/disregarded, and prosocial disregarded situations: Canadians attributed stronger specific self-evaluative emotions than Chinese, but not in prosocial regarded situations.

\*\*  $p < .01$ .



*Figure 3.* Mean scores of specific other-evaluative emotion expectancies. The results show significant differences between Canadians and Chinese participants in specific other-evaluative emotional ratings in moral regarded/disregarded, and prosocial disregarded situations. Mirrored to the self-evaluative emotion expectancies, Canadians attributed stronger specific (positive) self-evaluative emotions than Chinese. However, an opposite direction was found in specific other-evaluative emotion expectancies as compared to self-evaluative emotion expectancies in disregarded actions: Chinese attributed stronger (negative) emotions than Canadians in the situations of failing to act prosocially and failing to follow moral rules.  
\*\*  $p < .01$ .

## Appendix A

Table A1: *Analysis of Variance for Specific Self-Evaluative Emotion Ratings Including Age-group*

Source	DF	F	P	$\eta^2$
<b>Within Subjects</b>				
Context	1	10.52**	.00	.27
Action	1	4.06*	.05	.01
Context x Action	1	275.34**	.00	.43
Age-group x Context	2	1.19	.31	.01
Age-group x Action	2	2.95	.05	.02
<b>Between Subjects</b>				
Culture	1	24.59**	.00	.06
Age-group	2	1.42	.24	.01
Culture x Age-group	2	2.18	.11	.01
Culture x Context	1	3.87	.05	.01
Culture x Action	1	.82	.37	.00
Culture x Context x Age-group	2	.48	.62	.00
Culture x Action x Age-group	2	1.43	.24	.01
Culture x Context x Action	1	29.30**	.00	.08
Context x action x age-group	2	2.39	.09	.01
Culture x Context x Action x Age-group	2	.13	.88	.00

\*  $p < .05$ . \*\*  $p < .01$ .

Table A2: *Analysis of Variance for Overall Self-Evaluative Emotion Ratings Including Age-group*

Source	DF	F	P	$\eta^2$
<b>Within Subjects</b>				
Context	1	.06	.81	.00
Action	1	11.36**	.00	.03
Context x Action	1	368.58**	.00	.50
Age-group x Context	2	1.10	.34	.01
Age-group x Action	2	.30	.74	.00
<b>Between Subjects</b>				
Culture	1	20.33**	.00	.05
Age-group	2	2.47	.10	.01
Culture x Age-group	2	1.90	.15	.01
Culture x Context	1	.57	.45	.00
Culture x Action	1	1.97	.16	.01
Culture x Context x Age-group	2	.77	.47	.00
Culture x Action x Age-group	2	2.23	.11	.01
Culture x Context x Action	1	6.41 **	.01	.02
Context x action x age-group	2	3.05	.05	.02
Culture x Context x Action x Age-group	2	1.86	.16	.01

\*  $p < .05$ . \*\*  $p < .01$ .

Table A3: *Analysis of Variance for Specific Other-Evaluative Emotion Ratings Including Age-group*

Source	DF	F	P	$\eta^2$
<b>Within Subjects</b>				
Context	1	164.85**	.00	.31
Action	1	4.88*	.03	.01
Context x Action	1	1177.71**	.00	.76
Age-group x Context	2	2.63	.07	.01
Age-group x Action	2	19.15**	.00	.10
<b>Between Subjects</b>				
Culture	1	2.03	.16	.01
Age-group	2	1.39	.25	.01
Culture x Age-group	2	2.98	.05	.02
Culture x Context	1	21.65**	.00	.06
Culture x Action	1	84.64**	.00	.19
Culture x Context x Age-group	2	.57	.57	.00
Culture x Action x Age-group	2	1.97	.14	.01
Culture x Context x Action	1	13.99**	.00	.04
Context x action x age-group	2	.85	.43	.01
Culture x Context x Action x Age-group	2	.95	.39	.01

\*  $p < .05$ . \*\*  $p < .01$ .

Table A4

*Means and Standard Deviation (in Parentheses) for Specific Other-Evaluative Emotions Rating among Age-group and Action*

	Age-group		
	Grades 7-8	Grades 10-11	1 <sup>st</sup> -2 <sup>nd</sup> University
Action			
Disregarded	5.64 (1.85)	4.76 (1.53)	4.71 (1.48)
Regarded	5.36 (1.62)	5.71 (1.56)	5.87 (1.73)

Table A 5: *Analysis of Variance for Overall Other-Evaluative Emotion Ratings Including Age-group*

Source	DF	F	P	$\eta^2$
<b>Within Subjects</b>				
Context	1	287.66**	.00	.44
Action	1	48.91**	.00	.12
Context x Action	1	999.95**	.00	.73
Age-group x Context	2	2.38	.09	.01
Age-group x Action	2	22.89**	.00	.13
<b>Between Subjects</b>				
Culture	1	30.03**	.00	.10
Age-group	2	3.31*	.04	.02
Culture x Age-group	2	10.49**	.00	.05
Culture x Context	1	10.23**	.00	.03
Culture x Action	1	22.49**	.00	.06
Culture x Context x Age-group	2	.59	.56	.00
Culture x Action x Age-group	2	.58	.56	.00
Culture x Context x Action	1	.63	.43	.00
Context x action x age-group	2	.77	.46	.00
Culture x Context x Action x Age-group	2	2.26	.11	.01

\*  $p < .05$ . \*\*  $p < .01$ .

Table A6

*Means and Standard Deviation (in Parentheses) for Overall Other-Evaluative Emotions Rating among Age-group and Culture*

	Age-group		
	Grades 7-8	Grades 10-11	1 <sup>st</sup> -2 <sup>nd</sup> University
<b>Culture</b>			
Chinese	4.08 (.36)	3.89 (.30)	3.76 (.32)
Canadians	4.05 (.43)	4.14 (.32)	4.14 (.39)

Table A 7

*Means and Standard Deviation (in Parentheses) for Overall Other-Evaluative Emotions Rating among Age-group and Action*

	Age-group		
	Grades 7-8	Grades 10-11	1 <sup>st</sup> -2 <sup>nd</sup> University
Action			
Disregarded	4.16 (.49)	3.93 (.41)	3.85 (.49)
Regarded	3.97 (.52)	4.10 (.43)	4.05 (.47)

Table A8

*Correlation between Self and Other-Evaluative Specific Emotion Ratings among Age-group and Culture*

	Age-group		
	Grades 7-8	Grades 10-11	1 <sup>st</sup> -2 <sup>nd</sup> University
Culture			
Overall	.567	.627	.677
Chinese	.628	.649	.639
Canadians	.599	.684	.730

Appendix B

*How You Feel About Yourself and Others*

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If you have any questions or concerns related to this questionnaire, please do not hesitate to contact:

Dr. Tobias Krettenauer  
Department of Psychology  
Wilfrid Laurier University  
phone: 519-884-0710 ext. 3894  
e-mail: [tkrettenauer@wlu.ca](mailto:tkrettenauer@wlu.ca)

## *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 given name (e.g. MARY)

ρ ρ

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

ρ ρ

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

ρ ρ

You should memorize your personal code because you may need it in the future again.

**Please provide the following information:**

**Year of Birth:** \_\_\_\_\_

**Month of Birth:** \_\_\_\_\_

**Gender:** ρ female  
ρ male

**Grade Level:** \_\_\_\_\_

**Ethnicity:** (e.g. Canadian, Canadian-Scottish, Argentinean, Italian, Chinese, Japanese)

\_\_\_\_\_

## *Feelings about Yourself and Others*

On the following pages you find short stories that describe everyday situations as they might happen to you or someone else. Please read each story carefully. Try to imagine YOU were in the given situation while you respond to the subsequent questions.

**Imagine**, while you are strolling through a thrift store you see a tiny thing you really would like to have. However you don't have enough money to buy it. For a moment you consider taking the object without paying, but then you decide not to do it. So you leave the store empty handed ...

**Think about YOURSELF in this situation. How would you feel about YOURSELF?**

(Circle one number for each feeling)

	Not at all	Moderately							Very strongly	Not applicable
Satisfied	1	2	3	4	5	6	7	8	9	0
Angry	1	2	3	4	5	6	7	8	9	0
Embarrassed	1	2	3	4	5	6	7	8	9	0
Sad	1	2	3	4	5	6	7	8	9	0
Guilty	1	2	3	4	5	6	7	8	9	0
Proud	1	2	3	4	5	6	7	8	9	0
Shameful	1	2	3	4	5	6	7	8	9	0
Admiring	1	2	3	4	5	6	7	8	9	0
Contemptuous	1	2	3	4	5	6	7	8	9	0
Respectful	1	2	3	4	5	6	7	8	9	0

**How would you OVERALL feel about YOURSELF in this situation? (circle one)**

Very bad ----- bad ----- Neutral (OK)----- good ----- Very good

**In this situation, do you think people are morally obligated NOT to steal? (circle one)**

Not at all ----- A bit ----- Moderately ----- Strongly ----- Very strongly  
 obligated obligated obligated obligated obligated

**In this situation, do you think it is up to each individual to decide what to do? (circle one)**

Yes, absolutely ----- Rather yes ----- Not sure ----- Rather no ----- No, not at all

**In this situation, do you think people should do what society expects them to do? (circle one)**

Yes, absolutely ----- Rather yes ----- Not sure ----- Rather no ----- No, not at all

**Imagine**, you are riding the bus on your way home from school, while you notice another student on the other side of the road crashing into a barrier and falling off her bike. It looks like the student really hurt herself. At this moment one of your classmates comes by with her bike. It seems like she is in a hurry. So, she drives past without stopping. ....

**Think about YOUR CLASSMATE in this situation. How would you feel about YOUR CLASSMATE?** (Circle one number for each feeling)

	Not at all	Moderately							Very strongly	Not applicable
Satisfied	1	2	3	4	5	6	7	8	9	0
Angry	1	2	3	4	5	6	7	8	9	0
Embarrassed	1	2	3	4	5	6	7	8	9	0
Sad	1	2	3	4	5	6	7	8	9	0
Guilty	1	2	3	4	5	6	7	8	9	0
Proud	1	2	3	4	5	6	7	8	9	0
Shameful	1	2	3	4	5	6	7	8	9	0
Admiring	1	2	3	4	5	6	7	8	9	0
Contemptuous	1	2	3	4	5	6	7	8	9	0
Respectful	1	2	3	4	5	6	7	8	9	0

**How would you OVERALL feel about YOUR CLASSMATE in this situation?** (circle one)

Very bad ----- bad ----- Neutral (OK)----- good ----- Very good

**In this situation, do you think people are morally obligated to help?** (circle one)

Not at all ----- A bit ----- Moderately ----- Strongly ----- Very strongly  
obligated obligated obligated obligated obligated

**In this situation, do you think it is up to each individual to decide what to do?** (circle one)

Yes, absolutely ----- Rather yes ----- Not sure ----- Rather no ----- No, not at all

**In this situation, do you think people should do what society expects them to do?** (circle one)

Yes, absolutely ----- Rather yes ----- Not sure ----- Rather no ----- No, not at all

**Imagine**, some students from your school ask you to donate money for people in your city who don't have enough money for medical treatment. You think this is really a good cause. Still, you decide not to give them anything because you need all your money for a trip you are planning with your friends for the next weekend ...

**Think about YOURSELF in this situation. How would you feel about YOURSELF?**  
(Circle one number for each feeling)

	Not at all			Moderately			Very strongly			Not applicable
Satisfied	1	2	3	4	5	6	7	8	9	0
Angry	1	2	3	4	5	6	7	8	9	0
Embarrassed	1	2	3	4	5	6	7	8	9	0
Sad	1	2	3	4	5	6	7	8	9	0
Guilty	1	2	3	4	5	6	7	8	9	0
Proud	1	2	3	4	5	6	7	8	9	0
Shameful	1	2	3	4	5	6	7	8	9	0
Admiring	1	2	3	4	5	6	7	8	9	0
Contemptuous	1	2	3	4	5	6	7	8	9	0
Respectful	1	2	3	4	5	6	7	8	9	0

**How would you OVERALL feel about YOURSELF in this situation? (circle one)**

Very bad ----- bad ----- Neutral (OK)----- good ----- Very good

**In this situation, do you think people are morally obligated to donate? (circle one)**

Not at all ----- A bit ----- Moderately ----- Strongly ----- Very strongly  
obligated obligated obligated obligated obligated

**In this situation, do you think it is up to each individual to decide what to do? (circle one)**

Yes, absolutely ----- Rather yes ----- Not sure ----- Rather no ----- No, not at all

**In this situation, do you think people should do what society expects them to do? (circle one)**

Yes, absolutely ----- Rather yes ----- Not sure ----- Rather no ----- No, not at all

**Imagine**, while you are writing a test in class, you see that your classmate wants to copy an answer from his textbook. However, all of a sudden, he changes his mind. He puts the textbook away and works on the answers by himself ...

**Think about YOUR CLASSMATE in this situation. How would you feel about YOUR CLASSMATE?** (Circle one number for each feeling)

	Not at all	Moderately							Very strongly	Not applicable
Satisfied	1	2	3	4	5	6	7	8	9	0
Angry	1	2	3	4	5	6	7	8	9	0
Embarrassed	1	2	3	4	5	6	7	8	9	0
Sad	1	2	3	4	5	6	7	8	9	0
Guilty	1	2	3	4	5	6	7	8	9	0
Proud	1	2	3	4	5	6	7	8	9	0
Shameful	1	2	3	4	5	6	7	8	9	0
Admiring	1	2	3	4	5	6	7	8	9	0
Contemptuous	1	2	3	4	5	6	7	8	9	0
Respectful	1	2	3	4	5	6	7	8	9	0

**How would you OVERALL feel about YOUR CLASSMATE in this situation?** (circle one)  
 Very bad ----- bad ----- Neutral (OK)----- good ----- Very good

**In this situation, do you think people are morally obligated NOT to cheat?** (circle one)  
 Not at all obligated ----- A bit obligated ----- Moderately obligated ----- Strongly obligated ----- Very strongly obligated

**In this situation, do you think it is up to each individual to decide what to do?** (circle one)  
 Yes, absolutely ----- Rather yes ----- Not sure ----- Rather no ----- No, not at all

**In this situation, do you think people should do what society expects them to do?** (circle one)  
 Yes, absolutely ----- Rather yes ----- Not sure ----- Rather no ----- No, not at all

**Imagine**, while you are lining up at the bus stop you notice a schoolmate quickly taking a wallet out of another person's bag. Then he jumps on the arriving bus and drives away leaving the victim behind ...

**Think about YOUR SCHOOLMATE in this situation. How would you feel about YOUR SCHOOLMATE?** (Circle one number for each feeling)

	Not at all	Moderately							Very strongly	Not applicable
Satisfied	1	2	3	4	5	6	7	8	9	0
Angry	1	2	3	4	5	6	7	8	9	0
Embarrassed	1	2	3	4	5	6	7	8	9	0
Sad	1	2	3	4	5	6	7	8	9	0
Guilty	1	2	3	4	5	6	7	8	9	0
Proud	1	2	3	4	5	6	7	8	9	0
Shameful	1	2	3	4	5	6	7	8	9	0
Admiring	1	2	3	4	5	6	7	8	9	0
Contemptuous	1	2	3	4	5	6	7	8	9	0
Respectful	1	2	3	4	5	6	7	8	9	0

**How would you OVERALL feel about YOUR SCHOOLMATE in this situation?**  
(circle one)

Very bad ----- bad ----- Neutral (OK)----- good ----- Very good

**In this situation, do you think people are morally obligated NOT to steal?** (circle one)

Not at all ----- A bit ----- Moderately ----- Strongly ----- Very strongly  
obligated obligated obligated obligated obligated

**In this situation, do you think it is up to each individual to decide what to do?** (circle one)

Yes, absolutely ----- Rather yes ----- Not sure ----- Rather no ----- No, not at all

**In this situation, do you think people should do what society expects them to do?** (circle one)

Yes, absolutely ----- Rather yes ----- Not sure ----- Rather no ----- No, not at all

Imagine, some students in your school collect money for children living in your province who do not have enough to eat. You realize that one of your classmates donated a large amount of money even though she had made plans to buy something for herself with this money ...

Think about YOUR CLASSMATE in this situation. How would you feel about YOUR CLASSMATE? (Circle one number for each feeling)

	Not at all	Moderately							Very strongly	Not applicable
Satisfied	1	2	3	4	5	6	7	8	9	0
Angry	1	2	3	4	5	6	7	8	9	0
Embarrassed	1	2	3	4	5	6	7	8	9	0
Sad	1	2	3	4	5	6	7	8	9	0
Guilty	1	2	3	4	5	6	7	8	9	0
Proud	1	2	3	4	5	6	7	8	9	0
Shameful	1	2	3	4	5	6	7	8	9	0
Admiring	1	2	3	4	5	6	7	8	9	0
Contemptuous	1	2	3	4	5	6	7	8	9	0
Respectful	1	2	3	4	5	6	7	8	9	0

How would you OVERALL feel about YOUR CLASSMATE in this situation? (circle one)

Very bad ----- bad ----- Neutral (OK)----- good ----- Very good

In this situation, do you think people are morally obligated to donate? (circle one)

Not at all obligated ----- A bit obligated ----- Moderately obligated ----- Strongly obligated ----- Very strongly obligated

In this situation, do you think it is up to each individual to decide what to do? (circle one)

Yes, absolutely ----- Rather yes ----- Not sure ----- Rather no ----- No, not at all

In this situation, do you think people should do what society expects them to do? (circle one)

Yes, absolutely ----- Rather yes ----- Not sure ----- Rather no ----- No, not at all

**Imagine**, you plan to travel to a concert of your favorite musical group in a larger city nearby. To go there, you first need to take the bus to the train station and then catch the train. When you arrive at the bus stop you find an elderly man sitting on the bench and gasping for breath. You don't know the man personally but you recognize him as someone living in your neighborhood. Obviously, the man is not doing well and needs medical help. With your cell phone you call an ambulance. You want to make sure that the elderly person is safe until the ambulance arrives. At the same time, you know if you don't catch the next bus you will miss your train and therefore miss the concert. When the next bus comes to the stop you let it drive past ...

**Think about YOURSELF in this situation. How would you feel about YOURSELF?**  
(Circle one number for each feeling)

	Not at all				Moderately					Very strongly	Not applicable							
Satisfied	1	----	2	----	3	-----	4	----	5	-----	6	----	7	----	8	----	9	0
Angry	1	----	2	----	3	-----	4	----	5	-----	6	----	7	----	8	----	9	0
Embarrassed	1	----	2	----	3	-----	4	----	5	-----	6	----	7	----	8	----	9	0
Sad	1	----	2	----	3	-----	4	----	5	-----	6	----	7	----	8	----	9	0
Guilty	1	----	2	----	3	-----	4	----	5	-----	6	----	7	----	8	----	9	0
Proud	1	----	2	----	3	-----	4	----	5	-----	6	----	7	----	8	----	9	0
Shameful	1	----	2	----	3	-----	4	----	5	-----	6	----	7	----	8	----	9	0
Admiring	1	----	2	----	3	-----	4	----	5	-----	6	----	7	----	8	----	9	0
Contemptuous	1	----	2	----	3	-----	4	----	5	-----	6	----	7	----	8	----	9	0
Respectful	1	----	2	----	3	-----	4	----	5	-----	6	----	7	----	8	----	9	0

**How would you OVERALL feel about YOURSELF in this situation?** (circle one)

Very bad ----- bad ----- Neutral (OK)----- good ----- Very good

**In this situation, do you think people are morally obligated to help?** (circle one)

Not at all ----- A bit ----- Moderately ----- Strongly ----- Very strongly  
obligated obligated obligated obligated obligated

**In this situation, do you think it is up to each individual to decide what to do?** (circle one)

Yes, absolutely ----- Rather yes ----- Not sure ----- Rather no ----- No, not at all

**In this situation, do you think people should do what society expects them to do?** (circle one)

Yes, absolutely ----- Rather yes ----- Not sure ----- Rather no ----- No, not at all

**Imagine**, you have a math assignment to hand in tomorrow but you have not started yet. You see your classmate already has finished this assignment. For a moment, when she is going to the bathroom you copy the answers. The next day you hand these answers in ...

**Think about YOURSELF in this situation. How would you feel about YOURSELF?**  
(Circle one number for each feeling)

	Not at all	Moderately							Very strongly	Not applicable
Satisfied	1	2	3	4	5	6	7	8	9	0
Angry	1	2	3	4	5	6	7	8	9	0
Embarrassed	1	2	3	4	5	6	7	8	9	0
Sad	1	2	3	4	5	6	7	8	9	0
Guilty	1	2	3	4	5	6	7	8	9	0
Proud	1	2	3	4	5	6	7	8	9	0
Shameful	1	2	3	4	5	6	7	8	9	0
Admiring	1	2	3	4	5	6	7	8	9	0
Contemptuous	1	2	3	4	5	6	7	8	9	0
Respectful	1	2	3	4	5	6	7	8	9	0

**How would you OVERALL feel about YOURSELF in this situation? (circle one)**  
Very bad ----- bad ----- Neutral (OK)----- good ----- Very good

**In this situation, do you think people are morally obligated NOT to cheat? (circle one)**  
Not at all obligated ----- A bit obligated ----- Moderately obligated ----- Strongly obligated ----- Very strongly obligated

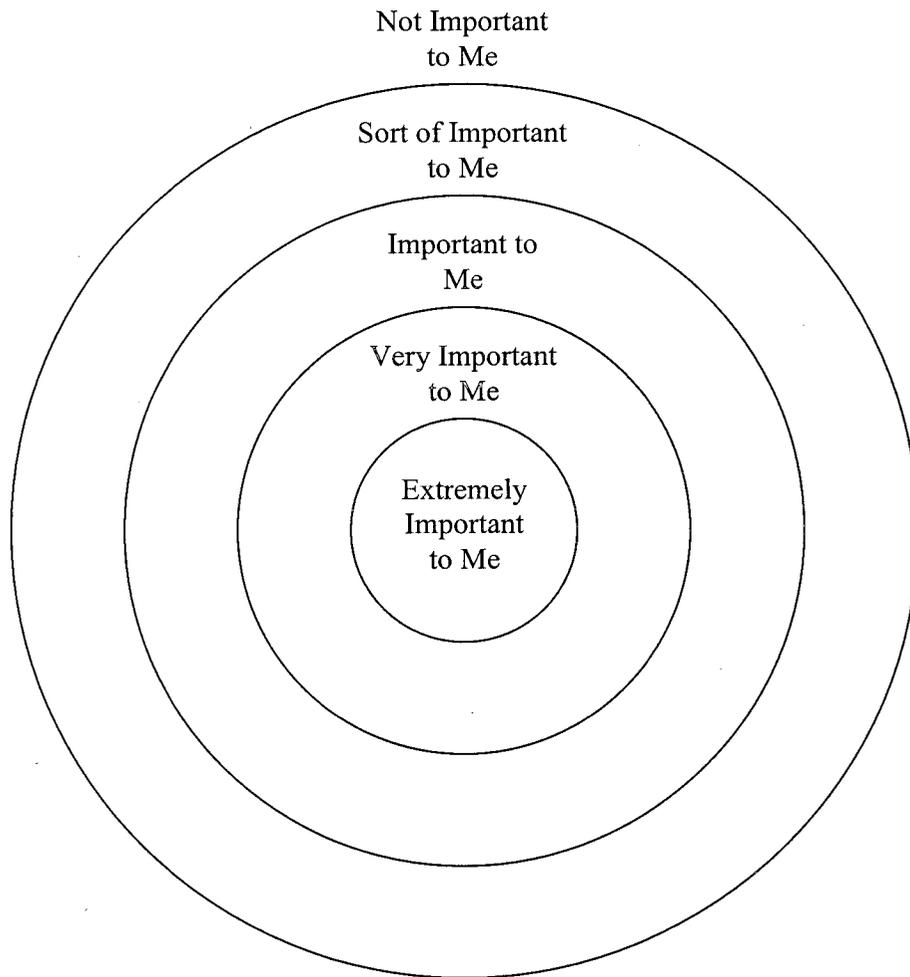
**In this situation, do you think it is up to each individual to decide what to do? (circle one)**  
Yes, absolutely ----- Rather yes ----- Not sure ----- Rather no ----- No, not at all

**In this situation, do you think people should do what society expects them to do? (circle one)**  
Yes, absolutely ----- Rather yes ----- Not sure ----- Rather no ----- No, not at all

## *How Do You View Yourself?*

On the following pages, you will be presented with qualities or characteristics that may or may not describe you. You will be asked to answer questions about how important these qualities are to who you are as a person.

It may help to imagine yourself as the picture below when deciding how important you think a quality is to you. Extremely important qualities are central for yourself, whereas less important characteristics are more peripheral.



- Some qualities will be **extremely important** to you.
- Some qualities will be **very important** to you.
- Some qualities will be **important** to you.
- Some qualities will be **sort of important** to you.
- Some qualities will **not be important** to you.

**Please answer the following questions by checking the appropriate box**

1) How important is it to you that you are **creative or imaginative**?

- Extremely Important to Me
- Very Important to Me
- Important to Me
- Sort of important to me
- Not important to Me

2) How important is it to you that you are **considerate or courteous**?

- Extremely Important to Me
- Very Important to Me
- Important to Me
- Sort of important to me
- Not important to Me

3) How important is it to you that you are **hard-working**?

- Extremely Important to Me
- Very Important to Me
- Important to Me
- Sort of important to me
- Not important to Me

4) How important is it to you that you are **honest or truthful**?

- Extremely Important to Me
- Very Important to Me
- Important to Me
- Sort of important to me
- Not important to Me

5) How important is it to you that you are **outgoing or sociable**?

- $\rho$  Extremely Important to Me
- $\rho$  Very Important to Me
- $\rho$  Important to Me
- $\rho$  Sort of important to me
- $\rho$  Not important to Me

6) How important is it to you that you are **kind to others** or **helpful**?

- $\rho$  Extremely Important to Me
- $\rho$  Very Important to Me
- $\rho$  Important to Me
- $\rho$  Sort of important to me
- $\rho$  Not important to Me

7) How important is it to you that you are **athletic** or **agile**?

- $\rho$  Extremely Important to Me
- $\rho$  Very Important to Me
- $\rho$  Important to Me
- $\rho$  Sort of important to me
- $\rho$  Not important to Me

8) How important is it to you that you are **compassionate** or **sympathetic**?

- $\rho$  Extremely Important to Me
- $\rho$  Very Important to Me
- $\rho$  Important to Me
- $\rho$  Sort of important to me
- $\rho$  Not important to Me

9) How important is it to you that you are **funny** or **humorous**?

- $\rho$  Extremely Important to Me
- $\rho$  Very Important to Me
- $\rho$  Important to Me
- $\rho$  Sort of important to me
- $\rho$  Not important to Me

10) How important is it to you that you are **generous** or **giving**?

- $\rho$  Extremely Important to Me
- $\rho$  Very Important to Me
- $\rho$  Important to Me
- $\rho$  Sort of important to me
- $\rho$  Not important to Me

11) How important is it to you that you are **logical** or **rational**?

- $\rho$  Extremely Important to Me
- $\rho$  Very Important to Me
- $\rho$  Important to Me
- $\rho$  Sort of important to me
- $\rho$  Not important to Me

12) How important is it to you that you are **respectful to others**?

- $\rho$  Extremely Important to Me
- $\rho$  Very Important to Me
- $\rho$  Important to Me
- $\rho$  Sort of important to me
- $\rho$  Not important to Me

13) How important is it to you that you are **independent** or **self-reliant**?

- $\rho$  Extremely Important to Me
- $\rho$  Very Important to Me
- $\rho$  Important to Me
- $\rho$  Sort of important to me
- $\rho$  Not important to Me

14) How important is it to you that you are **fair to others** or **just**?

- $\rho$  Extremely Important to Me
- $\rho$  Very Important to Me
- $\rho$  Important to Me
- $\rho$  Sort of important to me

$\rho$  Not important to Me

15) How important is it to you that you are active or energetic?

$\rho$  Extremely Important to Me

$\rho$  Very Important to Me

$\rho$  Important to Me

$\rho$  Sort of important to me

$\rho$  Not important to Me

16) How important is it to you that you are **responsible** or **dependable**?

$\rho$  Extremely Important to Me

$\rho$  Very Important to Me

$\rho$  Important to Me

$\rho$  Sort of important to me

$\rho$  Not important to Me

In the following you find statements about yourself and others. Please read each statement carefully and indicate whether you agree or disagree by using the following scale:

1 = strongly disagree 2 = disagree 3 = neither disagree nor agree 4 = agree 5 = strongly agree

1. I often do "my own thing". -----
2. One should live one's life independently of others. -----
3. I like my privacy. -----
4. I prefer to be direct and forthright when discussing with people. -----
5. I am a unique individual. -----
6. What happens to me is my own doing. -----
7. When I succeed, it is usually because of my ability. -----
8. I enjoy being unique and different from others in many ways. -----
9. It annoys me when other people perform better than I do. -----
10. Competition is the law of nature. -----
11. When another person does better than I do, get tense and aroused. -----
12. Without competition, it is not possible to have a good society. -----
13. Winning is everything. -----
14. It is important that I do my job better than others. -----
15. I enjoy working in situations involving competition with others. -----
16. Some people emphasize winning; I am not one of them. -----
17. The well-being of my co-workers is important to me. -----
18. If a co-worker gets a prize, I would feel proud. -----
19. If a relative were in financial difficulty, I would help within my means. -----
20. It is important to maintain harmony within my group. -----
21. I like sharing little things with my neighbors. -----
22. I feel good when I cooperate with others. -----
23. My happiness depends very much on the happiness of those around me. -----
24. To me, pleasure is spending time with others. -----
25. I would sacrifice an activity that I enjoy very much if my family did not approve it. ---
26. I would do what would please my family, even if I detested that activity. -----
27. Before taking a major trip, I consult with most members of my family and many friends. -----
28. I usually sacrifice my self-interest for the benefit of my group. -----
29. Children should be taught to place duty before pleasure. -----
30. I hate to disagree with others in my group. -----
31. We should keep our aging parents with us at home. -----
32. Children should feel honored if their parents receive a distinguished award. -----

## *Feelings about Yourself and Others – Part II*

On the following pages you find another set of short stories that describe everyday situations as they might happen to you. Please read each story carefully. Try to imagine YOU were in the given situation while you respond to the questions.

**Imagine**, it's the end of the school year and you are having final exams. One morning, on the way to your school you see an old lady who has dropped her cane and fallen down. You don't know the lady personally but you recognize her as somebody living nearby in an apartment building. Helping the woman would make you late for today's exam. So you walk away without helping ...

**Think about YOURSELF in this situation. How would you feel about YOURSELF?**  
(Check one box for each feeling)

	Not at all		Moderately		Very strongly	Not applicable
Satisfied	1 ---- 2 ---- 3----- 4 ----- 5 ----- 6 ----- 7 ----- 8 ----- 9					0
Angry	1 ---- 2 ---- 3----- 4 ----- 5 ----- 6 ----- 7 ----- 8 ----- 9					0
Embarrassed	1 ---- 2 ---- 3----- 4 ----- 5 ----- 6 ----- 7 ----- 8 ----- 9					0
Sad	1 ---- 2 ---- 3----- 4 ----- 5 ----- 6 ----- 7 ----- 8 ----- 9					0
Guilty	1 ---- 2 ---- 3----- 4 ----- 5 ----- 6 ----- 7 ----- 8 ----- 9					0
Proud	1 ---- 2 ---- 3----- 4 ----- 5 ----- 6 ----- 7 ----- 8 ----- 9					0
Shameful	1 ---- 2 ---- 3----- 4 ----- 5 ----- 6 ----- 7 ----- 8 ----- 9					0
Admiring	1 ---- 2 ---- 3----- 4 ----- 5 ----- 6 ----- 7 ----- 8 ----- 9					0
Contemptuous	1 ---- 2 ---- 3----- 4 ----- 5 ----- 6 ----- 7 ----- 8 ----- 9					0
Respectful	1 ---- 2 ---- 3----- 4 ----- 5 ----- 6 ----- 7 ----- 8 ----- 9					0

**How would you OVERALL feel about YOURSELF in this situation? (circle one)**

Very bad ----- bad ----- Neutral (OK)----- good ----- Very good

**In this situation, do you think people are morally obligated to help? (circle one)**

Not at all ----- A bit ----- Moderately ----- Strongly ----- Very strongly  
obligated            obligated            obligated            obligated            obligated

**In this situation, do you think it is up to each individual to decide what to do? (circle one)**

Yes, absolutely ----- Rather yes ----- Not sure ----- Rather no ----- No, not at all

**In this situation, do you think people should do what society expects them to do? (circle one)**

Yes, absolutely ----- Rather yes ----- Not sure ----- Rather no ----- No, not at all



**Imagine**, somebody in your school is collecting money for the homeless who live in your city and do not have enough to eat. One day she approaches you and asks for a donation. You think that this charity campaign really makes a difference. Therefore, you give her some money even though you already had made plans on how to spend it ...

**Think about YOURSELF in this situation. How would you feel about YOURSELF?**  
 (Circle one number for each feeling)

	Not at all								Moderately								Very strongly	Not applicable
Satisfied	1	----	2	----	3	-----	4	----	5	-----	6	----	7	----	8	----	9	0
Angry	1	----	2	----	3	-----	4	----	5	-----	6	----	7	----	8	----	9	0
Embarrassed	1	----	2	----	3	-----	4	----	5	-----	6	----	7	----	8	----	9	0
Sad	1	----	2	----	3	-----	4	----	5	-----	6	----	7	----	8	----	9	0
Guilty	1	----	2	----	3	-----	4	----	5	-----	6	----	7	----	8	----	9	0
Proud	1	----	2	----	3	-----	4	----	5	-----	6	----	7	----	8	----	9	0
Shameful	1	----	2	----	3	-----	4	----	5	-----	6	----	7	----	8	----	9	0
Admiring	1	----	2	----	3	-----	4	----	5	-----	6	----	7	----	8	----	9	0
Contemptuous	1	----	2	----	3	-----	4	----	5	-----	6	----	7	----	8	----	9	0
Respectful	1	----	2	----	3	-----	4	----	5	-----	6	----	7	----	8	----	9	0

**How would you OVERALL feel about YOURSELF in this situation?** (circle one)  
 Very bad ----- bad ----- Neutral (OK)----- good ----- Very good

**In this situation, do you think people are morally obligated to donate?** (circle one)  
 Not at all ----- A bit ----- Moderately ----- Strongly ----- Very strongly  
 obligated obligated obligated obligated obligated

**In this situation, do you think it is up to each individual to decide what to do?** (circle one)  
 Yes, absolutely ----- Rather yes ----- Not sure ----- Rather no ----- No, not at all

**In this situation, do you think people should do what society expects them to do?** (circle one)  
 Yes, absolutely ----- Rather yes ----- Not sure ----- Rather no ----- No, not at all

**Imagine**, your friend is taking the same class as you. You both have to hand in an essay tomorrow in class. However, your friend has not even started yet. Instead he finds an essay in the internet. He copies this essay and hands it in the next day ...

**Think about YOUR FRIEND in this situation. How would you feel about YOUR FRIEND?**

(Circle one number for each feeling)

	Not at all								Moderately								Very strongly	Not applicable
Satisfied	1	----	2	----	3	-----	4	----	5	-----	6	----	7	----	8	-----	9	0
Angry	1	----	2	----	3	-----	4	----	5	-----	6	----	7	----	8	-----	9	0
Embarrassed	1	----	2	----	3	-----	4	----	5	-----	6	----	7	----	8	-----	9	0
Sad	1	----	2	----	3	-----	4	----	5	-----	6	----	7	----	8	-----	9	0
Guilty	1	----	2	----	3	-----	4	----	5	-----	6	----	7	----	8	-----	9	0
Proud	1	----	2	----	3	-----	4	----	5	-----	6	----	7	----	8	-----	9	0
Shameful	1	----	2	----	3	-----	4	----	5	-----	6	----	7	----	8	-----	9	0
Admiring	1	----	2	----	3	-----	4	----	5	-----	6	----	7	----	8	-----	9	0
Contemptuous	1	----	2	----	3	-----	4	----	5	-----	6	----	7	----	8	-----	9	0
Respectful	1	----	2	----	3	-----	4	----	5	-----	6	----	7	----	8	-----	9	0

**How would you OVERALL feel about YOUR FRIEND in this situation? (circle one)**

Very bad ----- bad ----- Neutral (OK)----- good ----- Very good

**In this situation, do you think people are morally obligated NOT to cheat? (circle one)**

Not at all ----- A bit ----- Moderately ----- Strongly ----- Very strongly  
 obligated obligated obligated obligated obligated

**In this situation, do you think it is up to each individual to decide what to do? (circle one)**

Yes, absolutely ----- Rather yes ----- Not sure ----- Rather no ----- No, not at all

**In this situation, do you think people should do what society expects them to do? (circle one)**

Yes, absolutely ----- Rather yes ----- Not sure ----- Rather no ----- No, not at all

**Imagine**, at a flea market you find a couple of CDs of your favorite musical group you would like to buy. However, you don't have enough money. So, in a moment when nobody is watching you, you put the CDs in your bag and leave without paying ...

**Think about YOURSELF in this situation. How would you feel about YOURSELF?**  
 (Circle one number for each feeling)

	Not at all								Moderately								Very strongly	Not applicable
Satisfied	1	----	2	----	3	-----	4	----	5	-----	6	----	7	----	8	----	9	0
Angry	1	----	2	----	3	-----	4	----	5	-----	6	----	7	----	8	----	9	0
Embarrassed	1	----	2	----	3	-----	4	----	5	-----	6	----	7	----	8	----	9	0
Sad	1	----	2	----	3	-----	4	----	5	-----	6	----	7	----	8	----	9	0
Guilty	1	----	2	----	3	-----	4	----	5	-----	6	----	7	----	8	----	9	0
Proud	1	----	2	----	3	-----	4	----	5	-----	6	----	7	----	8	----	9	0
Shameful	1	----	2	----	3	-----	4	----	5	-----	6	----	7	----	8	----	9	0
Admiring	1	----	2	----	3	-----	4	----	5	-----	6	----	7	----	8	----	9	0
Contemptuous	1	----	2	----	3	-----	4	----	5	-----	6	----	7	----	8	----	9	0
Respectful	1	----	2	----	3	-----	4	----	5	-----	6	----	7	----	8	----	9	0

**How would you OVERALL feel about YOURSELF in this situation? (circle one)**  
 Very bad ----- bad ----- Neutral (OK)----- good ----- Very good

**In this situation, do you think people are morally obligated NOT to steal? (circle one)**  
 Not at all ----- A bit ----- Moderately ----- Strongly ----- Very strongly  
 obligated obligated obligated obligated obligated

**In this situation, do you think it is up to each individual to decide what to do? (circle one)**  
 Yes, absolutely ----- Rather yes ----- Not sure ----- Rather no ----- No, not at all

**In this situation, do you think people should do what society expects them to do? (circle one)**  
 Yes, absolutely ----- Rather yes ----- Not sure ----- Rather no ----- No, not at all

**Imagine**, you are in your friend's car and your friend is driving to school. You and your friend notice an old man who has fallen down on the side walk. Your friend stops the car. He checks if the old man is okay and calls an ambulance even though he is going to be late for his exam ...

**Think about YOUR FRIEND in this situation. How would you feel about YOUR FRIEND?**

(Circle one number for each feeling)

	Not at all	Moderately						Very strongly	Not applicable	
Satisfied	1	2	3	4	5	6	7	8	9	0
Angry	1	2	3	4	5	6	7	8	9	0
Embarrassed	1	2	3	4	5	6	7	8	9	0
Sad	1	2	3	4	5	6	7	8	9	0
Guilty	1	2	3	4	5	6	7	8	9	0
Proud	1	2	3	4	5	6	7	8	9	0
Shameful	1	2	3	4	5	6	7	8	9	0
Admiring	1	2	3	4	5	6	7	8	9	0
Contemptuous	1	2	3	4	5	6	7	8	9	0
Respectful	1	2	3	4	5	6	7	8	9	0

**How would you OVERALL feel about YOUR FRIEND in this situation? (circle one)**

Very bad ----- bad ----- Neutral (OK)----- good ----- Very good

**In this situation, do you think people are morally obligated to help? (circle one)**

Not at all obligated ----- A bit obligated ----- Moderately obligated ----- Strongly obligated ----- Very strongly obligated

**In this situation, do you think it is up to each individual to decide what to do? (circle one)**

Yes, absolutely ----- Rather yes ----- Not sure ----- Rather no ----- No, not at all

**In this situation, do you think people should do what society expects them to do? (circle one)**

Yes, absolutely ----- Rather yes ----- Not sure ----- Rather no ----- No, not at all

**Imagine**, some people in your school are collecting money for sick children whose parents don't have enough money for proper medical care. During lunch break they approach one of your classmates and ask for a donation. Even though your classmate seems to be positive about the cause he does not donate. So the people go away without getting any money from him ...

**Think about YOUR CLASSMATE in this situation. How would you feel about YOUR CLASSMATE?** (Circle one number for each feeling)

	Not at all	Moderately						Very strongly	Not applicable	
Satisfied	1	2	3	4	5	6	7	8	9	0
Angry	1	2	3	4	5	6	7	8	9	0
Embarrassed	1	2	3	4	5	6	7	8	9	0
Sad	1	2	3	4	5	6	7	8	9	0
Guilty	1	2	3	4	5	6	7	8	9	0
Proud	1	2	3	4	5	6	7	8	9	0
Shameful	1	2	3	4	5	6	7	8	9	0
Admiring	1	2	3	4	5	6	7	8	9	0
Contemptuous	1	2	3	4	5	6	7	8	9	0
Respectful	1	2	3	4	5	6	7	8	9	0

**How would you OVERALL feel about YOUR CLASSMATE in this situation?** (circle one)

Very bad ----- bad ----- Neutral (OK)----- good ----- Very good

**In this situation, do you think people are morally obligated to donate?** (circle one)

Not at all ----- A bit ----- Moderately ----- Strongly ----- Very strongly  
 obligated obligated obligated obligated obligated

**In this situation, do you think it is up to each individual to decide what to do?** (circle one)

Yes, absolutely ----- Rather yes ----- Not sure ----- Rather no ----- No, not at all

**In this situation, do you think people should do what society expects them to do?** (circle one)

Yes, absolutely ----- Rather yes ----- Not sure ----- Rather no ----- No, not at all

**Imagine**, it is the end of the school year and you have a big project that you have to hand in tomorrow but you are having trouble getting started. Your cousin had to do the same assignment the year before and she got a really good grade on the project she handed in. Your cousin still has her assignment and offers to let you take it, put your name on it, and hand it in. You wonder if you should do it. In the end, you decide to do your own work and you stay up all night finishing your project. ...

**Think about YOURSELF in this situation. How would you feel about YOURSELF?**  
 (Circle one number for each feeling)

	Not at all	Moderately								Very strongly	Not applicable
Satisfied	1	2	3	4	5	6	7	8	9	0	
Angry	1	2	3	4	5	6	7	8	9	0	
Embarrassed	1	2	3	4	5	6	7	8	9	0	
Sad	1	2	3	4	5	6	7	8	9	0	
Guilty	1	2	3	4	5	6	7	8	9	0	
Proud	1	2	3	4	5	6	7	8	9	0	
Shameful	1	2	3	4	5	6	7	8	9	0	
Admiring	1	2	3	4	5	6	7	8	9	0	
Contemptuous	1	2	3	4	5	6	7	8	9	0	
Respectful	1	2	3	4	5	6	7	8	9	0	

**How would you OVERALL feel about YOURSELF in this situation?** (circle one)

Very bad ----- bad ----- Neutral (OK)----- good ----- Very good

**In this situation, do you think people are morally obligated NOT to cheat?** (circle one)

Not at all ----- A bit ----- Moderately ----- Strongly ----- Very strongly  
 obligated obligated obligated obligated obligated

**In this situation, do you think it is up to each individual to decide what to do?** (circle one)

Yes, absolutely ----- Rather yes ----- Not sure ----- Rather no ----- No, not at all

**In this situation, do you think people should do what society expects them to do?** (circle one)

Yes, absolutely      Rather yes      Not sure      Rather no      No, not at all