Meta-moral cognition: bridging the gap among adolescents’ moral thinking, moral emotions and moral actions

Mira Bajovic and Kelly Rizzo
Faculty of Education, Brock University, St. Catharines, Canada

ABSTRACT
Adolescence is a stage when significant changes in moral development take place. Sometimes, a discrepancy between adolescents’ thoughts, emotions and actions may result in socially undesirable outcomes. The question is not whether emotions produce moral behaviour, but how awareness of emotions may influence moral action. In this paper, the interaction among cognition, emotions, and action is considered from two theoretical perspectives: cognitive-developmental and social domain theory. We argue that with increased awareness of cognition and emotion, actions may be influenced, and propose meta-moral cognition process as an active mediator of the cognition and emotions involved in making moral decisions. The meta-moral cognition strategies are also provided for classroom practices with the intention to support adolescents’ meta-moral cognitive development.

According to moral development theories, adolescence is a stage when significant changes in moral development take place (Gibbs, 2003; Kohlberg, 1984; Piaget, 1981). At this stage, adolescents have the capacity to use and express interpersonal feelings such as love, empathy, and concern for others to aid in understanding how good choices can lead to good outcomes. Through the lens of cognitive-developmental theorists (Eisenberg-Berg, 1979; Gibbs, 2003; Kohlberg, 1984), moral action is governed by the ability of the individual to take the perspective of another and choose to care for them, as they would expect to be cared for by others. Any act that could be considered harmful to them must also be given the same consideration when it applies to someone else. In essence, this is the golden rule. One person’s interests may not be elevated above those of another and still be morally right, nor may one judge what is right or wrong based on what they stand to gain or lose (Pinker, 2011).

According to the tenets of social domain theory (Nucci, 2001; Turiel, 2002), an adolescent’s ability to reason and act morally is governed by the abilities to identify and prioritize universal moral principles above social conventions, and personal domain elements. What may account for failure to act in moral ways is not an inability to cognitively identify moral principles of harm or justice, but rather an unwillingness or uncertainty in how to prioritize these matters where either a social convention, or personal preference are also at stake.

From the perspective of both cognitive and social domain theories, moral reasoning is considered as a gradually developing cognitive process, however research evidence argues that cognitive processes account for only one part of complex moral behaviour (Greene & Haidt, 2002; Swedene, 2005). Greene and Haidt (2002) posited that emotions may act as a precursor to moral judgement, and that emotions and cognitive processes work in conjunction when making moral decisions. A range of experience with emotions, both positive and negative, is thought to be integral to moral...
development and therefore linked to prosocial outcomes (Dunn, 2006). The emotional state of adolescents, along with their earlier experiences influence what information is paid attention to in any given situation, the conclusions that are drawn, and the actions that follow (Pinker, 2011). Previous experience and emotional state are therefore considered mediating processes for cognition and action. According to Biggs and Telfer (1987) metacognition requires adolescents to be aware of their cognitive resources within the context of the situation, as well as have an ability to plan, monitor and govern these resources. An awareness of their moral emotions, and the ability to integrate information with cognitive awareness of their personal mental state, may assist adolescents in the judgements they make, and in further motivating morally consistent action (Killen & Rutland, 2011).

The aim of this paper is to make recommendations for classroom practices for the purpose of increasing consistency between adolescents’ cognition, emotions and action, with the hope that the implementation of recommended strategies will result in more positive and equitable outcomes within and beyond the context of the classroom. To achieve this, we first provide possible explanations for the apparent disconnect between adolescents’ moral thoughts and actions through the lens of two theoretical perspectives: Cognitive-Developmental theory (Eisenberg-Berg, 1979; Gibbs, 2003; Kohlberg, 1984), and Social Cognitive Domain Theory (Nucci, 2001; Turiel, 2002). Adolescents’ emotion and experiences, are then explored as mediating factors, in relation to moral thoughts and moral actions. Finally, we proposed the meta-moral cognition as an active mediator of the cognitive processes and emotions involved in making moral decisions. Meta-moral cognition strategies (intentional thinking about moral thinking) are provided for practical application in classrooms to support adolescents’ meta-moral cognitive development. Our position is that by enhancing students’ awareness of their moral reasoning and moral emotions through context setting, purposeful instruction, and opportunities to practice, more positive and equitable outcomes will be obtained.

**Theoretical framework**

According to moral developmental theories, moral development in children follows a predictable developmental path in an invariant sequence of stages (Beauchamp & Childress, 2001; Eisenberg-Berg, 1979; Gibbs, 2003; Kohlberg, 1984). When presented with a moral dilemma, children under the age of eight usually take an egocentric perspective and judge an action as wrong when the action results in punishment, or is against the rules set by authority figures. As children mature, they start to consider multiple perspectives within dilemmas, and begin to recognize the intentions and motives of others. Adolescence is a period of life that generally starts at about age 12, runs to age 20, and is considered as a time of a great change on many levels (Gardner & Steinberg, 2005; Steinberg, 2008). These changes include dramatic biological changes, social changes, and significant psychological changes linked to increasing social and cognitive maturity. Adolescence is accompanied by an increasing ability to think abstractly, to engage in more sophisticated and elaborate information processing strategies, to consider multiple dimensions of a problem at once, and to reflect on one’s self and on multi-faceted problems (Graber et al., 2018; Simmons, 2017). At the adolescent stage, children also become more capable to reason about morality and more considerate about the perspectives of others (Hart & Carlo, 2005; Kay, 2017).

Kohlberg (1984) defined moral development through six stages ordered into three levels of moral orientation that reflect children’s growing competence in taking a socio-moral perspective: from a pre-moral, primarily egocentric orientation through a conventional, primarily rule-conforming orientation to a self-accepted, principled orientation. Kohlberg (1984) argued that at the earlier stage, ‘the centers of moral choice and feelings are based on the outcome of personal wellbeing’ (p. 393), while the later stage of moral development is associated with the ability to imagine the perspective of others. At the heart of each stage is the motivation for making the right choice. According to moral development theories, at the adolescence stage, moral reasoning moves beyond the need for individual approval, to adhere to moral decisions that often prescribe what is right and
wrong (Eisenberg-Berg, 1979; Gibbs, 2003; Kohlberg, 1984). Kohlberg (1984) described that these sequences of development are based on adolescents’ consideration of their own judgement and the judgement of others. At the conventional morality stage, adolescents also start paying more attention to interpersonal feelings such as love, empathy, trust, and they become more concerned about others.

According to Kohlberg (1984), children usually develop more mature moral judgement through the natural course of interactions with others. This mature moral judgement, according to Gibbs (2003), involves a growing ability to take the perspective of others. Children that show immaturity in the stages of moral judgement pronounced egocentric bias and usually base their judgement on ‘as you think, so you act’. Gibbs (2003) conceptualized Kohlberg’s main stages as developmental levels of moral immaturity and maturity or socio-moral justification stages. Social-moral justification stages one and two represent immature or superficial moral judgement typical for younger children age five to about 12, while stages three and four represent mature or profound moral judgement expected to be formed at adolescence and to last throughout adulthood. According to Gibbs et al. (2013), at the adolescent stage (Stage 3: Mutuality and Stage 4: Systems) the relationship itself becomes a value. Trust and mutual caring, although intangible, become real and important for adolescents. Moral judgement advances beyond pragmatic thinking to a perspective of mutual trust, and by caring about others and treating them fairly, adolescents start to develop the feeling of belonging and empathy. Individuals come to appreciate the need for universal, consistent standards of interdependence, and morality is emphasized through a deep commitment to justice and caring. Honouring commitments becomes the measure of self-respect, even if retaining integrity means becoming judged and unpopular.

Eisenberg-Berg (1979) moved from Kohlberg’s prohibition-oriented moral reasoning and justice approach, and introduced pro-social moral judgement focusing more on empathy and altruistic behaviour. She defined pro-social moral reasoning as a reasoning about moral dilemmas in which one person’s needs conflict with the needs of others. Eisenberg-Berg (1979) examined the changes in pro-social moral judgement at different developmental levels, and found age-related categories of development of pro-social behaviour. The more primitive, hedonistic reasoning characterized in younger children decreases with age, and more sophisticated reasoning increases as children get older. Eisenberg-Berg (1979) proposed 5 levels of pro-social moral reasoning. The first two stages Hedonistic/Direct-Reciprocity orientation and Needs-Oriented orientation are the early stages of pro-social moral reasoning specific to preschool to mid-elementary school children, range from self-focused consequences to developing concerns for physical and psychological needs of others without real self-reflective role taking or internalized affects. Stage three is typical for mid elementary and early high school children, and is based on the approval/stereotyped reasoning elicited from images of good and bad persons, and the need to sustain the approval of others. Late elementary and high school children reason at Stage 4a or self-reflective/empathetic orientation stage characterized by role taking, empathetic concerns for others, and more sophisticated moral reasoning. Stage 4b is a transition level, which according to Eisenberg-Berg (1979) a minority of high school youth demonstrate, and is based on the evidence of internalized values and concerns for the social rights and fair conditions for larger society. Stage 5, described as internalized stage is typical only for few high school youth and older adults and is based on the desire to maintain dignity, rights, and equality of all individuals. Eisenberg-Berg (1979) posited that the more sophisticated moral reasoning appears to occur during adolescence when other-oriented perspective takes place, which consequently leads to the development of caring and altruistic feelings for others, empathy, and pro-social skills.

As support for the Kohlberg-based approach to moral education waned, other theoretical approaches emerged. Turiel (2002) argued that children appeared to be inconsistent in their moral decisions based on moral development stage theories (e.g., Kohlberg, 1984), and proposed that a moral domain is one of three discrete domains for organizing information (moral, social, and personal) from which a judgement is made. Social-cognitive domain theory maintains that discrete developmental domains co-exist and are formed from a range of social experiences of adolescents.
Over time, through interactions with others and as part of social groups (e.g., family and school), understanding of social systems and their conventions are formed. At the same time, adolescents also develop knowledge about themselves including their personal preferences/priorities, and what it is to impact human welfare or principles of justice (Turiel, 2002). While acting in ways that do not cause harm to others is the foundation of social relationships, not all rules that govern these relationships are moral and therefore obligatory. Some rules, according to Smetana (2006) may regulate social interactions, but at the same time may lack the perspective and the essential foundation of moral rules. Social conventions direct actions to maintain order and effective functioning within the context of a societal group, as such these conventions may vary based on culture and specific contexts. They are usually agreed upon, and therefore may be changed. It is required, by those in authority, that these rules be followed (Smetana, 2006).

Within the context of rule-laden societies, each person also has personal agency. This is the ability to exercise choice in matters that include preferences (e.g., friends, activities), and control over one’s own body (Nucci, 2001). It is hypothesized that these types of matters apply only to the individual, and therefore are not governed by conventions of the society or moral principles. It is in fact, how an individual distinguishes themselves from others (Nucci, 2001). Moral judgements are derived from features inherent to social relationships involving harm to persons and violations of justice (Turiel, 2002). These elements form the moral domain. Moral prescriptions are universally applicable and apply to everyone in similar circumstances (Hauser, 2006). They are impersonal, not based on individual preferences, personal inclinations or social conventions meant to maintain order. Moral reasoning is based on judgements of fairness, harm, or welfare that are a priori judgements.

Using this framework, decision-making requires actively interpreting, assessing and negotiating more than one domain. Adolescents’ abilities to reason and act morally are therefore a function of their abilities to cognitively differentiate universal moral principles from social conventions, and make connections with their personal domain all within the cultural and situational context with which they are most familiar (Turiel, 2002). While moral and social convention and personal matters are distinct according to domain theory, most complex interactions involve more than one domain, thus, adolescents must develop skill in coordinating competing interests present in real-world interactions while they are still developing their decision-making abilities and emotional regulation. A failure to prioritize moral elements may not be indicative of non-moral thinking, but rather, the priorities given to competing elements present (Helwig, 1995).

According to Nucci (2001), understanding of moral elements progresses from an emphasis on observable (e.g., physical) harm in early childhood, through to understanding fairness, including equitable treatment of all people, later in adolescence. Research by Turiel (2002) uncovered variability in the judgements of adolescents facing actual moral transgressions when compared to hypothetical scenarios. Given that adolescents struggle to discern less clearly delineated elements present in situ, it would be prudent to target instruction within schools and classrooms to assist adolescents in developing skills to accurately interpret the features of complex real-world situations, including the perpetration of oppression either knowingly or unknowingly. Nucci (2001) proposed that the primary purpose of moral education is to develop skill in the daily application of moral understandings. Through social relationships, including relationships developed with teachers, adolescents can learn to first identify and then coordinate social and moral elements with personal priorities. Weissbourd (2003) posited:

Educators influence students’ moral development not simply by being good role models—important as that is—but also by what they bring to their relationships with students: their ability to appreciate students’ perspectives and to disentangle them from their own, their ability to admit and learn from moral error, their moral energy and idealism, their generosity, and their ability to help students develop moral thinking without shying away from their own moral authority. (p. 11)

Adolescents need opportunities to develop their intuitions in well-structured, positive environments (Narvaez, 2006) that provide guidance for developing ethical skills. Such a need reinforces the
necessity for teachers to further their knowledge and understanding about theoretical perspectives related to children’s moral development.

**Moral emotions in adolescence**

In recent years, research in the field of moral emotions (guilt, shame, empathy, and sympathy), and the role of emotion in moral reasoning has increased (Eisenberg, 2014; Malti & Krettenauer, 2013). Emotions such as guilt and empathy are believed to be motivated by moral behaviour, and also play a role in how behaviours manifest (Walker & Pitts, 1998). Tangney, Stuewig, Ferguson and Stegge (1998) defined guilt as ‘an agitation-based emotion or painful feeling of regret that is aroused when the actor actually causes, anticipates causing, or is associated with an aversive event’ (p. 20). Thus, guilt refers to a very strong moral feeling that contradicts the standards to which an adolescent operates (Eisenberg, 2014). In accepting responsibility for their own wrongdoing, adolescents either make amends or punish themselves, and in both cases experience strong moral emotions. Shame, by contrast focuses on diminishing the self, based on the views of others and is more related to self-disliking than regret over an action (Ferguson & Stegge, 1998). According to Ferguson and Stegge (1998) ‘the ashamed person focuses more on devaluing or condemning the entire self, experiences the self as fundamentally flawed, feels self-conscious about the visibility of one’s actions, fears scorn, and thus avoids or hides from others’ (p. 20). The feeling of guilt is activated by the adolescents’ monitoring their actions in relation to their own beliefs/standards and may be considered the more moral emotion compared to guilt. Tangney et al. (2014) posited

Shame and guilt are both “self-conscious” emotions that arise from self-relevant failures and transgressions, but they differ in their object of evaluation. Feelings of shame involve a painful focus on the self – the sense that “I am a bad person” – whereas feelings of guilt involve a focus on a specific behavior – the sense that “I did a bad thing.”. (p. 802)

These two emotions may occur in isolation or in concert with one another (Malti et al., 2013). For instance, the awareness of racist attitudes may elicit feelings of both shame and guilt, particularly where a good/bad binary belief is held, such that, to be a good person one must not be racist, and to be racist means one is a bad person. Such a dichotomy makes it most difficult for an adolescent (or adult for that matter) to honestly examine thinking and emotions related to oppressive actions with an open-minded intent to make positive change. Instead, they get caught up in defending their actions to avoid the feeling of shame and guilt.

Empathy and sympathy, similarly, can be related. While empathy is an affective experience similar to the feelings of another (or what another might be expected to feel) given the circumstances (Eisenberg, 2003), sympathy is an emotional response to what another is experiencing. It may not be the same emotion experienced (or expected), but does incorporate feelings of concern. Both involve encoding of information but only sympathy is believed to be truly moral because it primarily involves reducing a negative experience for another. Recent research suggests that empathy is comprised of several components (emotional, motivational, and cognitive), which interact and operate in parallel fashion (Decety & Cowell, 2014). Empathy involves the capacity to ‘feel’ the emotions of others and it is often referred as affective empathy or affective resonance. The motivational component of empathy refers to the constant state of care for another’s welfare regardless of another person’s need. Cognitive empathy represents the capacity to understand the emotions of others, and fairly accurately recognize another’s emotional state. According to Decety and Cowell (2104), each of these components of empathy may influence moral behaviour in conjunction or separately. Eisenberg (2014) defined sympathy as an emotional response trigged by the emotional state of another and it is manifested in feelings of concern and sadness for the other. Attending to all those emotions, our own and others, helps us to measure our day-to-day experiences in terms of success or challenge in meeting personal needs or needs of others.
Understanding the cause and consequences of emotions is essential to regulation, which is the key for socio-moral interactions and pro-social conduct. Salovey and Mayer (1990) defined the term emotional intelligence as ‘the ability to monitor one’s own and others’ feelings and emotions, to discriminate among them and to use this information to guide one’s thinking and actions’ (p. 189). Goleman (2006) described emotional intelligence as a sum of personal and social competences, in terms how we manage our own emotions and how well we handle our interpersonal relationships. With respect to socio-moral judgement, an awareness of emotional state of self and others has an important role in the interpretation, reasoning, judgement, and eventual action adolescents take (Broderick & Jennings, 2012). The awareness of emotional state can be further broken down into four different yet related aspects: (a) recognizing their own emotions, (b) recognizing the emotions of others, (c) anticipating their own emotion as an outcome of planned action, and (d) anticipating emotion of another as an outcome of planned action (Broderick & Jennings, 2012). According to Broderick and Jennings, emotional regulation requires not only recognition and acceptance of emotional experiences but also the ability to prioritize demands to sustain motivation, and to adjust behaviour to achieve goals. To further deconstruct actions, it is necessary to be aware of what information adolescents are paying attention to, and what they are choosing to ignore (or are simply missing), as this information will impact experienced, anticipated and therefore, regulated emotions.

A range of experience with emotions both positive and negative is thought to be integral to moral development, and therefore linked to pro-social outcomes (Dunn, 2006). For example, according to Malti and Krettenauer (2013), adolescents anticipate negative emotions from some peer relations, and use these anticipated emotions in their reasoning about the issues at hand. Adolescents who poorly regulate their emotional responses may struggle to attend to the available socio-moral information, which may lead to inadequate perspective taking and sympathizing with others. It may also lead to weaker pro-social actions as a result. The work of Arsenio et al. (2009) for example, examined the differences between reactive and proactive aggression among adolescent males. Reactive aggressors typically demonstrated higher levels of hostile attributions (misreading situations) without direct emotional outcome awareness, while proactive aggressors demonstrate greater emotional expectations from transgressions (e.g., taking something that does not belong to them will make them feel happy). Weak emotional regulation is associated most strongly with reactive aggressors and, adolescents who struggle to read accurately and control their responses when exposed to emotional triggers may be at greater risk for repeated behavioural transgressions (Eisenberg, 2014).

Emotional regulation is the ability to monitor, evaluate and adjust emotion in any given situation (Zaki & Williams, 2013). To increase regulatory skills, beginning with creating greater awareness of and ability to monitor emotion of self and others, is only the start of this complex process. One of the most studied strategies to increase emotional regulation is reappraisal. This essentially is a social cognitive process that requires the adolescent to ‘re-interpret’ the situation with a different perspective, which in turn helps them in changing emotional experiences successfully. Gross (2014) suggested that negative emotions in adolescents related to rejection may be regulated with explicit strategies (as cited in Ahmed et al., 2015). The process model of emotional regulation posited that particular emotional awareness is situation influenced, and as awareness increases, the individual is more inclined to select to which situation they would attend and is more able to modify the emotional impact (Gross, 2014). The process model also contains a feedback loop, which helps the individual to understand that emotional responses can be adjusted, suggesting that, ‘the emotion generation process can occur recursively’ (Ahmed et al., 2015, p. 14.)

The extended process model (Gross, 2014) proposed that the emotional regulation process develops in three stages: identification of emotional state, selection of the appropriate strategies for emotional regulation, and the implementation of the strategy selected. All three stages help the adolescent in evaluating either positive or negative emotions experienced and taking appropriate action. Cimmarusti (2011) recommended focusing first on awareness of emotion, and then accurately labelling the emotion. This can be achieved by asking adolescents, ‘What are you feeling?’
making a statement of observation, ‘You look angry’ and following with another question, ‘What is making you feel angry?’

Further influencing an adolescent’s ability to accurately read a situation is their mental model, how they view the world around them. Increasing awareness of mental models (how adolescents view their world) may assist in improving the abilities of adolescents to reason, judge and act pro-socially in a socio-moral context (Cimmarusti, 2011). As this research connotes, experiences are mediated by emotion (felt and anticipated). Given that it is repeated experiences that help to shape a worldview, we suggest that the mental models that adolescents form and use to interpret their world are therefore also affected by the emotions they experience. Making this knowledge explicit – teaching strategies for perspective taking and reflective self-awareness may assist in achieving more equitable and more positive outcomes.

How can greater awareness of what influences reasoning be achieved among adolescents so that this knowledge can be incorporated into the judgement and plan of action? The work of Crick and Dodge (1994) described a social information-processing model that is useful for explaining these processes. For example, an adolescent walking into a room is met with laughter – they must first interpret what is happening, then decide why it is happening (they are laughing at a joke, or they are laughing at me), then they decide their goal for the situation (what do they want as an outcome: to make friends, or avoid embarrassment). Next, they decide what course of action they will take (considering what skills they have to follow through on the action – e.g., make a joke about the situation, or leave the room) to achieve their goal. In other words, adolescents must organize information they encounter in a way that is meaningful to them. When the information used by the adolescent is incomplete, there is greater likelihood that in situ emotion will play a role in their cognitive processes and decision-making (Damasio, 1994; Jenkins & Oatley, 1997). For adolescents to reason fully, they must first ensure they are interpreting their experience/the information presented accurately, and regulate emotional and therefore behavioural responses accordingly.

Further to the influence of in situ emotion, Loomes and Sugden (1986) have identified anticipated emotions as influencing socio-moral decision-making. If, for example, adolescents identify that their planned course of action would cause harm to another, and that would lead them to feel regret – does this realization impact the decision they make and the action they take? In other words, it is not only about how the other person would reason (cognitive developmental theory emphasis), or the harm that would be caused (social cognitive domain theory emphasis), it is also about how the actor would feel as a result (moral emotions). Adolescents who are aware of their emotional arousal level and the influence it may have on their interpretation of the situation, are in a better position to use all the information available to reach a decision consistent with their socio-moral understanding. For those who do not have the skills necessary to recognize and regulate their cognitive and emotional states, there must be explicit instruction, and opportunities to practice while receiving constructive feedback.

**Meta-moral cognition: active awareness of moral thinking, feelings and action**

As a result of the above-presented analysis of the two different theoretical approaches to moral thinking and action, and considering emotions and experience as mediating factors, we propose a meta-moral cognition process, or intentional thinking about moral thinking and moral emotions. Meta-moral cognition represents an active mediator influencing the cognitive processes and emotions involved in making moral decisions. Meta-moral cognition should include five components: 1) informative knowledge or ‘knowing what’ – knowledge of one’s own (moral) thought processes and moral emotions; 2) performative knowledge or ‘knowing how’ – knowledge about one’s own moral actions and emotional responses and those of others; 3) self-regulatory knowledge: planning, monitoring, and evaluating one’s own cognitions and emotions which may lead to better control of one’s own behaviour and action; 4) provisional knowledge or ‘knowing when’ – knowledge about when moral thoughts, moral emotions and moral action are in equilibrium.
We propose that the development of meta-moral cognition may enable adolescents to think critically about their own, and the moral thoughts and emotions of others, which in turn may lead to better self-regulation of their own cognition and emotions, and inevitably lead to better monitoring of their own behaviour and action.

Educational implications: recommended strategies

Teaching strategies that help adolescents with their moral thinking and moral emotions is critically important, yet sometimes an overlooked component in classroom practices. We propose that helping adolescents in developing meta-moral cognitive skills is a necessary approach for developing a more accepting, equitable and tolerant worldview among our youth, and we propose the following four explicit strategies for implementation within classrooms to develop meta-moral cognitive skills and abilities: affective strategy, critical moral discourse, connect and deconstruct, and moral reflection strategy.

The first proposed strategy is an **affective strategy**, and is affiliated with informative and self-regulatory knowledge. This strategy requires the establishment and maintenance of an environment where students experience a sense of belonging and creates the conditions for students to feel safe to talk honestly about their moral emotions, moral motivations, and moral actions. For example, starting a class with a ‘circle of credence’ or ‘community circle’ where the teacher and students are able to share how they are feeling, what they are thinking, based on their experiences that day as a way to check in, and value each member of the class. Narvaez (2006) suggested that children need opportunities to develop their ethical skills within welcoming and positive environments provided by teachers. Developing sense of acceptance within the safe environment may help adolescents in examining their feelings, thoughts, and judgements associated with a situation, and enable them to examine their behaviours without feeling judged or shamed.

The second strategy we propose is **critical moral discourse** about moral thinking and moral feelings. This strategy aids in development of both informative and performative knowledge or ‘knowing what and how’. With this strategy, the teacher encourages everyone in the class to discuss and compare how they think and feel about different moral issues (principles of justice, human welfare) using current and/or historical events (e.g., recent racist actions of authority figures such as police, historical oppressive educational practices). Educators model and guide this process to develop student skills in speaking their truth, while being respectful of the truth of others. When different perspectives are shared and explored, students can practice building on, or challenging the ideas of their own and the ideas of others. Critical discourse has good potential for developing moral reasoning as well as emotional awareness in adolescents as it provides the opportunities for learning to listen to one another, build on or challenge one another’s ideas (Jurkowski & Hänze, 2015). Such practices allow students and teachers with different background experiences to share their potentially unique cultural perspectives and provides opportunities to acquire new knowledge for all. Educators fortify ‘thinking aloud’ throughout the process, and are required to model a critical approach to their own moral thinking and actions. According to Nucci et al. (2015), when teachers increase students’ engagement in transactive discourse, the socio-moral cognition among middle school students is enhanced. Further, Selman (1981) posited that:

The mutuality of perspectives includes a view of both self and other as complex psychological systems of values, beliefs, attitudes, etc. (and the)… further awareness that the mutuality of understanding of each other’s point of view can take place at different qualitative levels—for example, persons can ‘know each other as acquaintances, friends, closest friends, lovers, etc.’ (p. 404)

Eisenberg (2014) found that self-reflective moral reasoning, in this case reasoning pertaining to perspective taking increases pro-social behaviour and altruistic motivation. It is not enough to explore the topics alone – it must be done in concert with the emotions that are evoked through exploring or experiencing the issue from the perspective of self and others.
The third strategy we propose is connect and deconstruct. With this strategy, adolescents are supported to make connections between types of moral thinking, feelings, and action, including why they think, feel, and act as they do. This supports developing awareness of mental models and abilities to self-regulate. For instance, when addressing bullying, students should be encouraged to take perspective of all sides involved: bully, bullied and bystander. With this strategy, the teacher instructs on the importance of understanding all sides of the particular issue, and with guided instruction, encourages students to regulate their emotional responses to all sides involved. A role-play may be employed in which students take different roles, and afterwards engage in discussion about experienced feelings, both positive and negative in each assumed role. The extended process model (Gross, 2014) for emotional regulation should be employed, and adolescents should be encouraged first to identify the emotional state they experienced in each given role, second to select appropriate strategies for emotional regulation, and third to practice the strategies selected by playing the roles again. Ahmed et al. (2015) stressed the importance of a feedback loop within the process model in helping the individual to understand that emotional responses can be adjusted and that the process is fluid and ongoing. Adolescents who are aware of their emotional arousal level and the influence it may have on their interpretation of the situation, are in a better position to use all the information available to reach a decision consistent with their socio-moral beliefs.

A fourth strategy, moral reflection, is intended to develop provisional awareness, when moral thinking, emotions, and actions are aligned. Whether considering a lived experience and the path taken, or an historical event, taking time to honestly reflect on the choices made, the feelings felt, and outcome, both from the adolescents’ perspective and the perspective of other stakeholders, should become a regular part of the learning process to afford adolescents opportunity to grow in their understanding of themselves. A useful provocation could be: ‘I used to think … now I think …’

Before engaging adolescents in what could be considered high stakes meaningful discourse with one another, they must first be instructed in how to give and receive feedback, share different perspectives, and disagree respectfully. It is recommended that educators begin this process with lower stakes (less emotionally charged topics), and to always be aware of their audience – knowing their students is paramount to avoid inadvertently triggering any past or current trauma. By incorporating meta-moral cognitive strategies in everyday teaching practices, educators will create the opportunities for adolescents to make clearer connections between their moral thinking and moral action, because they will have greater awareness that experiences and emotions together are influencing their current thinking.

**Conclusion**

Our goal was to elaborate on the connections among moral thinking, emotions and action as we outlined an overarching theoretical framework with practical applications derived from two theoretical perspectives: cognitive-developmental theory (Eisenberg-Berg, 1979; Gibbs, 2003; Kohlberg, 1984) and social domain theory (Nucci, 2001, Turiel, 1983). We argued that the lack of understanding among adolescents of what influences their moral thinking and moral emotions in any given situation is a key impediment in their moral decision-making processes. We proposed that by incorporating meta-moral cognitive strategies in everyday teaching practices, educators will equip students with the necessary skills to better interpret their experiences and plan responses, and enable them to better understand the different influences on their moral thinking, action and emotions. The intended outcome of such work is to produce more equitable outcomes when faced with complex intrapersonal and interpersonal situations within diverse society.

**Disclosure statement**

No potential conflict of interest was reported by the authors.
Notes on contributors

Dr. Mira Bajovic is an Assistant Professor in the Faculty of Education, Brock University, Ontario, Canada. Her research interests include exploring moral and social-cognitive development in adolescents, and the media affects on social interactions, moral reasoning, and bullying in children. Other interests include exploring how meta-moral cognition strategies can be seamlessly integrated in everyday classroom practice to develop students’ more positive, and more equitable worldviews. She can be reached at: mbajovic@brocku.ca

Dr. Kelly Rizzo is an Elementary School Principal with the Hamilton-Wentworth District School Board in Ontario, Canada. Her research interests focus on educators’ character education practices and students’ socio-moral development. She has contributed to several initiatives within the school board including I Think Project and Pedagogies for Deep Learning. Kelly has been part of collaborative initiative Knowledge Building within the Students Achievement Division of the Ministry of Education of Ontario, and she is also an active contributor with School Mental Health Ontario. She can be reached at: krizzo@hwdsb.on.ca

ORCID

Mira Bajovic http://orcid.org/0000-0002-1189-2732

References

Ahmed, S. P., Bittencourt-Hewitt, A., & Sebastian, C. L. (2015). Neurocognitive bases of emotion regulation development in adolescence. *Developmental Cognitive Neuroscience*, 15, 11–25. https://doi.org/10.1016/j.dcn.2015.07.006

Arsenio, W. F., Adams, E., & Gold, J. (2009). Social information processing, moral reasoning, and emotion attributions: Relations with adolescents’ reactive and proactive aggression. *Child Development*, 80(6), 1739–1755. https://doi.org/10.1111/j.1467-8624.2009.01365.x

Beauchamp, T. L., & Childress, J. F. (2001). *Principles of biomedical ethics*. Oxford University Press.

Biggs, J. B., & Telfer, R. (1987). *The process of learning*. McGraw-Hill/Appleton & Lange.

Broderick, P., & Jennings, P. (2012). Mindfulness for adolescents: A promising approach to supporting emotion regulation and preventing risky behaviour. *New Directions for Youth Development*, 136, 111–126. https://doi.org/10.1002/yd20042

Cimmarusti, R. A. (2011). Increasing emotional regulation for youths in residential care: Phases of change. *Residential Treatment for Children & Youth*, 28(2), 91–101. https://doi.org/10.1080/0886571X.2011.569427

Crick, N. R., & Dodge, K. A. (1994). A review and reformulation of social information-processing mechanisms in children’s social adjustment. *Psychological Bulletin*, 115(1), 74–101. https://doi.org/10.1037/0033-2909.115.1.74

Damasio, A. R. (1994). *Descartes’ error: Emotion, rationality and the human brain*. Putnam (Grosset Books).

Decety, J., & Cowell, J. M. (2014). The complex relation between morality and empathy. *Trends in Cognitive Sciences*, 18(7), 337–339. https://doi.org/10.1016/j.tics.2014.04.008

Dunn, J. (2006). Moral development in early childhood, and social interaction in the family. In Killen & J. G. Smetana (Eds.), *Handbook of moral development* (pp. 331–350). Lawrence Erlbaum.

Eisenberg, N. (2003). Prosocial behavior, empathy, and sympathy. In M. H. Bornstein, L. Davidson, C. L. M. Keyes, & K. A. Moore (Eds.), *Well-being: Positive development across the life course* (pp. 253–267). Lawrence Erlbaum.

Eisenberg, N. (2014). Altruistic emotion, cognition, and behavior (PLE: Emotion). Psychology Press.

Eisenberg-Berg, N. (1979). Development of children’s prosocial moral judgment. *Developmental Psychology*, 15(2), 128–137. https://doi.org/10.1037/0012-1649.15.2.128

Ferguson, T. J., & Stegge, H. (1998). Measuring guilt in children: A rose by any other name still has thorns. In J. Bybee (Ed.), *Guilt and children* (pp. 19–74). San Diego: Academic Press.

Gardner, M., & Steinberg, L. (2005). Peer influence on risk taking, risk preference, and risky decision making in adolescence and adulthood: An experimental study. *Developmental Psychology*, 41(4), 625–635. https://doi.org/10.1037/0012-1649.41.4.d625

Gibbs, J. C. (2003). *Moral development and reality: Beyond the theories of Kohlberg and Hoffman*. Sage.

Gibbs, J. C., Basinger, K. S., Fuller, D., & Fuller, R. L. (2013). *Moral maturity: Measuring the development of sociomoral reflection*. Routledge.

Goleman, D. (2006). *Emotional intelligence*. Random House LLC.

Graber, J.A., Brooks-Gunn, J. & Peterson, A. C. (Eds.). (2018). *Transitions through adolescence: Interpersonal domains and context*. Psychology Press.

Greene, J., & Haidt, J. (2002). How (and where) does moral judgment work? *Trends in Cognitive Sciences*, 6(12), 517–523. https://doi.org/10.1016/S1364-6613(02)02011-9

Gross, J. J. (2014). Handbook of emotion regulation, conceptual and empirical foundations. In J. J. Gross (Ed.), *Handbook of emotion regulation- second edition* (p. 3–20). New York: Guilford Press.
Hart, D., & Carlo, G. (2005). Moral development in adolescence. Journal of Research on Adolescence, 15(3), 223–233. https://doi.org/10.1111/j.1532-7795.2005.00094.x

Hauser, M. (2006). Moral minds: How nature designed our universal sense of right and wrong. Ecco/HarperCollins Publishers.

Helwig, C. (1995). Adolescents' and young adults' conceptions of civil liberties: Freedom of speech and religion. Child Development, 66(6), 152–166. https://doi.org/10.2307/1131903

Jenkins, J. M., & Oatley, K. (1997). Emotional episodes and emotionality through the life span. In C. Magai & S. McFadden (Eds). Handbook of emotion, adult development, and aging (pp. 421–441). Academic Press.

Jurkowski, S., & Hänze, M. (2015). How to increase the benefits of cooperation: Effects of training in transactive communication on cooperative learning. British Journal of Educational Psychology, 85(3), 357–371. https://doi.org/10.1111/bjep.12077

Kay, W. (2017). Moral development: A psychological study of moral growth from childhood to adolescence. Routledge.

Killen, M., & Rutland, A. (2011). Children and social exclusion: Morality, prejudice, and group identity. John Wiley & Sons.

Kohlberg, L. (1984). Essays on moral development: The psychology of moral development. Harper & Row.

Loomes, G., & Sugden, R. (1986). Disappointment and dynamic consistency in choice under uncertainty. The Review of Economic Studies, 53(2), 271–282. https://doi.org/10.2307/2297651

Malti, T., Eisenberg, N., Kim, H., & Buchmann, M. (2013). Developmental trajectories of sympathy, moral emotion attributions, and moral reasoning: The role of parental support. Social Development, 22(4), 773–793. https://doi.org/10.1111/sode.12031

Malti, T., & Krettenauer, T. (2013). The relation of moral emotion attributions to prosocial and antisocial behavior: A meta-analysis. Child Development, 84(2), 397–412. https://doi.org/10.1111/j.1467-8624.2012.01851.x

Narvaez, D. (2006). Integrative ethical education. In M. Killen & J. Smetana (Eds.), Handbook of moral development (pp. 703–733). Erlbaum.

Nucci, L. (2001). Education in the moral domain. Cambridge: Cambridge University Press.

Nucci, L., Creane, M. W., & Powers, D. W. (2015). Integrating moral and social development within middle school social studies: A social cognitive domain approach. Journal of Moral Education, 44(4), 479–496. https://doi.org/10.1080/03057240.2015.1087391

Piaget, J. (1981). Intelligence and affectivity: Their relationship during child development. (TA Brown & CE Kaegi, Trans. & Ed.). Annual reviews.

Pinker, S. (2011). Decline of violence: Taming the devil within us. Nature, 478(7369), 309–311. https://doi.org/10.1038/478309a

Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. Imagination, Cognition and Personality, 9(3), 185–211. https://doi.org/10.2190/DUGG-P24E-S2WK-6CDG

Selman R. L. (1981). The development of interpersonal competence. The role of understanding in conduct. Developmental review, 1(4), 401–422.

Simmons, R. G. (2017). Moving into adolescence: The impact of pubertal change and school context. Routledge.

Smetana, J. (2006). Social domain theory: Consistencies and variations in children's moral and social judgments. In M. Killen & J. G. Smetana (Eds.), Handbook of moral development (pp. 119–154). Lawrence Erlbaum Associates.

Steinberg, L. (2008). A social neuroscience perspective on adolescent risk-taking. Developmental Review, 28(1), 78–106. https://doi.org/10.1016/j.dr.2007.08.002

Swedene, J. K. (2003). Feeling better about moral dilemmas. Journal of Moral Education, 34(1), 43–55. https://doi.org/10.1080/03057240500049307

Tangney, J. P., Stuewig, J., & Martinez, A. G. (2014). Two faces of shame: The roles of shame and guilt in predicting recidivism. Psychological Science, 25(3), 799–805. https://doi.org/10.1177/0956797613508790

Turiet, E. (1983). The development of social knowledge: Morality and convention. Cambridge, United Kingdom: Cambridge University Press.

Turiet, E. (2002). The culture of morality: Social development, context, and conflict. Cambridge University Press.

Walker, L. J., & Pitts, R. C. (1998). Naturalistic conceptions of moral maturity. Developmental Psychology, 34(3), 403. https://doi.org/10.1037/0012-1649.34.3.403

Weissbourd, R. (2003). Moral teachers, moral students. Educational Leadership, 60(6), 6–11. ISSN:0013-1784

Zaki, J., & Williams, W. C. (2013). Interpersonal emotion regulation. Emotion, 13(5), 803. https://doi.org/10.1037/a0033839