Moral Development in Adolescence

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Abstract

This article provides a selective review of research on moral development in adolescence during the past decade. We begin with introducing key concepts and reviewing critical theoretical advances in the field of adolescent moral development. This includes integrative models to the developmental study of morality and dynamic socialization models of moral development. Next, related major empirical findings are presented on moral emotion–behavior links, morality in intergroup contexts, and the socialization of moral development. Next, methodological innovations are presented, including new techniques to assess and analyze moral emotions and moral behaviors. We conclude by pointing to promising future directions for moral development research and practices aimed at promoting ethical growth and civic responsibility in adolescents around the globe.

Keywords: Moral development; adolescence; socialization; nurturing goodness
Moral Development in Adolescence

Humans have great potential for destruction and goodness. The world we live in suggests that moral development is of utmost significance to maintain peace, social inclusion, and civilized conduct. In this manuscript, we review progress in the field of adolescent moral development research during the past decade. The field of adolescent moral development is at the core of research on adolescents’ social and healthy development and continued to be an active, informative, and multifaceted area of research during the past decade.

Morality concerns the way we treat each other, how we develop a sense of caring and fairness, and how we experience and deal with our and others’ emotional experiences in the context of ethical and social conflict (Killen & Malti, 2015). Adolescence is a critical period to study the roots, antecedents, and consequences of morality because it is considered a time in which humans’ search for meaning, identity, and uniqueness is particularly prominent (Erikson, 1968). As such, the adolescent period provides a developmental window for the establishment of more stable dimensions of one’s identity and values that are essential to the self, including obligations toward the self and others, and an attachment to principles of caring, fairness, and equality (Smetana & Turiel, 2003). Youths’ social contexts change as they move out of childhood (e.g., in romantic relationships, a movement away from family and towards peers), and as such, adolescents’ social contexts provide them with unique opportunities for engaging in interactions that shape the formation of motivations, values, and emotions, thus further contributing to the development of a more differentiated identity, including the moral self (Krettenauer & Hertz, 2015). These yield opportunities to promote moral growth with potential for enduring positive consequences, making this stage of development critical for creating meaningful, lasting implications for moral development as adolescents enter the adult world.
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In what follows, we provide a selective review of theoretical, empirical, and methodological advancements in the field of adolescent moral development over the past decade, and end by pointing to promising directions for future research. The predominant focus of this review is on the second decade of life. Given the breadth of this literature, it is beyond the scope of this article to provide a comprehensive review. Rather, we have deliberately chosen themes and domains that appear substantial and yield promising venues for future work on adolescent moral development and its promotion. Notably, we have chosen to focus on a few core theoretical advancements, empirical advancements related to these theories, as well as methodological advancements in the field which provide further support for these findings and point towards promising avenues for future work.

Theoretical Advancements

Over the past decade, several theoretical advancements have informed contemporary research on adolescent moral development. Here, we focus on two core approaches: Integrative developmental models to the study of morality and socialization models of moral development.

Integrative Psychological Perspectives on Moral Development

Until recently, moral development research has taken a piecemeal approach—that is, topics relevant to moral development (e.g., emotional development, identity development, behavioral development) have largely been treated as separate entities and rarely studied in tandem. In the last decade, researchers have begun to combine various facets of moral development into theoretical frameworks that aim to garner more holistic perspectives of phenomena in question. Below, we review two prominent theories that have take an integrative approach to the study of moral development: clinical developmental theory (Malti, 2016) and the social reasoning developmental model (Rutland et al., 2010). In addition, we focus on new
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developments in the socialization of adolescent moral development because youth’s social context and social influences are paramount to how youth acquire moral development.

Clinical Developmental Theory

Since the beginnings of psychological theorizing on moral development by Jean Piaget and the seminal work by Larry Kohlberg, psychological theorizing about moral development across the lifespan has come a long way and informed the study of moral judgement and reasoning about norms of fairness and justice. An ethics of care as proposed by Carol Gilligan, Nel Noddings, and others, helped the field appreciate the role of caring in morality and contributed to an increased focus on prosocial duties as part of moral development research.

Based on these core ideas about morality, the past decade has made progress in integrating components of these theoretical perspectives, acknowledging that a complete psychological account of morality and its development includes issues of care, fairness, and justice. These ethical principles require a consideration of affect, cognition, and behavior and the developmental processes associated with each of these dimensions. The past decade has increasingly integrated the role of emotional experiences in morality, its development, as well as its relations with moral cognitions and morally relevant behaviors. Specifically, past research has predominantly focused on empathy-related responding (Hoffman, 2000), current models integrated various other-oriented and self-conscious moral emotions, including ethical guilt, respect, moral pride, moral anger, into the theorizing (Malti, 2016, 2020).

Our clinical-developmental theory has incorporated moral emotions and judgments to understand interpersonal victimization, unethical behaviors, and prosocial behaviors (Malti, 2016, 2020; Malti et al., 2020a). The model integrates past traditions that have focused on the development of moral emotions, as well as research that has studied interpersonal experiences of
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bullying and victimization in the context of peer group interactions or prosocial behaviors, civic engagement, and youth activism. One goal of this theoretical account has been to explain why youth victimize others, while others refrain from aggression and/or help others and contribute to the greater good in a community of peers. A basic premise of this theory is that emotions, such as sympathy or ethical guilt, serve important motivational functions to resolve interpersonal conflict and to understand adolescents’ aggression or other-oriented orientations (see Malti et al., 2020b). Because emotional experiences can reveal the negative consequences of acts of victimization for the self and others, they provide insight into adolescents’ motivation to engage in, or refrain from, aggression or prosocial behavior. The clinical-developmental theory offers a conceptual framework to systematically study emotional experiences in ethical contexts in relation to bullying, victimization, and prosocial behaviors across development (Malti, 2020). Related accounts on the motivations underlying prosocial action tendencies have similarly emphasized the need to distinguish the motivations for prosocial behaviors, such as selfish vs. other-oriented motives (Carlo & Pierotti, 2020; Eisenberg et al., 2015; Padilla-Walker & Carlo, 2014). More recently, we have integrated humanistic theorizing into our clinical-developmental framework, acknowledging that a more complete account on the development of human morality requires careful consideration of care of the self and lived other-orientedness (Malti, 2020).

Social Reasoning Developmental Model

The Social Reasoning Developmental Model (SRDM; Rutland et al., 2010) has been an influential theory in moral developmental research that has emerged the last decade. SRDM takes an integrative socio-cognitive developmental perspective to study moral development specifically in the context of prejudice and social exclusion by drawing from social domain theory (SDT; Turiel, 1998) and social identity theory (SIT; Tajfel & Turner, 1986). SDT suggests that children and adolescents refer to different domains of social knowledge when
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grappling with social conflicts. That is, they may draw from moral (i.e., themes of fairness, justice, rights, and others' welfare), social-conventional (i.e., conventions, etiquette, and customs that promote effective group functioning), and/or psychological domains (i.e., autonomy, individual prerogatives, and identity) when justifying and reasoning about their social experiences and decisions. SIT argues that a large part of individuals’ decisions depends on the group(s) they affiliate with. In the context of prejudice, group membership facilitates intergroup bias and spurs prejudicial beliefs via relationships between social groups, and as a result, certain social group memberships become salient (Cooley et al., 2019). When taking these two theories together, the integrative framework provides insight into the formation of intergroup biases, prejudice, and discrimination across development by examining how youth reason about social dilemmas within intergroup contexts (Burkholder et al., 2019; Rutland et al., 2010).

Theories of Socialization and Adolescent Moral Development

Theoretical accounts on the socialization of moral development continued to be of central importance to theorizing on adolescents’ moral growth in the past decade. Due to the breadth of this literature, we focus on new themes that have emerged during the past decade.

Parenting and the Family

Moving beyond parenting styles and relations to morally relevant outcomes in adolescence, recent theoretical accounts have emphasized the need to conceptualize socialization as a dynamic process and the use of a domain-specific perspective to understand how parenting affects dimensions of children’s and adolescents’ moral development (Grusec, 2019). Recently, related theorizing has focused on the incorporation of neurobiological processes that may underlie links between parenting and morally relevant behaviors (Miller & Hastings, 2019). The literature on the role of the family and parenting styles on moral development has also
increasingly moved beyond parenting strategies to the consideration of family values, cultural codes, ethical norms in the family and community settings, and the role of non-parental caregivers. For example, the work by Carlo et al. has shown that different cultural and ethnic groups bring different values to the moral socialization of adolescents, which affects morally relevant behaviors (e.g., Knight et al., 2016). This highlights the need to identify the sociocultural specificity of parenting on adolescent moral development in contemporary theorizing (see Carlo et al., 2018; Malti & Cheah, 2022).

Peers and Group-Membership

The theorizing on peer effects of adolescent’s moral development has moved beyond friends and in-group peers and explored questions about group membership (in-group, outgroup distinctions), group dynamics, and social network effects on morally relevant behavior. For instance, Melanie Killen’s work has incorporated social identity accounts and social domain theory to the study of age-related changes in children’s and adolescents’ thinking and reasoning about morality and social exclusion in group contexts (Killen & Rutland, 2011). The literature on peer effects on morally relevant behaviors has acknowledged the importance of group effects and more systematically integrated social network analysis into this theorizing (e.g., Rambaran et al., 2019). Lastly, theorizing on deviant peer group effects has been complemented by work on the potential of positive peer group effects on morally relevant behaviors, such as prosocial bystanders (Evans & Smokowski, 2015; Malti et al., 2015; Staub, 2019).

Major Empirical Findings

In this section, we review empirical findings from the past ten years across three domains that have seen major activity: the role of morally-relevant emotions (e.g., sympathy and ethical guilt) in adolescents’ moral behavior, the socialization of adolescents’ moral development—
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particularly in the context of non-Western and/or non-white populations—and how group processes affect adolescents’ social exclusion and moral decision-making. These domains reflect important novel empirical findings pertinent to the theoretical advancements outlined above (i.e., clinical developmental theory, social reasoning development model, and the socialization of adolescent moral development).

Moving Beyond Moral Judgment: Emotion-Behavior Links

Early moral development research was primarily concerned with moral cognition (e.g., reasoning), and thus mostly overlooked the role of moral emotions. However, although this research continues to shed light on the complexities of youths’ moral reasoning across domains (e.g., rights and liberties; see Helwig et al., 2014) and contexts (see Nucci et al., 2017), moral decision-making and behaviors are also entrenched in a rich emotional landscape. More recently, research—particularly an avenue fueled by the clinical developmental approach—has increasingly explored how moral emotions affect adolescent’s moral behavior. Consequential emotions (those felt in response to past events) and anticipatory emotions (those one predicts they will feel in response to future events) are key regulators of morally relevant behaviors (e.g., Eisenberg, 2000), and are increasingly coordinated with their moral decisions in adolescence (Malti et al., 2013). Below we review selective research about the role of two ethically-relevant emotions—sympathy and ethical guilt (Malti et al., 2016)—in adolescent’s morally-relevant behavior. For other-oriented moral emotions, sympathy (i.e., empathic concern) was chosen as it is the most commonly studied and one of the most consistently related to moral behavior (in contrast to moral anger or respect; Tangney et al., 2007). For self-conscious moral emotions, ethical guilt was chosen as it is the only self-conscious moral emotion which is consistently and adaptively related to the moral domain (e.g., in contrast to shame, embarrassment, or pride;
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Malti, 2016;). Additionally, these emotions were chosen because of their theoretical relevance to ethical principles of care, fairness and justice. In particular, each emotion plays a key dual role in both promoting moral behavior and inhibiting amoral behavior—both before the fact and afterwards (e.g., inhibiting aggression vs. making reparations).

Sympathy and ethical guilt will be examined in relation to prosocial and aggressive behaviors as these behaviors represent two sides of moral behavior: voluntary acts done with the intent to benefit others and acts intended to harm others, respectively. Prosocial behaviors may be conducted with the goal of increasing fairness (e.g., sharing resources with a less-fortunate child), promoting justice (e.g., defending a victim of bullying), or lessening or preventing harm (e.g., getting a band-aid). Additionally, civic engagement (e.g., volunteering, activism) also reflects a prosocial orientation towards issues pertaining to principles of ethics. In contrast, aggressive behaviors typically violate such ethical principles, including bullying (i.e., repeated instances of intentional harm, humiliation, or exclusion towards a less powerful individual over time) and cyberbullying (i.e., online communication intended to cause harm).

**Sympathy**

Sympathy is concern or sorrow for another’s distress or misfortune (Eisenberg, 2000). We focus specifically on sympathy rather than general empathy-related responding here because sympathy has the most direct implications for morally relevant behaviors (Eisenberg et al., 2015; Malti, 2020). A lack of concern for others’ well-being may remove an important barrier between egoistic desires (e.g., desire for an object belonging to someone else) and unethical behavior (e.g., stealing the object) in adolescents. Indeed, low levels of sympathy have been found to be associated with aggression in adolescents (e.g., Mazzone et al., 2019; Zuffianò et al., 2018). For instance, van Noorden et al. (2015) conducted a systematic review of 40 studies which found that
lower levels of empathy-related responding was associated with increased bullying perpetration in youth. Similar findings have been reported for cyberbullying (see Zych et al., 2019). Deficits in sympathy have also been shown to be more strongly related to proactive aggression than to reactive aggression (e.g., Euler et al., 2017), which may have implications for bullying interventions (Garandeau et al., 2016). Sympathy is also a motivator for moral relevant behavior (prosociality) and research from the past decade has confirmed a positive link between sympathy and adolescents’ prosocial action tendencies. For instance, Metzger et al. (2018) found sympathy to be associated with higher civic engagement across several domains (e.g., volunteering, informal helping, social responsibility values). Van der Graaff et al. (2018) examined this relation longitudinally from early to late adolescence and showed that sympathy consistently predicted subsequent prosocial responding across adolescence.

**Ethical Guilt**

Guilt involves an evaluation of the self or one’s own behavior in relation to ethical standards, norms, and values (Malti, 2016) resulting in a feeling of regret over one’s own wrongdoing and the acceptance of responsibility for one’s actions. Guilt plays a dual role in moral development: guilt-forecasting (i.e., the anticipation of future guilt) and consequential guilt after wrongdoing. The former is thought to deter antisocial behavior while the latter is thought to promote prosocial reparative behavior (i.e., making amends after wrongdoing).

Not all guilt is created equal. **Ethical** (or moral) guilt occurs in response to violations of principles of fairness, justice, and/or harm (Malti, 2016). In contrast, **non-ethical** (or non-moral) guilt occurs in response to violations of conventional norms or personal dilemmas and **inappropriate** (or “neurotic”) guilt is maladaptive self-blame disproportionate to or unsuitable for the situation and is thus more akin to shame than to guilt (Malti, 2016). This distinction
between ethical guilt and other forms of guilt is important because unlike both non-ethical and inappropriate guilt, ethical guilt consistently falls within the moral domain (i.e., reflecting internalized principles of fairness, justice, and concern for others’ welfare). Non-ethical guilt typically occurs due to concerns over external sanctions (e.g., punishment) and is not consistently related to internalized ethical principles. Inappropriate guilt is often disproportionate and inconsistent to the context which provoked it (for a review of guilt and its subtypes, see Colasante & Malti, 2020). The other-oriented, moral focus of ethical guilt also distinguishes it from shame, a distinction which is important because the predominantly self-focused characteristics of shame have been shown to promote rather than deter aggression (Heaven et al., 2009; Stuewig et al., 2015). With all this in mind, only ethical guilt can be said to be consistently adaptive for moral development. Research from the past decade has consistently shown that adolescents’ guilt-proneness and anticipated ethical guilt after transgressions predict lower aggression across adolescence (for reviews, see Colasante & Malti, 2020; Malti & Krettenauer, 2013). Along with deterring aggression, guilt also plays a role in promoting morally relevant behavior, such as overt prosociality (e.g., Olthof, 2012), defending behaviors (e.g., Laible et al., 2014), and reparative behaviors (e.g., Dumont & Waldzus, 2014).

Other Morally Relevant Emotions

Over the years, several other morally-relevant emotions have been explored in relation to moral behaviors—notably shame, compassion, gratitude, and schadenfreude. As mentioned above, despite shame’s potential to deter antisocial behavior (i.e., being similar to guilt in that shame can be an internal punishment for wrongdoing), the self-focused nature of shame may be maladaptive such that it may promote rather than deter aggression (Heaven et al., 2009; Stuewig et al., 2015) via its links to anger and the externalization of blame (Stuewig et al., 2010;
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Thomaes et al., 2010). Shame has also been found to predict longitudinal decreases in prosocial behavior in early adolescence (Roos et al., 2014) and deter bystander intervention, as shame may make youth afraid of behaving inappropriately in front of their peers (Olthof, 2012; Mazzone et al., 2018). Research on compassion and gratitude in youth have been focused on examining their phenomenological nature, experiences of these emotions, and their links to prosocial behavior (see Bausert et al., 2018; e.g., Peplak & Malti, 2021). Although work on these emotions in youth is scant, researchers have situated gratitude and compassion at the crux of kindness and encourage additional research on their social functions. On the other side of the coin, in the last decade researchers have also turned to examining emotions that reflect self-interest and malevolence. For example, schadenfreude, which may be considered a counterpart to sympathy and compassion, involves taking pleasure at another’s distress or misfortune and has recently been investigated in youth. Schadenfreude is often motivated by competition and self-interest (Peplak et al., 2020) and has been found to decrease prosocial responding in childhood and early adolescence (Schindler et al., 2015; Steinbeis & Singer, 2013).

In summary, developmental research from the past decade suggests that sympathy and ethical guilt play a dual role in adolescents’ morally relevant behavior: fostering the promotion of moral behavior (e.g., prosociality) and deterring unethical, “immoral” behavior (e.g., aggression and antisocial conduct). Other morally relevant emotions like compassion, gratitude, and schadenfreude have the potential to affect ethically relevant behaviors. As such—in accordance with the clinical developmental model—this work suggests that attempts to increase adolescents’ sympathy and ethical guilt may prove to be the most promising areas of interventions aimed at nurturing young people’s morality.

Moral Development in the Intergroup Context
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The past decade has also seen an increase in research on the role of peer group processes on adolescent moral-emotional development, an avenue with particular relevance to the SRDM. This is because youth are inundated by messages (both positive and negative) from peers, parents, and the media about group categories (e.g., gender, race/ethnicity, personality; Cooley et al., 2019; Killen & Malti, 2015). Over time, prejudice against certain groups may develop, which can then impact how adolescents feel and react in context of social and ethical conflict (Rutland & Killen, 2017). Due to the relevance of group processes in adolescent’s moral development and the potential of this work to inform interventions to increase equality and intergroup prosociality (Tropp & Al Ramiah, 2017), we briefly discuss selected research that has considered intergroup processes in relation to adolescents’ moral-development.

Moral Emotions in Contexts of Social Exclusion

One line of research in this area focuses on investigating how adolescents think and feel about social exclusion—specifically regarding the repercussions for the excluder and excluded victim. In one study, following the presentation of hypothetical exclusion scenarios, Malti et al. (2012) found that Swiss adolescents ages 12 and 15 years understood the negative repercussions of nationality-based exclusion, such that they anticipated that excluded adolescents would feel negative emotions (e.g., sadness, anger) after being excluded. In a related study, Gasser et al. (2013) showed that 9- and 12-year-olds adolescents condemned disability-based exclusion and reported feeling sympathy for excluded children. Despite adolescents’ understanding that exclusion has negative repercussions on those excluded, they tend to be more ambivalent in the emotions they attribute to excluders. That is, adolescents tend to anticipate that excluders would feel a variety of positive and negative emotions (e.g., pride, happiness, shame, guilt) following exclusion decisions (e.g., Gummerum & López-Pérez, 2020). For example, adolescents may
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anticipate excluders to feel positively for satisfying their desire to include a peer who may function better within a group, but also understand that excluders may feel sympathy for the excluded other and guilty about making a potentially unfair decision. The variability of emotional responses reflects the complexity of concerns (e.g., moral vs. social conventional in nature), as well as contextual complexity (e.g., having a limited number of spots left to include someone in a game) that adolescents face when making decisions about exclusion dilemmas. Multiple studies have found that, within multifaceted contexts, there are increases in youths’ beliefs regarding the legitimacy of harmful social behavior to gratify norms of group functioning—particularly within adolescence (e.g., Recchia et al., 2012; Rutland et al., 2010).

Inclusive Environments and Moral Development

Research from the last decade has also shown the benefit of inclusive environments in shaping adolescents’ judgements and emotions in intergroup contexts. For instance, educational settings that have inclusive classrooms (i.e., classrooms that include and support students of all abilities) and encourage positive contact with diverse others can decrease prejudice and promote fairness, equity and sympathy for others (Gasser et al., 2013; Ruck et al., 2011). For example, Grütter et al. (2018) found that cross-group friendships (i.e., between those with low and high academic achievement) positively related to individual change in sympathy from 11 to 12 years of age, which then predicted adolescents’ inclusive attitudes. Diversity, particularly in school contexts, can have positive effects on adolescent’s prosocial behavior and inclusive attitudes. Having positive contact with peers from different socio-cultural backgrounds may increase adolescents’ ability to understand and accept diverse perspectives, consequently reducing fear and intergroup threat and increasing sympathy and trust (Beelmann & Heinemann, 2014).

Inequality
Lastly, the role of intergroup dynamics in moral development has recently been investigated in the context of inequality (assessed via resource allocation; Rutland & Killen, 2017). How individuals divide resources is an important part of social life and contributes to the development of concepts such as equality, equity, and need. Researchers have shown that as children become adolescents, they begin to reflect on group norms at different levels when deciding how to allocate resources. For example, Killen et al. (2013) showed that both children and adolescents decided to include an out-group member who supported equal allocation over an in-group member who endorsed unequal allocation. Nevertheless, adolescents were more likely than children to choose an out-group member, over an in-group member, who advocated an unequal distribution of resources when it was in line with their in-group’s norms (Hitti & Killen, 2015). Adolescents’ concern about fairness is also demonstrated in a study by McGuire et al. (2018), wherein it was shown that adolescents compared to children were less influenced by in-group competitive norms than cooperative norms when allocating resources, prioritizing their concern for fairness. This shows that even though adolescents may be attuned to group norms and expectations, they still maintain concerns about fairness and equality, demonstrating the struggle they face when balancing these norms. Other related research focuses on adolescents’ understanding of economic inequality and links to resource allocation inequality (Elenbaas, 2019). Indeed, adolescents appear to be aware of social and economic inequalities between high-wealth and low-wealth peers (Hjalmarsson, 2018). In sum, work in this area is exploring if and how adolescents’ thinking and feelings about inequality are related to their attempts to rectifying or perpetuating patterns of inequality (i.e., via resource allocation).

Group affiliation is a necessary part of social life; however, group processes can negatively influence how adolescents think, feel, and behave toward others (Rutland & Killen,
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2017). The findings described here provide evidence for the complex nature of adolescent’s moral, social, and personal concerns and how they may be related to their developing “theory of social mind” (see Mulvey & Killen, 2017; Rizzo & Killen, 2018).

Agents of Socialization and Moral Development

Socialization of moral development is particularly relevant during adolescence, as several related factors undergo significant change during this period—such as advances in balancing others’ interests and group concerns with one’s own, and increased involvement in peer and romantic relationships (Rubin et al., 2015). Here we focus briefly on two areas of socialization which have undergone significant developments in the last decade: family and peers.

Parents and Adolescent Moral Development

Despite adolescents gradually spending less time with their parents, parents continue to influence their moral development in multifaceted ways. For instance, adolescents weigh the costs and benefits of different moral decisions differently when the decision involves their parents. Gingo (2017) found that adolescents are less likely to view lying to parents (vs. teachers) for moral reasons as acceptable as doing so may harm their parent-child relationship (e.g., lowering relational trust). These findings are consistent with other work that adolescents are increasingly capable of coordinating personal and concerns as they age (e.g., Smetana, 2011), a finding which may be particularly relevant to the socialization of morality in parent-child relationships. These findings suggest that the parent-child relationship is still a unique and relevant domain for moral socialization, even in adolescence. In general, authoritative parenting with an emphasis on inductive reasoning, supportiveness, and warmth appears to be beneficial for promoting moral development in adolescents (e.g., Carlo et al., 2011; see Nelson et al., 2019). Padilla-Walker et al. (2012) found that respectful and trusting forms of proactive
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parenting (e.g., shielding from certain experiences, pre-arming with tools to handle future events, and supporting autonomous decision-making) promoted adolescents’ prosocial behaviors.

While work on parenting has historically been focused on culturally homogenous contexts (e.g., predominantly white, Western samples), researchers have increasingly begun to extend their focus to how culturally specific parenting practices affect adolescents’ moral development (e.g., Kumru et al., 2012). For example, Mexican parents’ socialization of familism values—which are common in Hispanic and Latin cultures—and strong ethnic identity have been shown to be positively associated with their children’s prosocial orientations (e.g., Calderón et al., 2011; Carlo et al., 2018; Knight et al., 2016). Furthermore, belonging to minority ethnocultural groups can shape how youth conceptualize of and engage in moral behavior, as experiences of marginalization may make youth unique adept at recognizing and mobilizing against situations of injustice and unfairness (Rivas-Drake & Medina, 2020; Terriquez et al., 2018). Parents play a large role in this, as parental socialization of ethnic identity often includes the promotion of factors related to moral development. For instance, Black parents’ practices of ethno-racial socialization in North America may foster prosociality via a heightened awareness of injustices, nurture sympathy and tolerance for other groups, and increase the likelihood that their youth will confront discrimination (see Evans et al., 2012; Grills et al., 2016).

natural mentors and adolescent moral development

Non-parental caregivers or mentors such as grandparents and teachers may also play a role in adolescents’ moral development. Their role is typically more minor than that of parental figures; nevertheless, these caregivers may be particularly important for youth in multi-generational households, those raised by single parents, or those from unsupportive households.
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Indeed, supportive relationships with a non-parental mentor has the potential to decrease youth’s aggressive and related behaviors (e.g., Kogan et al., 2011; Tolan et al., 2013).

Grandparent involvement and emotional closeness to a grandparent positively predict adolescents’ prosocial behavior concurrently and longitudinally (Attar-Schwartz et al., 2016; Wild & Gaibie, 2014; Yorgason et al., 2011). Interestingly, links between emotional closeness and prosociality vary by adolescents’ cultural background—in one study, Arab youth were found to benefit more from closeness to a grandparent than Jewish youth (Attar-Schwartz et al., 2016). Researchers have proposed that the influence of grandparents may occur due to grandparents’ influence in the internalization of prosocial norms and values and in providing additional opportunities for prosocial experiences by helping their grandparents with chores and daily tasks (Yorgason et al., 2011).

Teachers play a similar role in youth’s moral development. In a four-year longitudinal investigation, Obsuth et al. (2017) discovered that the quality of teacher–student relationships at age 11 (e.g., emotional connection to the teacher, teachers’ fairness/supportiveness) predicted more prosocial behaviors and less antisocial behaviors concurrently. This association with antisocial behaviors—but not prosocial behaviors—persisted two and four years later. Perceived closeness with one’s teacher has also been found to amplify young adolescents’ preference for prosocial friends and decrease preference for antisocial friends in class (Shin et al., 2019). Teachers also influence their students’ morally relevant behaviors via other means as well; certain teaching styles seem to also promote moral behavior. For example, Roth et al. (2010) found that certain teaching styles (i.e., those that involve providing rationales for decisions, acknowledging the students’ feelings and perspectives, allowing for student choices, and
minimizing pressures) tend to promote adolescents’ internalization of prosocial values and lower rates of classroom bullying.

**Peers and Adolescent Moral Development**

Adolescents’ peer groups influence and enforce expectations for moral behavior. Adolescents tend to form friendships with like-others and members of peer groups who expect and support prosociality from others are more likely to take on those characteristics. As such, the moral composition of peer groups holds influence on moral behaviors, particularly in early adolescence (e.g., Lawford et al., 2012; Caravita et al., 2014). Research has also provided ample evidence for the role of group processes in adolescents’ moral development (see social reasoning developmental model discussed in the section above; Killen & Malti, 2015; Rutland et al., 2010). As adolescents advance in their social-cognitive development across childhood into adolescence (e.g., in their perspective taking and social knowledge; Selman, 1980), they develop a more nuanced understanding of groups and group membership (e.g., that one may belong to variety of groups and some groups are more stigmatized and marginalized than others), how they function, and how moral and personal viewpoints may diverge from group concerns (Rutland & Killen, 2017). As such, whether youth decide to discriminate against others or treat them with respect depends, in part, on how they situate their peer relationships within intergroup contexts and how they balance the various concerns (i.e., moral, conventional, and personal) and complexities (e.g., when there are limited resources to distribute) that play a role in social decision making.

**Methodological Advancements**

In the last decade, moral development researchers have drawn from methods that originate from other fields of study such as cognitive psychology, social psychology, and biopsychology. As a result, implementing methods that have not traditionally been used in the
moral domain has advanced our understanding of the building blocks of morality. In this section, we discuss methodological advancements in the study of moral emotions and behaviors.

**New Approaches to the Measurement of Moral Development**

*Dynamic Nature of Emotions*

Emotions are not linear nor static; rather, they are often transient, brief, and dynamic (Hastings & Kahle, 2019). Recent methodological advancements have focused on measuring emotions as organized patterns that emerge within interactions with others which may aid in better understanding the developmental mechanisms that underlie the nature, causes, and consequences of emotions—including emotional experiences in contexts of morality (Kuppens & Verduyn, 2017). This approach assesses real-time changes in emotions including facial and vocal expression, and peripheral and central physiology is assessed using a variety of instruments. For example, a dynamic systems approach has recently been adopted in the area of parent-adolescent conflict such that researchers have examined flexibility, sequential emotion contingencies, and coregulation of emotion during parent-adolescent interactions (Hollenstein & Tsui, 2019). This advancement is important because adolescents experience higher levels of conflict with their family than children (De Goede et al., 2009) and thus, this research would be beneficial for determining conflict resolution strategies and increased moral engagement within parent-adolescent dyads. Extending this perspective and resulting methods to the peer group may be particularly fruitful in adolescence due to the importance of peer relationships during this age period. Assessing dynamic shifts in emotions within interactions with peers may provide insight into peer group dynamics and when and why youth treat their peers with kindness or hostility. Shifts in the study of emotion speaks to the acknowledgement that emotions are *processes* that emerge in real-time across a variety of relationships and contexts.
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Related to the dynamic nature of emotion, the past decade has turned towards experience sampling methods (ESM) and ecological momentary assessment (EMA) in order to capture the temporal relation between emotions and behaviors in the context of morality. For example, studies using these methods have helped confirm the association between anger and subsequent aggression (Rothenberg et al., 2019). These methods allow for insight into causal mechanisms between events (e.g., emotions) and subsequent moral behavior—for instance, by testing mediation between events, emotions, and behaviors in temporal order. Given that morally salient situations increasingly occur in the context of peers when children progress to adolescence, using measures which can capture these events is of the utmost importance. Further integration of these methods into the moral development field may allow researchers to both access real-world moral events relevant to adolescents and simultaneously combat memory biases in reporting.

Cognitive and Perceptual Mechanisms Underlying Moral Development

In the last decade, researchers have also turned to studying the building blocks of moral development, drawing from research on perception and cognition. For example, technology such as eye trackers and facial analysis software have been used to study when and why moral emotions emerge. That is, examining youths’ visual attention to morally relevant stimuli (e.g., an image of a peer who is distressed) using an eye-tracker and concurrently assessing their spontaneous emotional responses provides insight into how attentional processes influence emotions and in turn prompt behavioral responses (e.g., comforting or helping the distressed peer; Malti et al., 2018). The analysis of facial expressions (at both micro- and macro levels) also allows for unique insight into the role of automatic and controlled processes in youths’ spontaneous emotional responses to morally relevant stimuli (e.g., Dys & Malti, 2016; Malti et al., 2018). Finally, because approximately half of youths’ interactions with friends occur face-to-
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Face, researchers are now employing methods that capture important nuances in social expressions within peer interactions, such as tone of voice, that are not captured by traditional rating scales (e.g., Morningstar et al., 2017). Given that humans tend to have limited understandings of their own and others’ emotional states, applying perspectives from cognitive science to moral development may illuminate the function of and individual differences in moral perception/sensitivity, and how it relates to moral behavior, identity, and peer relations.

Biological Underpinnings of Moral Behavior

Drawing on methods from biology and psychophysiology, research on moral development has seen an increase in work that utilizes physiology and biomarkers as measures to study antecedents of youth’s moral behaviors. For example, vagal activity has been found to facilitate moral behaviors, with Miller (2018) recently proposing that this relation may be curvilinear, such that moderate levels of respiratory sinus arrhythmia promote prosociality more than high or low levels—which has been supported by research with adolescents (Cui et al., 2015). Notably, Ruttle et al. (2011) found that cortisol levels may depend on the aggression’s developmental onset, such that the emergence of aggression may initially cause hyper-arousal of the HPA axis while chronic aggression may lead to hypo-arousal. Relatedly, the onset of pubertal development may also affect factors related to moral development, such as sympathy, but current findings are mixed (e.g., Masten et al., 2013; van der Graff et al., 2014). These findings may hint towards a nuanced role of sex hormones and related social factors in moral development. And finally, exposure to adversity has been shown to interact with several genes to influence moral behavior. Polymorphisms of the oxytocin receptor (OXTR) gene—thought to influence attachment and sensitivity to social cues—have been shown to affect adolescents’ prosocial behaviors (e.g., Shang et al., 2017). Furthermore, both OXTR and the 7-repeat allele
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polymorphism of the dopamine D4 receptor (DRD4) gene interacts with early life adversity to influence aggression in adolescence (e.g., Andreou et al., 2018; Cecil et al., 2018). Similarly, the MAOA genotype has been shown to moderate the relation between childhood maltreatment and adolescent antisocial behavior (Byrd & Manuck, 2014). This work on the biomarkers of morality lays the groundwork for assessing biological risk and resilience factors, thus allowing for future tailored prevention and intervention strategies for the promotion of at-risk adolescents’ moral development.

**Studying Morally Relevant Behavior Through Social Networks**

A growing number of researchers have used social network analysis to investigate peer group dynamics among adolescents with the goal of understanding the development of prosocial behavior and aggression (van Rijsewijk et al., 2016). Network analysis is used to measure and analyze networks of interdependent dyadic relationships in order to (1) better understand what influences the formation of relational ties in a sample and (2) determine the influence of the structure of relational ties on outcomes (Veenstra & Steglich, 2012). Social network research in the last decade has shown that adolescent prosocial behavior is influenced by *who* the target of their prosociality is. For example, van Rijsewijk et al. (2016) found that (dis)similarity in characteristics (e.g., popularity, academic achievement and gender) is an important driving factor underlying the emergence and development of prosocial relations in the peer context, and that prosocial behavior in adolescence is often directed at particular others. This research speaks to the specificity of day-to-day acts of prosocial behaviour in adolescence. Further, regarding victimization and aggression, research employing a social network framework has shown that victims tend to select each other as friends, and that friends of victims also run the risk of becoming victimized (Lodder et al., 2016). Further, being friends with aggressive peers increases
adolescents’ own aggression over time (e.g., Sentse et al., 2013; Sijtsema et al., 2013). Thus, broadening the focus of research on processes in peer networks may provide a more complete picture of the social landscape that adolescents belong to, and how social settings play a role in their moral development. Importantly, social network research may aid in the design of tailored intervention programs aimed at increasing intergroup kindness and decreasing victimization in schools (Hooijsma et al., 2020; see Kaufman et al., 2020).

**Narrative Approaches to Moral Development**

Narrative methods, an approach that emphasizes the interpretive power of personal stories, provide a window into how adolescents interpret and create meaning about their lived socio-moral experiences (Wainryb et al., 2005). Research in the last decade has examined the content of youths’ narratives to illuminate how they may approach and resolve conflicts with peers. For example, researchers (e.g., Pasupathi & Wainryb, 2010; Recchia et al., 2015; Recchia et al, 2020) have recently assessed the ways in which adolescents approach interpersonal conflict by investigating how they construct their narratives accounts and the ways in which exposure to adverse environments may influence adaptive meaning-making and conflict resolution strategies. Narrative approaches have also been used to shed light on the relation between youths’ emotions and their interpretations, evaluations, and behavioral responses in contexts of peer conflict (e.g., Recchia et al., 2019)—insights that may help us understand adolescents’ evolving interpretations of emotions and morality within peer relationships.

**Technological Advancements**

Due to increases in adolescents’ technology usage in the last decade, research has increasingly explored how adolescents’ usage of technology and the internet (e.g., social media, video games) affect moral development (e.g., Kornbluh, 2019; Padilla-Walker et al., 2020;
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Stockdale & Coyne, 2018). Technological advancements have also occurred in the form of new research methods, such as in-lab computer games and experience sampling methods—allowing for more nuanced understandings of how changes in adolescents’ environments and inner landscapes affect subsequent moral decisions and behaviors (e.g., Saleem et al., 2012).

Future Directions

Research on adolescents’ moral development has made significant advancement during the past decade. We have seen innovation in theorizing about adolescent moral development and an improvement to methodology which, taken together, generated new knowledge on adolescent moral development and its promotion. Given the critical relevance of raising responsible and inclusive citizens for wellbeing, positive relationships and peaceful societies, deepening our understanding of the mechanisms that nurture moral growth has always been essential for the field of adolescent moral development. It never has been more relevant in the current time of crisis and change. Moving forward, we identify three promising themes for future research:

First, the comprehensive and integrative study of trajectories of emotional experiences, cognitions, and behaviors in the context of morality across cultural and ethnic groups, and in populations with varying levels of exposure to adverse events (e.g., the current pandemic, experiences of war, forced migration, or targeted violence) is timely. In particular, although some researchers have moved towards a resilience-focused approach to understanding moral development in minority and marginalized youth (e.g., Travis & Leech, 2014), more work taking into account the perspectives of minority youth is greatly needed to understand how morality can be best promoted, especially in intergroup settings. Furthermore, although research tends to focus on one point of marginalization at a time (e.g., being an ethnic minority) more attention needs to be payed to youth who are multiply marginalized, as these intersectional identities may...
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both affect their experiences of victimization, identification with ingroups and outgroups, and give them a unique perspective on social justice (e.g., Terriquez et al., 2018). Further, simultaneously assessing a broader range of morally relevant emotions (e.g., schadenfreude, gratitude, envy) may provide insight into how distinct emotions uniquely motivate behavioral outcomes. This also requires a consideration of underlying social, psychological, and biological mechanisms that facilitate development of ethically relevant outcomes, such as prosocial and aggressive behaviors, environmentalism and civil rights, social justice, and youth activism and movements. Such integrative work can greatly inform our understanding of what is common and what is specific in adolescent moral development.

Second, significant advancements in technology over the past decade and subsequent changes in how adolescents spend their time have led to new avenues of research such as the role of online privacy and “technoference” in parents’ ability to monitor their children’s risky behaviors (e.g., Padilla-Walker et al., 2020; Stockdale et al., 2018), and youth’s involvement in cyberbullying (e.g., Ma et al., 2019). Research has also demonstrated how adolescents now use the internet to promote social justice and engage in activism, and that this usage positively relates to their real-life civic engagement and ethical principles (e.g., Kornbluh, 2019; Wray-Lake & Abrams, 2020). Future research in this area is likely going to enrich the understanding of adolescent moral development.

Third, research informed practice innovation is timely, and the past decade has seen an increasing effort to build integrated theoretical frameworks that guide the implementation of programs and intervention approaches that nurture morally relevant dimensions of adolescent development. For instance, the promotion of Positive Youth Development and prevention programs aimed at reducing violence have some overlapping features, such as a focus on
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ethically relevant, psychological protective factors, and as such may help inform asset building models for all youth that can be adapted to address morally relevant problem behaviors. Guerra (2018) proposed to focus on self-regulatory skills, regulation of action, and positive social engagement, complemented by strategies that address the risk of serious youth violence (see Bowers et al., 2015). Social-emotional learning programs have increasingly emphasized the need to integrate ethically relevant dimensions beyond empathy/sympathy, such as prosocial behaviors, into their program models (see Durlak et al., 2011). Character education programs continued to consider the promotion of morally relevant social-emotional skills, such as sympathy, and combined this with an increasingly explicit focus on lived ethics (e.g., through the facilitation of a nurturing and inclusive school climate; see Lickona, 2004; Berkowitz, 2012).

The next generation of such approaches may benefit from becoming even more developmentally tailored and reaching the young person at their developmental capacities and thus facilitate moral growth (see Malti et al., 2016). In addition, research on how to best implement culturally sensitive approaches aimed at nurturing ethical growth in adolescence across diverse sociocultural and ethnic groups is essential (Malti & Cheah, 2021—especially in groups which tend to be unrepresented in research (e.g., Indigenous youth).

Why does it matter? Because societies need caring humans to do well. And becoming an ethical, moral person requires a complex synthesis between the ethics of self-care and compassion for others (Schweitzer, 1966). This, in turn, brings a responsibility to all of us to do the very best we can to facilitate this process in young people. Research on adolescent moral development has and can continue to contribute to this goal.
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