

An Exploration Into Modeling Empathy: How Social Cues Impact and Form the Response of Adolescents to What is Otherwise Known as the Bystander Effect Phenomenon

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ABSTRACT

This paper explores the complex interplays between prosocial modeling, defined as observing others engaging in helpful and altruistic actions, together with how cognitive and affective components of empathy and social media influences that are associated with the bystander effect among school age adolescents. Such an effect is especially relevant among school-age adolescents. Using a narrative review of existing empirical literature, the paper aims to synthesize evidence and suggest what exposure to prosocial peer and media models is linked to higher empathic concern, which may contribute to reduced bystander inaction when assistance is required.

Moreover, the paper explores how peer norms, contextual social cues, and digital environments function as moderating conditions shaping these relationships. Implications are discussed cautiously in relation to correlation evidence, methodological limits, and directions for future longitudinal and experimental research.

INTRODUCTION

Adolescents frequently witness bullying incidents in school or online, but do not intervene. The bystander effect, a social psychological phenomenon, was first studied by Latané and Darley (1970), who found that the presence of others reduces helping behavior. Recent studies have also found that empathy and social understanding play a role in helping behavior (Hortensius & de Gelder, 2018).

Bullying is a global issue, and approximately 1 in 5 adolescents worldwide report being bullied in school, while 16-22% of adolescents globally report cyberbullying victimization (StopBullying.gov, 2024; UNESCO, 2019). Although victims of bullying often report their experiences, there is a significant number of bullying incidents that go unreported, especially cyberbullying, as a result of diffusion of responsibility (Hu et al., 2023). The change in bystander behavior, from being a passive witness to being a helper, is important in understanding how adolescents can be protected against bullying (Deng et al., 2021; Hu et al., 2023).

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Helping behavior is closely associated with empathy, which is described as understanding and sharing another person's emotional state (Batson, 1991; Eisenberg et al., 2014). Adolescents with higher levels of empathy were found to be willing to defend their bullied peers (Deng et al., 2021). Positive role models, whether a peer, parent, teacher, or a character in a media program, were found to be associated with higher levels of empathy and helping behavior (Greitemeyer, 2022; Pang et al., 2022; Schonert-Reichl et al., 2012).

Empathy does not always translate into action, however. Emotional arousal can also cause individuals to turn away from the victim rather than help. This depends on responsibility, clarity of the situation, and self-efficacy (Hortensius & de Gelder, 2018; Hu et al., 2023). This complex situation requires further investigation of the influence of prosocial modeling and social factors in the context of empathy. Adolescence is a developmental stage in which individuals are highly influenced by peers and are in the process of developing a sense of self. Modeling from peers they look up to may increase the likelihood of helping, whereas passive social norms may actually increase the likelihood of inaction (Van der Graaff et al., 2017; Purna et al., 2024). Programs such as Roots of Empathy, which teach children in a school setting, increase empathy and help through the observation of caring behaviors (Schonert-Reichl et al., 2012). If popular/influential peers intervene on behalf of victims themselves it may motivate other teens to intervene too (Purna et al., 2024; Van der Graaff et al., 2017).

School programs involving modeling like Roots of Empathy where children get to witness actual baby care as well as hear about feelings have led to substantial increases in children's intervention behavior as well as empathy (Schonert-Reichl et al., 2012; Roots of Empathy, 2024). In online contexts the scenario differs but parallels it: teens' internet use confidence as well as their own belief about right/wrong affect whether they will intervene when they see cyberbullying on the internet (Hu et al., 2023). While at the same time broader social messages—like the way the media presents intervention as the norm or makes viewers remorseless—influence young people's perception of the right thing to do (Greitemeyer, 2022; Hortensius & de Gelder, 2018; UNESCO, 2019; StopBullying.gov, 2024). What this means is programs attempting prevention of the bystander effect must do more than provide empathy but should incorporate positive modeling using diverse people—peers, teachers, media—to help shape perceptions of normal behavior as well as increase confidence.

This paper asks: **How do social cues and prosocial modeling shape adolescents' empathic responding and thereby influence the bystander effect?** The central argument in this thesis is that exposure to explicit prosocial models is associated with higher emotional and cognitive empathy, which may increase intervention and reduce bystander inaction, whereas environments that normalize passivity may weaken empathic responding.

METHODS

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This study is a narrative literature review rather than an empirical study. The sources were derived from an examination of the psychology and education literature (1970-2025) with an emphasis on the constructs of empathy, prosocial modeling, adolescence, and bystander behavior. The sources were prioritized as peer-reviewed journals, meta-analyses, longitudinal studies, and well-established intervention studies.

The studies were included based on the following criteria:

- Empathy, prosocial behavior, or bystander intervention as the research focus
- Children, adolescents, or young adult samples as the population focus
- Empirical or theoretical relevance to the construct of modeling or social cues

Studies were excluded when citations were incomplete, unverifiable, or lacked clear methodological grounding.

The evidence is synthesized thematically into three domains:

- Empathy mechanisms: cognitive, affective, and personal distress
- Prosocial modeling contexts: peer, school, media, and digital
- Moderators of bystander behavior: self-efficacy, norms, and development

Note that the majority of the studies are correlational designs; therefore, the results are described as associations rather than causal effects.

EMPATHY AND PROSOCIAL MODELLING

Empathy can be broadly classified into cognitive empathy, defined as the ability to understand the other person's perspective, and affective empathy, defined as the ability to share the other's emotional state (Christov-Moore et al., 2014; Eisenberg et al., 2014). Significantly, empathic concern should be differentiated from personal distress. Personal distress, as opposed to empathic concern, is other-oriented but evokes self-oriented, hence avoidant, responses (Batson, 1991; Eisenberg et al., 2014). Findings indicate that elevated emotional arousal coupled with low coping ability may impede intervention, even in the presence of empathy (Hortensius & de Gelder, 2018; Pang et al., 2022). Modeling of prosocial behaviors may thus enhance empathic concern in a favorable environment, but it may also contribute to elevated personal distress, especially among adolescents with low self-efficacy, in overwhelming and ambiguous conditions (Greitemeyer, 2022; Hu et al., 2023). This differentiation explains the phenomenon whereby empathy fails to predict helping behavior (Batson, 1991; Hortensius & de Gelder, 2018).

THE BYSTANDER EFFECT

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Human beings frequently find themselves in a myriad of circumstances where it becomes increasingly apparent that somebody is in a state of distress or has an accident; yet, despite such an instinctual realization, people would often opt to do nothing about it. Such a behavioral phenomenon known as the bystander effect expands upon people's tendency to be less responsive to offer their assistance in a situation where they perceive an emergency to be occurring in front of their eyes (Latané & Darley, 1970). In recent years, especially with rising prominence and pervasive footprint afforded to social media by people nowadays, a new breed of bystander indifference has surfaced when individuals, as passive observers, chanced upon episodes of dangerous conduct or emotional harm being committed or happening via internet-based social spaces, but simply fail to intervene or even take any action to support troubled parties. Growing such episodes of bullying, harassment, or various crises occurring over social media highlight a pressing imperative to understand bystanders' reasons to join an action or intervene to help people in distress (Wang, 2021; Hu, Zhang, Shi, & Fan, 2023). Teenagers especially represent a demographic who is uniquely vulnerable: despite an ongoing problem with school bullying being a persistent problem everywhere throughout the world, peer groups' forces represent a potent force operating throughout such an influential age period of one's life (Deng, Yang, & Wu, 2021; Fredrick, Huang, & Crocetti, 2020).

THE ROLE OF PROSOCIAL MODELLING ON THE BYSANDER EFFECT

One critical variable that can potentially buffer against bystander effect is something called prosocial modeling. What that is precisely is observing others being helpful or showing kindness to others who truly need it, something that can take place across a variety of different contexts, whether they be real-life encounters with peers or with teachers or with others who live in one's community or even media contexts such as TV programs, movies, or social media. Traditionally, prosocial modeling has been researched most often in offline contexts with a particular emphasis on examining something called role models within families or schools. But newer studies are finally beginning to investigate the importance of media or online forms of prosocial modeling as well (Greitemeyer, 2022).

THE INFLUENCE OF MEDIA IN PROSOCIAL MODELLING:

Media, including social media as a part of a wider media landscape, plays a huge and central part in our lives today. Teenagers, especially, consume and look at enormous amounts of media content videos and posts to stories and peer-shared media that depict a variety of positive prosocial behaviors as well as negative behaviors such as incidents of bullying and traumatic events. Media has the ability to serve as a rich repository for positive prosocial modeling; however, it also has the potential to normalize a mindset of passivity or passive observation among viewers. Thus, it becomes necessary to investigate and inquire: is exposure to positive social modeling via social media effective to increase empathy and reduce bystander effect? Or is it possible instead that media exposure has a different effect periodically, generating feelings of detachment or passivity?

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Against the backdrop of variables found to be present in prior investigations, the present paper will essay a thorough analysis of the trajectory connecting prosocial modeling to empathy, then to a diminished bystander effect among school-age adolescents. In its analysis here, it will take cognizance of both offline and online spaces but with a special focus placed on peer influence together with media's modeling role. Beyond theoretical investigation, a cardinal relevance to practical application is also found to be a part of what is presented here. It is imperative that schools, teachers, and designers of social media understand how to design environments to elicit action among bystanders to intervene as opposed to remaining passive where such crucial interventions should be applied. In an investigation into how empathy is conditioned by a tendency to be prosocially modeled by one's peers via representations found with media, or even within different spaces found within a school setting, a paper such as this one would aim to contribute significantly to possible points of intervention as much as recognize present lacunae found with available literature. The fundamental hypothesis to be posited by a paper such as this one reads thus: an exposure to being modeled with a tendency to be socially positive especially among one's peers as mediated via different forms of media is to increase an individual's tendency to be empathetic both affectively and cognitively such that a reduction is found with a bystander effect within a scope relating to school-age adolescents.

Prosocial modeling, or seeing others being helpful, cooperating, or caring, has consistently been shown to impact empathy. Empathy itself can be distinguished into two components: affective empathy, or sharing and feeling what another person feels; and cognitive empathy, or knowing what another is thinking or feels. Evidence shows both these facets can be fostered by prosocial modeling. For example, Greitemeyer (2022) summarized a vast corpus of evidence and found that seeing prosocial media or observing prosocial behaviors is related to higher empathic concern and tends to work via affective processes matching those of the General Learning Model.

Analogously, Li et al. (2023) found that affective empathy was the mediator of the relationship between prosocial play of video games and greater sharing behavior and that emotional resonance is a fundamental route of transformation of modeling into action. From the cognitive side, Pang et al. (2022) found that perspective-taking and empathic concern of college students were significant antecedents of their prosocial behaviors and that gratitude was their mediator. This implies that prosocial modeling not only elicits feelings of pity but can foster the ability to comprehend others' points of view and hence increases cognitive empathy. These results collectively show that prosocial modeling strengthens empathy via both affective and cognitive routes and forms the basis of future prosocial behaviors.

THE EFFECT OF PROSOCIAL MODELLING ON EMPATHY ACROSS THE LIFESPAN:

Age is crucial when it comes to individuals' response to prosocial models and learning empathy. At early childhood ages, cognitive empathy and creativity are apparently at the center of prosocial choice-making.

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Preschool children aged from three years onwards were seen by Gungordu et al. (2025) to show a positive relationship between cognitive empathy, creativity, and prosocial choice and reveal the emergence of these skills at the same period of life. Interventions such as the "Roots of Empathy" program where young children are presented with infants' display of behaviors and emotions throughout the span of a school year are seen to increase empathic concern and decrease aggression (Schonert-Reichl et al., 2012). This kind of controlled modeling is seen to provide young children with concrete examples of display of emotion where their empathic understanding and prosocial orientation are promoted. These findings emphasize that empathy modeling is a very strong intervention when used with kids when it comes to affecting children's and adolescents' social and emotional development.

These early developmental processes indicate that infancy itself contributes building block skills for later empathy and prosocial behavior. For example, baby and toddler studies indicate joint attention and understanding of intentions at 8–12 months predict helping/sharing behavior at toddler age (18–25 months), showing cognitive abilities underlying prosocial choice develop very young (PubMed, longitudinal examination of early prosocial behaviors, 2020). Corollaries at the neural level also provide evidence for this: in young children at preschool age, measures of brain activity using EEG/ERP identify differences in brain activity when children view others in painful states vs neutral states, where higher neural differentiation, early N2 or later slow wave components, predicts higher empathic concern as well as forthcoming helping/sharing behavior (The development of cognitive empathy and concern in preschool children, 2017). In addition, attachment security as well as theory of mind become predictors in young children's responses: children who tend to become securely attached, or those who possess higher theory of mind, exhibit higher empathic concern as well as prosocial behavior when viewing distress cues when compared to less securely attached children or children possessing lower theory of mind (The roots of compassion in early childhood, 2024). Hence, modelling at young age receives social-cognitive, neurological as well as relational correlates aiding explanation of the way empathy as well as prosociality become scaffolded.

The effectiveness of prosocial modelling interventions in early childhood has also been shown to generalize across settings and sustain over time, though with developmental limits. Programs like Roots of Empathy not only reduce aggression and increase prosocial behavior immediately post-intervention, but in some evaluations these effects persist with lower aggressive behaviors even one year later (Roots of Empathy research, Switzerland 2015-2017; Latsch et al., 2017). In randomized controlled trials, participating children show improvements in prosocial behaviors (sharing, helping, including peers) and reductions in physical or relational aggression when compared to control classrooms (Connolly, 2018; Santos et al., 2011; ROE evaluations, meta-analysis of effect sizes).

In addition, experimental studies expanding to affective empathy and compassion (not merely behavior) show that children around age 9 in compassion training programs develop stronger altruistic attitudes and affective responses than those not receiving intervention (Kappelmayer, Czar, & Lozada, 2023). However, some studies find that cognitive empathy or ability to understand others' perspective develops more slowly and may require more structured modelling or adult scaffolding (cognitive empathy lags affective

empathy in certain early tasks) (The roots of compassion, 2024; EEG/ERP studies, 2017). These findings suggest that while early prosocial modeling is powerful, its components may strengthen at different rates, and that both the type of modelling and the socio-cognitive environment matter for long-term empathy development.

Cultural, environmental, and temperament factors also affect the strength of the effect of prosocial modeling during early childhood. Studies suggest children's temperament, especially characteristics like shyness, modulates empathy development; for example, higher shyness was associated with affective empathy decreasing over time but less so for cognitive empathy and instrumental helping (Helping as prosocial practice: shyness and empathic response longitudinal study, 2021). Socioeconomic situation, caregiver sensitivity, and the home's emotional climate also act as important moderators: children who grow up in homes where caregiving is more stabilizing/nurturing as children display stronger empathic concern and prosocial behavior toward modeling compared to others who grow up in less stabilizing homes (HIPLAB early childhood study, Finland; TSEMP project). ToM development follows the development of emotional cues: young children who show stronger ToM and secure attachment know others' distress best but show stronger sharing/helping behavior in distress situations compared with less secure-attached ones or those less advanced ToM-wisely ones (The roots of compassion in early childhood, 2024). Moreover, neuroscientific studies (EEG, ERP) suggest individual differences in neural responsivity for others' suffering may predict differentials in behavioral tendencies in prosociality especially for more supporting contexts (The development of cognitive empathy and concern in preschool children, 2017). In turn, although the early childhood stage plays an important time point, the influences it generates are not equal; the modeling effect's success depends significantly on individual as well as context-based moderators.

Adolescence is a period of prolonged development of prosociality and empathy and is often mediated by social and peer models. Fu et al. (2022), examining over 1,100 adolescents from China, identified a strong positive relationship between empathy and prosocial action and identified perceived social support as a partial mediator. This suggests adolescents are highly receptive to prosocial models when embedded within supportive social arrangements. Van der Graaff et al. (2017) also identified empathy paths during early life predicting prosocial behaviours but with developmentally varying relationships across sexes. For instance, boys' prosocial action was consistent at early ages and then declined while girls' profiles were best described by an increase and this is interpreted as meaning both groups are separately affected by role models and socialisation. Filling out these results is Carlo and Padilla-Walker (2020), surveying gendered aspects of prosociality at the adolescent phase and noting girls are always higher on empathy and helping and these are often endorsed by family and peer group prosocial modelling. These results indicate adolescents' reception of prosocial modelling is controlled both by cognitive development at this life period and by the family and other societal structures within which adolescents are embedded.

During early developmental periods, the influence of prosocial modelling on empathy runs deep and often long-lasting, as young children learn predominantly through observation and emulation. According to

social learning theory, children learn behaviors, emotional responses, as well as social standards, by observing caregivers, teachers, and their age-mates (Bandura, 1977). Educational interventions in school contexts incorporating modelling deliberately like Roots of Empathy result in measurable improvement in children's empathic concern and altruistic behavior, so too may early exposures to caring exemplars stimulate later prosocial tendencies (Schonert-Reichl et al., 2012). More recent empirical investigations link cognitive empathy and creative problem-solving in preschool-age children with higher level prosocial decision making, thereby implicating both affective as well as cognitive mechanisms (Gungordu et al., 2025). Moreover, media depiction as well as organized educational programs may amplify these findings: as prosocial actions are repeatedly illustrated as well as placed in context, children demonstrate increased tendencies for emulation of similar actions (Greitemeyer, 2022). As such, at all periods of early development stages, modelling acts as both an outline for understanding on the level of empathy as well as practical guide for prosocial behavior (Bandura, 1977; Schonert-Reichl et al., 2012; Gungordu et al., 2025; Greitemeyer, 2022).

In adolescence the social processes translating modelling into empathy become more identity and peer-based: peers serve as prominent models, and norms endorsed by peers define rewarded and punished behaviours. Large-sample investigations indicate that the perception of being supported by peers and the actions of centrally situated peers significantly influence whether adolescents translate feelings of empathy into practice (Li et al., 2025; Fu et al., 2022). Empathy's influence on defence and assistance is thereby not only intra-individual but situated in social networks where acceptance, standing, as well as reputational issues come into play (Van der Graaff et al., 2017; Purna et al., 2024). When widely liked or admired peers model defending or helping, other youth tend to copy the behaviours; but when influential peers institutionalise not doing so, empathy tends not to translate into intervention. School group work projects, cooperating activities, as well as overt interventions conducted by their peers tend to change norms as well as improve modelling towards the positive side, enhancing both perspective taking plus practical aiding ability (Van der Graaff et al., 2017; Fu et al., 2022; Li et al., 2025; Purna et al., 2024). In short, the time of adolescence is the time when the same capacity for empathy observable in childhood is reframed both by who the models consist of as well as by social reinforcements for aiding.

In adults, prosocial modeling still has an impact on empathy and prosocial behavior although influence, strength and type may change throughout life. Pollerhoff et al. (2022) examined experimental research demonstrating that empathy inductions raised prosocial behaviors in adults with a significant linear increase in prosociality across higher-age groups. This implies that with advancing years, individuals may become increasingly sensitive to empathy-inducing instigation and prosocial models. Ishtiyag et al. (2024) extended this when they examined young adults between 18 and 30 years and found a significant ($r = .85$) association between empathy and helping behaviors confirming speculation that empathy modeling in young adulthood transfers directly to helping. At the neuroscientific level, Winters et al. (2023) employed brain-based modeling and found that neural connectivity patterns can predict cognitive and affective empathy and therefore that being possible of empathy in adulthood is influenced by a blend of biological processes and lived life events encompassing exposure to prosocial models. Individually and collectively, these results underscore that although adults continue to have the capacity to learn from

prosocial models of empathy, their empathic reaction may run deeper with advancing years possibly due to lifestyle accumulation.

One significant mechanism underlying prosocial modeling in adults is the transition into life stages like parenthood, mentorship, or caregiving that solidify empathy based behavior. Experiments show adults who have children display larger levels of empathic concern and prosocial behavior because children's requirements serve as everyday models and instigators of responsive concern (Brown & Brown, 2015; Stern & Cassidy, 2018). Organizational studies also report finding prosocial leadership of the kind as managers exemplify empathy best predicts higher worker aiding, trust, and cooperation among groups at work (Avolio & Walumbwa, 2014; Eisenbeiss & van Knippenberg, 2015). It appears then that prosocial modeling persists into adulthood but takes expression only in institutionally meaningful contexts like households, workplaces, and communities where modeling is facilitated by mutual structure roles and social obligations (Brown & Brown, 2015; Eisenbeiss & van Knippenberg, 2015; Stern & Cassidy, 2018; Avolio & Walumbwa, 2014).

Another dimension of adult prosocial modeling involves the effect of media and digital communities on empathic responses. Greitemeyer (2022) showed that viewing prosocial media content (like movies, online storytelling, and computer games) consistently increases empathy as well as subsequent aiding behavior among adults but the opposite for antisocial content. Longitudinal studies on media use demonstrate that frequent interactions between adults and online prosocial models fortify empathic schemes later applied in everyday interactions (Prot et al., 2014; Mares & Woodard, 2012). In addition, the study on digital bystanders contends that the modeling of empathy in cyber contexts boosts the likelihood of intervention online when confronting situations of online bullying (Hu et al., 2023). Altogether, the findings indicate adults' empathic reactions as susceptible influences of external models; however, the medium on which the models appear increasingly includes mediated as well as virtual bases for those serving as potent role models (Greitemeyer, 2022; Prot et al., 2014; Mares & Woodard, 2012; Hu et al., 2023).

Finally, cross cultural and lifespan studies indicate prosocial modeling influences empathy variably across adulthood dependent on culture scripts, health, and process of aging. For example, research demonstrates collectivist societies endorse empathic responding throughout late adulthood via neighborhood level care and reciprocity modeling (Mesquita et al., 2020; Kim et al., 2008). In individualistic contexts, however, prosocial modeling is often correlated with voluntary actions like charitable donation or civic responsibilities (Thoits & Hewitt, 2001). Additionally, neuroscientific data indicate older adults maintain or increase empathic concern relative to younger adults but declines in perspective-taking are also reported on some occasions (Sze et al., 2012). In turn, the latter therefore suggests the influence of prosocial models across adulthood is not universal but moderated by culture, health, and cognitive aging so as many paths either lead to maintenance or change of empathic responses across the lifespan (Mesquita et al., 2020; Kim et al., 2008; Sze et al., 2012; Thoits & Hewitt, 2001).

DISCUSSION

This paper has also taken a close look at the empirical support for the thesis that prosocial modeling causes an increase in levels of empathy. Such increased empathy then helps to decrease bystander effect or bystander apathy, especially among adolescents whether they find themselves in a standard school setting or with an online configuration. The most important points to emerge from such a discussion include the realization that affective as well as cognitive types of empathy play an important part. Cognitive empathy, or a comprehension of others' perspectives, is often also a good predictor of whether people would take an active part in interventions where assistance is necessary.

However, affective empathy can also be a great motivator to helping behavior but also sometimes might cause a state of distress or avoidance if an individual feels overpowered by an overwhelming burden of emotion (Pang, Zhang, & Yang, 2022). Such a phenomenon as that of prosocial modeling be it from one's peers or school programs structured especially for such a purpose or even family or mediation from various forms of media has also been constantly associated with increases to such measures of empathy across a variety of experiments (Greitemeyer, 2022). In addition to such a finding, it also seems that peer or work-based contexts hold particular sway during adolescence: when adolescents find highly admired or even "cool" peers acting with a high level of prosocial behaviors, an increase often results where such adolescents opt to follow their lead (Forms of Bystander Interventions, 2025; Deng, Yang, & Wu, 2021).

Moreover, subsequent research has taken these initial results and generalized them to cover the online sphere: it has been determined that bystanders' helping behavior in cases of cyberbullying is positively related to their level of empathy; furthermore, empathy has been found to have a highly significant impact upon moral judgment, which then also mediates an individual's willingness to act and intervene. In addition to this, it is also worth mentioning online self-efficacy, or the level to which an individual is confident in using a variety of internet tools effectively. It has been found to play a moderating function in determining to what extent moral judgment is converted into actual helping behavior (Hu, Zhang, Shi, & Fan, 2023). It would thus appear to be indicated that the sequence involving prosocial modeling leading to increased empathy and then resulting in a lower bystander effect is applicable not only to offline situations but also to online contexts as well. It has been found that social cues such as others' behaviors acting as observers, to what extent one's peer crowd norms support intervening, as well as a variety of signals present either in media or else in one's online environment may either facilitate or inhibit a tendency to take bystander action (Wang, 2021; Fredrick et al., 2020).

There also exist some limitations to the research that has been reviewed to date. Many of the experiments performed are cross-sectional designs, such that they can only establish a correlation between variables but fail to demonstrate a cause-and-effect relationship, or a causation. For example, although Hu et al. (2023) and several other researchers have established a correlation between bystander helping behavior and empathy but fail to definitively establish a causal relationship such that exposure to modeling increases an individual's empathy, resulting in a decrease in bystander apathy. Another limitation is that several of these experiments utilize measures of self-report; however, it is relevant to recognize that

adolescents may be inclined to over-report their level of helping behavior or their level of empathy because they desire to be seen as socially desirable. Another limitation is that the variable of "media" is often represented broadly: not all forms of media represent or model prosocial behavior equally. There could be idealized presentations or realism or presentations of doing nothing or presenting negative behaviors, which would be capable of undermining such a pathway from modeling to developing empathy. Moreover, peer groups exert an important but often diffuse impact on what exactly constitutes a "peer model," let alone a peer who is admired or influential enough to be considered so as such a variable is often explained in ambiguous or fluctuating language across various experiments.

Lastly, it is to be found that a considerable lack of longitudinal or experimental designs succeeds effectively to isolate such a sequence as a sequence of prosocial modeling to lead to empathy with a resulting bystander effect decrease over a longer period, a setting where such a design becomes especially necessary to isolate such a sequence is with respect to environments or with respect to social media platforms. From these limitations outlined above, several key avenues for future work come into focus. Firstly, what is most needed is a much greater number of experimental and longitudinal investigations that directly manipulate exposure to different types of prosocial modeling, such as exposure to peer leaders or particular content media, with resultant changes in levels of empathy and bystander behavior measured over longer periods stretching to months or even years.

Secondly, it is important that investigations distinguish among different types of empathy, namely cognitive versus affective empathy, and that they also investigate a more central role for personal distress since over-involvement emotionally can sometimes induce withdrawal from a situation instead of causing individuals to intervene. Thirdly, an area which is currently almost completely unrepresented is that concerned with digital environments such as social media platforms, peer groups online, and internet-based contexts concerned with bullying. Effects of internet self-efficacy, internet moralities, and social cues online deserve much further investigation and analysis.

Fourthly, it is most necessary that an investigation specifies peer group effects much more fully: who are the peer models? What is an estimate or an evaluation of their extent of influence? What are the prevailing norms among peers to help or assist? How do cooperation or intergroup conflict affect the pathway from modeling to a state of empathy to one of intervening? Lastly, it is most necessary that interventions be developmentally planned and rigorously tested as carrying an explicit coverage of a concept of a prosocial modeling. These might include school-based programs where respected peers function as a mold or a model for a helping behavior, media literacy programs to encourage pupils to critically assess their media information consumption, and collaborative work projects to promote cooperation to an intergroup empathy.

CONCLUSION

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In conclusion, after thoroughly examining the extensive body of evidence that has been presented, prosocial modeling has the potential to significantly enhance levels of empathy within individuals. This increase in empathy not only fosters a more compassionate environment but also plays a vital role in reducing the bystander effect, which is frequently observed among adolescents in various settings, including both offline environments like schools as well as online platforms where interactions occur. Both peers and media function as influential sources of this type of modeling, meaning that their impact is important to study and further understand.

Furthermore, future studies should prioritize longitudinal, experimental, and digitally focused methods to clarify causal pathways. Despite current limitations, structured exposure to prosocial models represents a promising strategy for promoting helping behavior and reducing bystander inaction in adolescence. Nonetheless, the insights derived from these findings suggest practical and actionable strategies that can be employed for effective interventions. By intentionally leveraging the power of prosocial modeling, especially through the influence of admired peers as well as through thoughtfully crafted media campaigns or school programs, it is important to significantly reduce instances of bystander apathy while simultaneously encouraging an increase in helping behaviors among adolescents.

REFERENCES

Avolio, B. J., & Walumbwa, F. O. (2014). Leadership theory and research in the new millennium: Current theoretical trends and changing perspectives. *The Leadership Quarterly*, 25(1), 36–62.

<https://doi.org/10.1016/j.leaqua.2013.11.007>

Bandura, A. (1977). *Social learning theory*. Prentice Hall.

Brown, S. L., & Brown, R. M. (2015). Connecting prosocial behavior to improved physical health: Contributions from the neurobiology of parenting. *Neuroscience & Biobehavioral Reviews*, 55, 1–17.

<https://doi.org/10.1016/j.neubiorev.2015.04.004>

Carlo, G., & Padilla-Walker, L. M. (2020). Prosocial behavior in adolescence: Gender differences and cultural considerations. In D. A. Schroeder & W. G. Graziano (Eds.), *The Cambridge handbook of prosociality* (pp. 567–584). Cambridge University Press.

Christov-Moore, L., Simpson, E. A., Coudé, G., Grigaityte, K., Iacoboni, M., & Ferrari, P. F. (2014). Empathy: Gender effects in brain and behavior. *Neuroscience & Biobehavioral Reviews*, 46, 604–627.

<https://doi.org/10.1016/j.neubiorev.2014.09.001>

Deng, X., Yang, J., & Wang, P. (2021). Adolescent empathy and defending behavior in school bullying: A meta-analytic review. *Frontiers in Psychology*, 12, 690898. <https://doi.org/10.3389/fpsyg.2021.690898>

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- Eisenbeiss, S. A., & van Knippenberg, D. (2015). Ethical leadership and follower outcomes. *Journal of Organizational Behavior*, 36(2), 182–195. <https://doi.org/10.1002/job.1968>
- Fu, X., Wang, X., & Chen, H. (2022). Empathy and prosocial behavior in adolescence: The mediating role of perceived social support. *Humanities and Social Sciences Communications*, 9, 289. <https://doi.org/10.1057/s41599-022-01296-0>
- Greitemeyer, T. (2022). Prosocial media exposure and helping behavior: A meta-analytic review. *Current Opinion in Psychology*, 44, 101288. <https://doi.org/10.1016/j.copsyc.2021.12.002>
- Hortensius, R., & de Gelder, B. (2018). From empathy to apathy: The bystander effect revisited. *Frontiers in Behavioral Neuroscience*, 12, 21. <https://doi.org/10.3389/fnbeh.2018.00021>
- Hu, Y., Zhang, T., Shi, H., & Fan, C. (2023). Empathy and cyberbullying bystander helping. *Frontiers in Psychology*, 14, 1196571. <https://doi.org/10.3389/fpsyg.2023.1196571>
- Kim, H. S., Sherman, D. K., & Taylor, S. E. (2008). Culture and social support. *American Psychologist*, 63(6), 518–526. <https://doi.org/10.1037/0003-066X.63.6.518>
- Latané, B., & Darley, J. M. (1970). *The unresponsive bystander: Why doesn't he help?* Appleton-Century-Crofts.
- Li, Y., Chen, J., Xu, J., & Xu, Y. (2023). Prosocial video game play and sharing behavior in adolescents. *Journal of Applied Developmental Psychology*, 85, 101517. <https://doi.org/10.1016/j.appdev.2023.101517>
- Mares, M. L., & Woodard, E. (2012). Positive effects of television on children's social interactions: A meta-analysis. *Media Psychology*, 14(1), 1–34. <https://doi.org/10.1080/15213269.2011.547464>
- McDonald, R., Harris, L. J., & Reid, V. (2023). Sex differences in empathy and prosocial donation. *Scientific Reports*, 13, 21431. <https://doi.org/10.1038/s41598-023-47747-9>
- Mesquita, B., De Leersnyder, J., & Albert, D. (2020). Cultural psychology of empathy. *Emotion Review*, 12(2), 105–118. <https://doi.org/10.1177/1754073919870614>
- Pollerhoff, L., Ziaei, M., & Ebner, N. C. (2022). Empathy across the adult lifespan. *Scientific Reports*, 12, 1794. <https://doi.org/10.1038/s41598-022-06620-x>
- Prot, S., Gentile, D. A., Anderson, C. A., et al. (2014). Long-term relations among prosocial-media use, empathy, and prosocial behavior. *Psychological Science*, 25(2), 358–368. <https://doi.org/10.1177/0956797613503854>

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- Schonert-Reichl, K. A., Smith, V., Zaidman-Zait, A., & Hertzman, C. (2012). Promoting children's prosocial behaviors in school: Impact of the Roots of Empathy program. *Child Development, 83*(4), 1156–1171. <https://doi.org/10.1111/j.1467-8624.2012.01740.x>
- Stern, J. A., & Cassidy, J. (2018). Empathy from infancy to adolescence. *Developmental Review, 47*, 1–22. <https://doi.org/10.1016/j.dr.2017.09.002>
- Sze, J. A., Gyurak, A., Goodkind, M. S., & Levenson, R. W. (2012). Emotional empathy and prosocial behavior in late life. *Emotion, 12*(5), 1129–1140. <https://doi.org/10.1037/a0025011>
- UNESCO. (2019). *School violence and bullying: Global status report*.
- Van der Graaff, J., Carlo, G., Crocetti, E., Koot, H. M., & Branje, S. (2017). Prosocial behavior in adolescence. *Journal of Youth and Adolescence, 47*(5), 1086–1099. <https://doi.org/10.1007/s10964-017-0786-1>
- Winters, S., Chen, C., & Mitchell, D. (2023). Predicting empathy using connectome-based modeling. *Frontiers in Human Neuroscience, 17*, 1052803. <https://doi.org/10.3389/fnhum.2023.1052803>
- Zhong, L., Chen, H., Wang, X., & Xu, Q. (2024). Parenting styles, empathy, and bystander behavior in bullying. *Frontiers in Psychiatry, 15*, 1452396. <https://doi.org/10.3389/fpsy.2024.1452396>