

Monica J. Harris

EDITOR

BULLYING, REJECTION, & **PEER** **VICTIMIZATION**

A Social Cognitive Neuroscience Perspective



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Bullying, Rejection, and Peer Victimization

*A Social Cognitive Neuroscience
Perspective*

MONICA J. HARRIS, PHD

Editor

 **SPRINGER PUBLISHING COMPANY**
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Preface

Middle school, in my humble opinion, is hell on earth. In my case, I was thrust from a small, cozy elementary school with small classrooms full of children who had all known each other for years, and for the most part liked each other, to a large, impersonal junior high school where there was a definite status hierarchy, and the students at the bottom of this hierarchy were often mercilessly teased, physically intimidated, or even physically attacked.

The victim I remember the most was Mike Monroe (not his real name). Mike was, well, just plain weird. He committed the unforgivable middle school sin of wearing pants that were too short (“flooders”); he was awkward in conversation; and he was interested in things no self-respecting middle schooler at that time would admit to being interested in. For example, one day in English class he and his only friend (another misfit) went to the front of the class dressed as Trekkies and delivered a Star Trek sketch, to the bemusement of the rest of the class.

Mike became the whipping boy of O. A. Peters junior high in the mid-1970s. When it became evident that he was attracted to a particular girl in the class, the others would taunt him publicly about his crush in front of her, while he stood there mute, blushing miserably and unable to stop the teasing. Then one day one of his tormentors got the bright idea to tell Mike that the young girl in question wanted to hear him sing, and so they loomed threateningly around him and ordered him to sing a song. This he did, a capella, warbling badly. Within minutes a large group of jeering adolescents gathered. The principal was called to disperse the crowd. This was evidently considered to be so riotous that the next day poor Mike was once again commanded to declare his love for the girl through song, and once again the principal was called into action.

For the remainder of my time at Peters, Mike was frequently the butt of jokes or physical pranks, or was simply ignored as irrelevant. We then went to different high schools and I never heard of him again. Out

of curiosity I recently tried to track him down, but his real name is annoyingly common and I was unable to find him.

But I wonder what became of him. O. A. Peters was kinder to me than it was to Mike Monroe, but that is not saying much. On the popularity ladder of middle school girls, I was planted firmly on the second rung, above the special education students but below just about everybody else. Most of the time I was merely ignored, but there was one notable exception. One day I was walking with a friend at lunch break, when a group of about 7 or 8 tough-looking girls—none of whom I even knew—sidled up to us. My friend and I knew we were in trouble when the leader of the gang veered toward us, shoved my friend roughly with her shoulder, and then accused *us* of pushing *her*. We were quickly surrounded and informed that we needed to get on our knees to apologize, and when I refused to do so (what the *heck* was I thinking?!), I was assured that I could look forward to being beat up after school.

I didn't learn anything the rest of the day, as I spent my time worrying about my imminent demise. I didn't tell a teacher or authority person about the threat. Why, I don't know. I probably thought it wouldn't help and would only get me in worse trouble. The second the dismissal bell rang, I ran lickety-split in the opposite direction I normally went and took a circuitous route home, roughly three miles out of the way, heart pounding the whole time. I followed this strategy the next few days until I became convinced the gang had lost interest in me.

My story, of course, is not unique. Most people have one like it. A smaller percentage has stories more like Mike Monroe's, with repeated bullying and/or rejection that may lead to lasting psychological or physical scars. And at the extreme, there are the Columbines where we see the lengths that some youth feel driven to when they have been rejected and tormented.

Decades later, I am convinced that academic psychology has something to offer the children who must navigate often cruel social worlds; the educators and clinicians who struggle to make these social worlds safer and happier; and the parents who want nothing more than to shield their children from the (perhaps inevitable) pain—emotional and physical—inflicted by their peers. This book is intended to be one step in the journey from asking to understanding to helping.

Editing a book is an endeavor that does not seem daunting at all until one actually undertakes the effort, when it becomes a much different story. My gratitude is enormous toward the many people who helped me throughout the process: Richard Smith, who coached me

through the proposal stage that was essential to getting the project off the ground; my editor, Philip Laughlin, who was encouraging at every step of the way and also answered—patiently—countless silly questions about manuscript preparation; the group of eminent scholars who did me the great honor of contributing to this volume; my colleague and buddy, Rich Milich, whose not-so-gentle nagging through countless walks to the campus Starbucks ensured that the book would meet the deadline; and, of course, my husband and children (Hi, Athena! Hi, Isaac!), who graciously tolerated the far too many times when I had to say, “Not now; Mom’s got to work on her book.”

Introduction

PART
I

1

Taking Bullying and Rejection (Inter)Personally: Benefits of a Social Psychological Approach to Peer Victimization

MONICA J. HARRIS

The bully-victim encounter is iconic in modern culture. Simply saying the word *bully* conjures up any number of mental images, from the scenes in *A Christmas Story* where Scut Farkus terrorizes poor little Ralphie, to the Charles Atlas body-building ads where the skinny guy gets sand kicked in his face, to more somber memories of school shootings that result in the deaths of innocent bystanders. Along with cultural awareness of peer aggression, there has been a long history of academic research attention to these issues, particularly within the field of developmental psychology. Much of this research has focused, however, on one side or the other of the bully-victim dyad. Yet peer victimization is first and foremost an *interpersonal* phenomenon and as such needs to be understood and studied that way.

Bullying and peer victimization would thus seem to be tailor-made for the field of social psychology. However, while there is a healthy body of social psychological research on aggression and rejection in general, primarily using college students as participants, very little work in the field of social psychology has dealt specifically with the issues of peer aggression in childhood. At the same time, developmental, school, and clinical psychologists focusing on peer victimization issues have not always availed themselves of theoretical and methodological developments within social psychology that might prove useful in tackling this topic.

The purpose of this chapter, and the major purpose of the volume as a whole, is to make a case for a social psychological approach to this most quintessential of social experiences. I begin with a brief summary of the relevant domains being studied; I discuss what is meant by a “social psychological approach” and how such an approach can be applied to studying bullying and peer victimization; and I end with a brief survey of the chapters in this volume and how they achieve this application.

DEFINING AND DISTINGUISHING AMONG BULLYING, PEER VICTIMIZATION, AGGRESSION, AND REJECTION

Perhaps one reason researchers from different disciplines appear to be talking past each other so often is that scholars tend to use different terms for similar processes, and these terms may ultimately end up being reified into distinct concepts and subareas where little cross-talk occurs. To give one example, a prototypical incident where one child hits another could be variously called bullying; aggression; mobbing; school violence; peer victimization; direct aggression; proactive aggression (if the hitting were unprovoked); reactive aggression (if the aggressor were retaliating for a prior hostile act by the victim); hostile aggression (if the aggressor displayed angry affect during the event); or instrumental aggression (if the aggressor hit the victim to induce him to yield lunch money)—just for starters.

And if we change our prototypical example to be a hostile insult, we open up another whole set of terms: verbal aggression; teasing; harassment; indirect aggression; relational aggression (if the insult was intended to damage the victim’s social standing in the peer group); interpersonal rejection (if the insult is intended to exclude the victim from the peer group); and cyber-bullying (if the insult was delivered via Internet).

Defining and distinguishing among all these terms is clearly beyond the scope of this chapter, but a few salient observations may be useful. First, all of these terms fall under the umbrella of *aggression*, for which it is difficult to improve upon the classic definition of *any behavior, verbal or nonverbal, that is intended to harm another living being who is motivated to avoid such treatment* (Baron & Richardson, 1994). While such a definition may be overly broad, it does help to make a key point: The domain of this chapter, and volume as a whole, is intentional hurtful behavior directed from one or more person(s)

toward another, and that behavior does not have to be physical to be hurtful or aggressive.

The definition of *bullying* is trickier and has changed over time (Smith & Monks, 2008). Many researchers in the field use a conceptual definition offered by Daniel Olweus, the researcher who could be said to have started scholarly work on the topic of bullying. This definition identifies three criteria essential to bullying: (a) intentional negative actions or harm-doing; (b) these actions are carried out repeatedly and over time; and (c) the bully-victim dyad is characterized by an imbalance of power, such that the bully is in a position of greater psychological or physical strength than the victim (Olweus, 1994, 1995). While this definition has spawned a great deal of useful research and intervention efforts, its narrowness poses certain difficulties. First, the idea that aggressive acts must be repeated over time to count as bullying is debatable, as a child who suffers a single but dramatic incident of physical abuse on the part of a peer would almost certainly consider it to be bullying, even if the researchers do not.

Second, while the criterion that bullying must involve a power imbalance catches well the subjective experience of intimidation and fear that is a hallmark of bullying, it is a criterion that is difficult to operationalize (what is “psychological strength” anyway?) and is subject to circular reasoning: A given incident is judged to be bullying because one member of the dyad suffers at the hand of another, who by definition possesses less physical or psychological strength or feels powerless. Further muddying the definitional waters is that *peer victimization* is the logical flip side of bullying (bullying does not occur without a victim), yet definitions of peer victimization do not necessarily include similar criteria of repeated encounters over time or imbalance of power.

Because a major goal of this edited volume is to provide new perspectives and encourage cross-disciplinary collaboration on the topic of peer victimization and aggression, I will err on the side of inclusion in specifying the domain(s) under discussion. Most important in that regard is that forms of both physical aggression (classic bullying) and verbal or relational aggression will be addressed. Many children (and adults, for that matter) who want to hurt a peer choose nonphysical means to do so, perhaps in part due to fewer formal rules or sanctions existing against relational forms of aggression. However, recent research suggests that cyber-bullying, rumor-spreading, rejection, and ostracism are perceived as being just as personally distressing, if not more distressing, to experience (Kowalski, Limber, & Agatston, 2008; Williams & Nida, this volume).

WHAT IS “A” OR “THE” SOCIAL PSYCHOLOGICAL PERSPECTIVE?

Social psychology, according to the classic definition articulated in Allport (1985), is the study of how one person's thoughts, feelings, and behavior are influenced by the imagined or actual presence of others. Obviously such a broad definition covers a vast amount of territory, and it is perhaps both a strength and a weakness of the field that social psychological theories can rightfully and usefully be applied to virtually every aspect of human behavior. The strength lies in its utility and capacity to explain so many phenomena, but that strength carries with it the weakness of fragmentation: Subareas develop with their own specialized methodologies, vocabularies, and invisible colleges of researchers who talk among themselves but not so often with researchers from other subareas.

A telling if light-hearted example of this fragmentation can be seen in the results of an informal poll once circulated on the Society for Personality and Social Psychology listserv asking members to nominate their “favorite social psychological theory.” The (admittedly unscientific) poll revealed that 37 different theories were nominated by 69 SPSP members, with no theory receiving more than 10 votes! (The winner, if you are curious, was Terror Management Theory.) It is thus not surprising that social psychology has been criticized, and fairly so, as a field in search of a paradigm.

Kuhn's (1962) well-known treatise on the philosophy of science argues that progress in a scientific field follows three distinct stages: *prescience*, which occurs early in a discipline and is characterized by discrete research enterprises lacking a central paradigm; *normal science*, which occurs when a central paradigm has been developed and researchers attempt to refine or expand it; and *revolutionary science*, which occurs when anomalous findings accumulate, forcing researchers to change the dominant paradigm.

Psychology in general, including social psychology, would likely be classified as a prescience according to Kuhn's definitions. We currently lack a single central paradigm; instead, the history of social psychology can be described as a succession of topical interest areas and theories that come into and fall out of fashion. This state of affairs reached its peak during the crisis in social psychology in the 1960s and 1970s, leading Ring to publish a withering critique of the field in which he argued that social psychology gives the impression of a “sprawling, disjointed realm of activity where the movement is primarily outward, not upward”

(Ring, 1967, p. 119) and is “a field of many frontiersmen, but few settlers” (p. 120).

Social psychology has made substantial and gratifying progress since the crisis, but we have yet to arrive at a unified paradigm. As a result, it would be misspeaking to offer *the* social psychological perspective on a given topic. Rather, it would be more accurate to talk of a smaller number of broad theoretical approaches that have become especially influential within the discipline and that offer considerable promise as a way in which to study and understand a given phenomenon. Within social psychology, three of the broad paradigms currently guiding much theory and research include social cognition, evolutionary psychology, and neuroscience. In the sections that follow, I will describe briefly these paradigms and propose how they might fruitfully be applied to research on bullying and peer victimization. I should stress that these are not the *only* or perhaps not even the *best* social psychological perspectives for understanding bullying and peer victimization; there are many other social psychological theories I could have chosen to highlight here (social comparison theory, for example, or any of the theories that emphasize ingroup/outgroup distinctions, such as social identity theory). I chose these three primarily because they are more global in scope, and many of the more specific theories within social psychology can be subsumed under them.

SOCIAL COGNITION

Social cognition became the predominant paradigm in social psychology in the 1980s and remains the most influential perspective operating today. However, the notion of the individual as a social thinker has always influenced theory and research in the field. As Fiske and Taylor (2008) describe, the “social thinker” in social psychology was historically portrayed in succession as (a) a consistency seeker (attitude and cognitive dissonance research); (b) a naïve scientist (attribution research); (c) a cognitive miser (research on heuristics); (d) a motivated tactician (dual-process models); and (e) an activated actor (research on implicit associations and prejudice). The later models incorporated elements of preceding models but added substantially to them in terms of methodological and theoretical sophistication and complexity. The current view of humans as activated actors, for example, argues that cues in the social environment trigger peoples’ social concepts, with or without awareness, and these concepts

cue other related concepts, evaluations, affect, motivations, and behavior in a process of spreading activation (Fiske & Taylor, 2008).

Inherent in research and theory involving social cognition is the assumption that thinking about other people involves different processes than thinking about objects. If it did not, we would not need a separate field of social cognition and instead could rely on purely cognitive psychology. There are several reasons why social cognition is a special case of cognition, all essentially tapping into the idea of meta-awareness or the theory of mind: When we think about a given target person, we realize that the target is *also* a causal agent who is thinking about *us*, and our motivations and feelings about the target influence the way we want to present ourselves to the target as well as how we interpret the behaviors of the target (Fiske & Taylor, 2008). In other words, our thoughts about another person are much more complicated than our thoughts about a shoe, because we know the essence of the shoe will not change as a function of what we are thinking about it, but the same is not true of our thoughts about others.

Of all the theoretical perspectives within social psychology, social cognition has been applied the most often and with the greatest success to understanding problems of peer aggression. The best example of this application is Dodge's social information processing model (Crick & Dodge, 1994; Dodge, 1986). This model posits that children's behavioral responses in a social situation are a function of the sequential (a) encoding of internal and external cues; (b) interpreting the cues; (c) clarifying and selecting a response goal; (d) response access or construction; (e) deciding on a response; and (f) enacting the behavior (Crick & Dodge, 1994). Children's biological capabilities (temperament, personality), along with a database of stored memories, social schemas, norms, and social knowledge, influence what occurs at each step in this process. In a reciprocal fashion, children's social information processing and behavior can in turn affect the stored database of memories, schemas, and norms.

The social information processing model is comprehensive and has sparked a great deal of relevant research documenting that both aggressors and victims process social information in a biased manner (e.g., Lee & Hoaken, 2007; MacBrayer, Milich, & Hundley, 2003; Schultz, Izard, & Ackerman, 2000; and Schwartz et al., 1998). For example, a *hostile attribution bias* has been consistently demonstrated where a child predisposed to be aggressive may interpret objectively ambiguous behavior given off by a peer as being hostile in intent and therefore behave angrily toward the peer.

The area of social cognition attracting the most attention these days is the distinction between *automatic* and *controlled* processes (Blair & Banaji, 1996; for a discussion of this distinction as it applies to aggression specifically, see Berkowitz, 2008). This has produced a concomitant emphasis on methodologies that permit the measurement of automatic responses, such as priming methodologies and the Implicit Association Test (IAT) (see Fazio & Olson, 2003, for a review of these implicit measures). These methodologies allow the assessment of the extent to which a given construct is chronically accessible in a manner that is relatively devoid of demand characteristics or self-presentational concerns, which is an important benefit when dealing with behaviors as socially undesirable as bullying or being victimized.

For example, in the IAT, participants' reaction times are measured as they categorize various stimulus words as (a) being either evaluatively positive or negative; (b) either belonging to the target category or not (e.g., Black vs. White); and (c) whether the stimulus word belongs to a given pairing of evaluative and target category (e.g., "positive or White" vs. "negative or Black"). The measure of critical interest in the IAT is the difference in reaction time as people categorize congruent versus incongruent pairings (Greenwald, McGhee, & Schwartz, 1998). For example, most Americans find it easier to decide that a given word is "positive or White" versus "negative or Black" than to decide if a given word is "positive or Black" versus "negative or White," a finding that has been interpreted as evidence for implicit bias against Blacks (Brauer, Wasel, & Niedenthal, 2000; Devine, Plant, Amodio, Harmon-Jones, & Vance, 2002).

The automatic/controlled distinction can also be applied to understanding children's responses to aggression by their peers. For example, in a study described in greater detail in the Rosen, Milich, and Harris chapter in this volume, we demonstrated that children with greater histories of experiencing peer victimization also scored higher on a victimization version of the IAT (i.e., they found it easier to associate themselves with victim-related words than nonvictim words; Rosen, Milich, & Harris, 2007).

This is only one example of relevant work in peer victimization taking a social cognition perspective, and it should be obvious that there are any number of other fruitful avenues to explore in identifying the thought processes that mediate children's decisions to engage in peer aggression as well as their reactions to being aggressed upon by others. It is more difficult to think of limitations to a social cognition approach,

although one possible drawback is that social cognition research tends to generate studies that emphasize running participants one at a time on computer-administered tasks and measures. As I discuss in more detail later, such an exclusive focus on individual cognitive responses can lead to a regrettable, and entirely avoidable, neglect of interpersonal behaviors that are arguably the processes and outcomes of greatest interest.

EVOLUTIONARY PSYCHOLOGY

As evolutionary theory is the predominant paradigm in biology for explaining animal behavior, it is perhaps surprising that it has taken evolutionary psychology as long as it has to assume a major role in explaining human social behavior (Webster, 2007). The tenets of evolutionary psychology are simple and rest on the basic proposition that the human brain, and consequently behavior, is the product of natural selection (Workman & Reader, 2008). In other words, those traits and behaviors that facilitate human survival and, in particular, reproductive success will be reinforced through natural selection.

Given the importance of reproductive success to evolutionary theories, it is only natural that human mating choices and sexual behavior have attracted the greatest amount of attention from evolutionary psychologists. Sexual strategies theory (Buss & Schmitt, 1993) is perhaps the leading theory in this area and argues convincingly that sex differences in individuals' preferences for short-term and long-term matings as well as the features desired in a sexual partner can be accounted for in part by differences in parental investment required by human males and females. In other words, the biological fact that men have greater opportunities to reproduce than do women, and women must devote more physical resources to bearing and raising a child than men, may be responsible for sex differences in the characteristics people deem important in choosing a mate and their strategies in pursuing reproductive opportunities.

In addition to human sexual/dating behavior, evolutionary psychology has been used with considerable success to explain such fundamental topics in social psychology as helping behavior (or lack thereof), prejudice and stereotyping, impression formation, and culture (Schaller, Simpson, & Kenrick, 2006). Most relevant to the present volume is the large literature on the evolutionary roots of aggressive and criminal behavior (Barber, 2008; Buss & Duntley, 2006; Rodkin, Hawley, & Little,

2007). This literature essentially makes the argument that, for most of humankind's evolutionary history, aggression has been an adaptive trait: Those early humans who were the most aggressive in terms of seeking out and protecting their own resources and kin were more likely to survive and reproduce.

The hallmark of an evolutionary psychology approach to understanding a phenomenon is that it forces a focus on *why* a given behavior is widespread. While it is important not to commit the naturalistic fallacy—that is, assuming that because a behavior exists, it is desirable and *should* exist—an evolutionary perspective to peer victimization can be helpful because it requires researchers to ask what adaptive functions are being served by the behavior, and the answers to these questions can guide practitioners in designing interventions for dealing with aggression. For example, Vaughn and Santos (2007) argue that aggression can be construed as an adaptive solution to a wide range of environmental challenges humans have faced throughout their evolutionary history and that research would be better served to differentiate between *successful aggression*, which will be associated with positive outcomes and life competence, and *unsuccessful aggression*, which will be associated with negative outcomes. In short, eliminating peer aggression entirely may be both an unrealistic and perhaps even counterproductive goal, as some studies suggest that aggression is associated with greater popularity among adolescents (Prinstein & Cillessen, 2003). Rather, intervention goals may be better directed toward limiting the damage caused by aggressive acts.

Evolutionary psychology thus provides a unifying framework and theoretical basis for viewing a wide range of behavior. However, the evolutionary approach to understanding social behavior has also attracted its share of criticism, including claims that evolutionary psychology leads to hypotheses that are nonfalsifiable (Gannon, 2002). Moreover, because the time scale for natural selection is measured over generations, if not thousands of years, causal inferences of the sort we are used to in experimental laboratory studies are hard to come by. Finally, an evolutionary perspective generally does not provide a basis for making the detailed kinds of individual-level predictions we ideally would like to be able to make from a practical standpoint, that is, trying to identify which children will victimize which other particular children in what specific contexts. In sum, as Benenson argues in her chapter in this volume, it may be that the most helpful contribution an evolutionary perspective can make to understanding bullying and peer victimization is the suggestion

that we consider the possible functions served when children act aggressively and that we view aggression as typically displayed in childhood as normative, rather than pathological.

SOCIAL NEUROSCIENCE

Perhaps the subdiscipline of psychology enjoying the most rapid growth and “buzz” these days is social neuroscience. As a crude measure of the explosion of interest, I compared the number of hits on the PsycINFO database for the term *neuroscience* across various years. For the year 2000, this resulted in 2,439 hits. This increased to 5,252 for the year 2007, and for the first nine months of 2008 alone, *neuroscience* yielded an astonishing 12,609 hits! A search for *social neuroscience* specifically resulted in a similar dramatic increase, from a grand total of 9 hits in the year 2000 to 156 in 2007.

Social neuroscience, broadly defined, is devoted to “understanding the neural, hormonal, and immunological processes giving rise to and resulting from social psychological processes and behaviors” (Harmon-Jones & Devine, 2003, p. 590). The rise of social neuroscience is in large part due to recent developments in noninvasive means of locating and identifying neural and physiological activity, including functional magnetic resonance imaging (fMRI), positron emission tomography, electroencephalogram, electromyography, hormone assays, and measurement of peripheral nervous system activity (pupil response, eyeblink, respiration, heart rate, and skin conductance levels).

A major focus of neuroscience in general and social neuroscience in particular is *brain localization*, that is, identifying the regions and pathways of the brain involved in specific traits and behaviors. For example, a recent meta-analysis concludes that the amygdala is activated while processing emotional stimuli, and this is particularly true for fear and disgust stimuli (Costafreda, Brammer, David, & Fu, 2008). And as will be described in detail in a later chapter, with respect to relational aggression more specifically, Naomi Eisenberger and her colleagues have identified specific limbic and front regions implicated in the neural processing of social exclusion.

A second major focus of social neuroscience research is to identify how hormones interact with features of the environment (particularly stress) to affect immunological functioning and health outcomes. Cortisol has attracted the most research attention, as it is a hormone that

plays a major role in the regulation of the fight-or-flight response and immune system activity (Hazler, Carney, & Granger, 2006). For example, Vaillancourt et al. (2008) have shown a significant relation between victimization history and cortisol levels, controlling for age, depression, and anxiety, which may diminish victimized children's ability to cope with subsequent stress.

While considerable research has been conducted on the neuroscientific basis of conduct disorder and antisocial behavior (e.g., Blair, 2002; Huebner et al., 2008; Raine, 2002), neuroscience theory and methods have only very recently begun to be applied to bullying and peer victimization specifically (Hazler et al., 2006). No doubt this is due in large part to difficulties in enrolling child participants in neuroscience studies. (Many children—and/or their parents—are reluctant to agree to being placed inside an fMRI magnet, say, or providing the multiple daily saliva samples required for cortisol assays).

Thus, the research agenda for analyzing bullying and peer victimization from a neuroscience perspective is wide open (Hazler et al., 2006), and one of my hopes for this volume is that it will encourage researchers interested in these topics to explore neuroscience methods. At the same time, valid questions can and have been raised about the limitations inherent in a neuroscience approach to understanding interpersonal behavior. A dyadic behavior like bullying or peer victimization may involve *emergent properties*, that is, properties that arise from the interaction of component processes that are not reducible to the components individually (Willingham & Dunn, 2003). This is ultimately an empirical question, but the chapters included here arguing for the necessity to take environmental and situational factors into account in predicting peer victimization (Kochenderfer-Ladd et al.; Hodges et al.; Espelage & Swearer; this volume) suggest strongly that focusing *only* on what goes on inside the brain will leave us with an incomplete picture.

However, the converse of this statement is also true: Focusing only on outward behavior without attending to the cognitive and physiological processes attending that behavior will *also* leave us with an incomplete picture. For example, Scarpa and Raine (2007) argue convincingly that the incidence of violence is greatest when individuals possess both psychosocial risk factors as well as certain biological risk factors (e.g., autonomic underarousal and prefrontal deficits). In sum, understanding what neurological features are associated with bullying, peer victimization, and aggression may help substantially in identifying those individuals at

greatest risk for poor outcomes, thus improving practitioners' ability to target intervention efforts more effectively.

SLOUCHING TOWARD A UNIFIED PARADIGM FOR SOCIAL PSYCHOLOGY?

While each of the major theoretical perspectives described above has generated productive lines of research, there is also the promise and potential for these approaches to be integrated into one comprehensive model or system for analyzing human behavior, a new field that can be termed *evolutionary cognitive neuroscience* (Krill, Platek, Goetz, & Schackelford, 2007), or if we want to be truly comprehensive, *evolutionary social cognitive neuroscience*. As Cacioppo, Berntson, Sheridan, and McClintock (2000) argued, “[S]ocial and biological approaches to human behavior have traditionally been contrasted as if the two were antagonistic or mutually exclusive” (p. 829), but they go on to note that this “abyss between biological and social levels of organization is a human construction” (p. 830)—and it is an abyss that researchers must bridge if we are to achieve a complete understanding of human social behavior.

Fortunately, the past few decades have produced gratifying progress in two major domains that allow for an integration of these approaches, namely: (a) methodological advances that allow social behavior to be assessed at a biological level (including functional brain imaging and neurochemical analyses), and (b) statistical advances in analytic techniques such as structural equation modeling and multilevel modeling that permit a more comprehensive analysis of mediational and moderation models of complex behavioral pathways operating at different levels of specificity.

The result is that we now have the methodological and statistical tools that are sophisticated enough to allow us to document the reciprocal effects among neural and social processes. We may in fact—at some point in the not-too-distant future—achieve the unified paradigm for understanding human social behavior that has eluded researchers in psychology thus far. It is important to note that a unified psychology does not mean agreeing on a single methodology or narrow theoretical approach; rather, it refers ideally to the “multiparadigmatic, multidisciplinary, and integrated study of psychological phenomena through converging operations” (Sternberg & Grigorenko, 2001, p. 1069). And even if we are not quite at that point in the field today, the basic message that a complete

understanding of a phenomenon requires looking at it on multiple levels is a theme that resonates clearly in the chapters in this volume.

USING SOCIAL PSYCHOLOGICAL THEORIES AND FINDINGS TO DESIGN OR IMPROVE INTERVENTIONS

No chapter on the benefits of social psychological theory is complete without hauling out Lewin's (1952) classic adage that "there is nothing more practical than a good theory" (p. 169). And perhaps, ultimately, one of the most beneficial aspects of the chapters in this volume is that they offer possible avenues for researchers, clinicians, and educators to create or modify existing interventions aimed at reducing peer bullying and victimization. Such an application is both desired and needed, given the significant increase in public attention devoted to school safety issues and antibullying programs in recent years.

Formal research aimed toward designing and evaluating antibullying interventions began largely with Olweus's influential bullying prevention program (e.g., Olweus, 1978, 1993), which is the first to have been implemented on a large scale and systematically evaluated (Smith, Schneider, Smith, & Ananiadou, 2004). This program stresses the importance of intervening at all levels, from individual to system-wide, through recruiting the cooperation of all members of the school community (teachers, students, parents) and communicating a clear and consistent message that bullying will be (a) detected and (b) not tolerated. Aspects of the curriculum target attitude change among students and the development of conflict resolution skills; individualized interventions also target children known to be involved in bullying incidents as either perpetrator or victim. While other antibullying programs exist, they tend to adopt most of the key features of the Olweus program.

While the emphasis on taking the school and home environment into account when carrying out an antibullying intervention is a good thing, as attested by many of the chapters in this volume, it is also clear that existing interventions are not as effective as would be desired. Two meta-analyses have been published evaluating the outcomes of antibullying programs (Merrell, Gueldner, Ross, & Isava, 2008; Smith et al., 2004), and their conclusions were somewhat bleak. For example, Smith et al. (2004) noted that effects of the interventions "fell almost exclusively in the categories of small, negligible, and negative" (p. 550). Merrell et al. (2008) concurred, arguing that the majority of effects obtained

were too weak to be considered meaningful or clinically important. Both meta-analyses further noted fundamental weaknesses with the design and methodologies of much of this research: (a) a lack of randomization and true experimental designs; (b) great variability, and in some cases questionable validity, in the outcome measures being assessed across studies; and (c) variability in the fidelity of the implementation of the intervention.

Design issues for evaluation studies of antibullying interventions can be easily addressed—well, perhaps not easily, but with adequate resources and access to school systems and attention to principles of sound experimental design. However, I would argue that the content and focus of potential intervention programs themselves also need to be addressed to take into account the findings of basic research on bullying and peer victimization as documented in these chapters. For example, at least three of the chapters in this volume argue convincingly for the crucial role played by emotion regulation in predicting peer victimization, on both the part of the victim and the aggressor. Interventions that therefore focus, for example, on teaching potential victims cold, rational decision-making processes (e.g., social skills curricula that emphasize generating and choosing among response options) may not reflect the reality of children so overwhelmed by the hot emotions of the moment that they are unable to think rationally at all. As another example, without knowledge of the neuroscience literature, a clinician might dismiss the recommendation that ostracized or rejected children be given a Tylenol to help them feel better as merely dabbling with the placebo effect—but the research described by DeWall in his chapter in this volume suggests that, given the shared brain pathways for physical and social pain, physical pain relievers should in fact be explored as an effective treatment for the pain of rejection.

Outline of the Book

This volume contains chapters by many of the leading social, developmental, and counseling psychologists dedicated to understanding how, when, and why children and adults are cruel to their peers. The chapters of this book fall into five major sections. The first section is this introduction. Section 2 consists of three chapters that offer broad theoretical perspectives for approaching the problem of peer victimization and bullying. Chapter 2, by Becky Kochenderfer-Ladd, Gary Ladd, and Karen Kochel, focuses on the importance of taking both child and environment

variables into account in predicting which children are likely to be victimized. In chapter 3, Carrie Masten and Naomi Eisenberger offer a comprehensive overview of recent advances in the neuroscience literature on understanding the brain areas implicated in responding to social rejection. Chapter 4 by Paul Rosen, Richard Milich, and myself, offers a new model of implicit social cognitive processing among victimized children that highlights the role of the *victim schema* created and held by repeatedly victimized children, and we describe the results of a longitudinal study supporting the causal role of implicit victim schemas and emotion dysregulation in contributing to subsequent victimization.

The third section of the volume contains more empirical reviews of different aspects of the literature surrounding bullying and peer victimization. In chapter 5, Lauri Jensen-Campbell, Jennifer Knack, Amy Waldrip, and Marie Ramirez concentrate on the victim side of the bully/victim dyad, examining in particular the role of personality and effortful control processes in predicting victimization. Ernest Hodges, Kätlin Peets, and Christina Salmivalli in chapter 6 examine bullying through the lens of the child x environment perspective articulated in the Kochenderfer-Ladd et al. chapter. They provide convincing data that an important percentage of the variance in bully-victim encounters is accounted for by the unique bully/victim pairing involved and that, therefore, prediction will be best served by considering characteristics of the aggressor as well as the situation (defined as targets of aggression). In chapter 7, Dorothy Espelage and Susan Swearer expand their well-known body of research delineating a social-ecological view of bullying by reporting the results of an impressive large-scale study of youth that demonstrates the importance of taking neighborhood/school level variables into account. The final chapter in this section by Joyce Benenson (chapter 8) analyzes adult and child sex differences in aggression from an evolutionary perspective and argues that peer aggression may be fruitfully understood as an adaptive response to the distinct evolutionary goals faced by males and females.

The fourth section of this volume concerns aggression that is not physical but rather relational in nature, including rejection and ostracism. In chapter 9, C. Nathan DeWall describes recent advances in neuroscience research showing that social pain is perceived in the brain in the same way, and utilizing the same pathways, as is physical pain. Kristin Sommer and Daniel Benkendorf take a more social cognition approach in presenting an attachment regulation perspective on peer rejection in chapter 10. In chapter 11, Will Crescioni and Roy Baumeister review

the lengthy and impressive body of research documenting the diverse consequences of rejection, including the role of rejection in causing aggression. Finally, in chapter 12, Kip Williams and Steve Nida offer convincing, and sobering, evidence that ostracism may be perceived by its targets as just as distressing, if not more so, than physical bullying—a conclusion that serves as a necessary caution for educators and clinicians, who tend to focus their prevention efforts on physical bullying rather than the much less visible pain of ostracism.

The fifth and concluding section of the book considers victimization in the broader peer context. In chapter 13, Jaana Juvonen and Adriana Galván propose that a major function of bullying is to punish deviance and enforce a peer group's norms, and these attempts are often successful because bystanders are (understandably) reluctant to risk incurring the wrath of the aggressors and so do not challenge the bully's actions. The remaining two chapters argue for the wisdom of adopting a social network analysis approach to understanding peer aggression, from two slightly different perspectives. Noel Card and David Schwartz first describe the benefits of analyzing peer victimization and bullying from multiple levels (individual, dyadic, peer subgroups, and larger peer groups). Rich Gilman, David Schonfeld, and Inga Carboni then focus more on the phenomenon of social isolation, providing first an excellent explication of the basic strategy underlying social network analysis and then discussing how a social network approach might inform interventions aimed at helping isolated youth.

CLOSING COMMENTS: PROMISES AND PITFALLS OF A SOCIAL PSYCHOLOGICAL APPROACH TO PEER VICTIMIZATION

One theme I hope is evident through the (necessarily brief) description of the chapters in this volume, and which should become more evident in the chapters themselves, is the rich potential represented in taking a social psychological approach to understanding bullying, rejection, and peer victimization. The chapters included here adopt a variety of social psychological perspectives operating on a variety of levels, ranging from the detailed specificity of identifying neural pathways and brain regions evident in the neuroscience chapters to a much broader scope that considers humankind's evolutionary history. But the common thread across the chapters is the emphasis on *theory*, with a corresponding emphasis on

mediating and moderating processes, as an organizing principle sparking the design of studies delving into the problems of peer aggression. This is a focus greatly needed, as past research on these issues has tended to rely heavily on descriptive and applied aims and methods. In other words, research to date on bullying, victimization, and peer rejection has given us a very good picture of who does the bullying, who is victimized, and the consequences of victimization. Unfortunately, our understanding of *why* bullying occurs and the mediating and moderating pathways of peer victimization is relatively impoverished. The great promise of a social psychological approach to behavior is thus an emphasis on understanding process and mediation within a theoretical framework, and it is this enriched theoretical understanding that should lead to more effective interventions and treatments.

Of course, a social psychological perspective on bullying, rejection, and peer victimization may be prone to some of the limitations of the field itself. One of the biggest of these pitfalls is social psychologists' overreliance on introductory psychology students as participants in their research, a problem that was sharply criticized by David Sears (1986) over 20 years ago and remains as problematic today. The reasons for using college students are obvious and compelling—they are a convenient and free source of abundant data—but the limitations of this reliance are equally obvious and compelling. Social psychological research on young adults can yield a large amount of useful data that can help in formulating theory, but an important step will be to validate the results obtained on college students against those obtained with younger children. In many cases, the processes identified in adult samples will undoubtedly generalize to younger samples, and for that reason, research on college students remains both useful and expedient. But in some cases the findings will not generalize, and we need to know what those cases are. For example, as Masten and Eisenberger note in their chapter, there are important structural differences between the brains of adolescents and the brains of adults, and these differences appear to have ramifications for how rejection is experienced and reacted to by children and adults. To put it another way, while it is difficult to construe the recent decline in federal funding for basic social psychological research positively, one definite benefit is that it encourages social psychologists to go beyond laboratory research on college students to addressing other age groups in real-world contexts.

A second pitfall in taking a social psychological approach to issues of bullying and peer victimization is that it—ironically—too often leads to

examining the thoughts and reactions of an individual person rather than interpersonal behavior occurring between two or more people, a regrettable feature given the interactional nature of peer aggression. This is not the fault of the field of social psychology itself, which is explicitly and proudly interpersonal in its scope and theoretical aims, but more a reflection of the methodologies that have become predominant in the field, methodologies that emphasize self-report and what is going on inside the head rather than what is going on between individuals.

My intention here is not to criticize those methodologies; as will become evident in reading the chapters in this book, the methodologies associated with social cognitive neuroscience are sophisticated and exciting and provide a means of glimpsing into the “black box” of the human brain to an extent previously undreamed of. Indeed, as Baumeister, Vohs, and Funder (2007) state in their delightfully if plaintively titled article, “Psychology as the Science of Self-Reports and Finger Movements: Whatever Happened to Actual Behavior?” there is nothing wrong with learning about inner process. And, as I hope I have made abundantly clear, progress in understanding bullying and peer victimization requires learning more about the inner processes going on in the bully/victim dyad. The point is that “behavior matters too” (Baumeister et al., 2007, p. 400). As a field, social psychology needs to move away from a view of human behavior that regards it almost exclusively as something “performed in a seated position, usually seated in front of a computer” where “finger movements, as in keystrokes and pencil marks, constitute the vast majority of human action” (Baumeister et al., 2007, p. 397).

The good news is that researchers interested in studying bullying, rejection, and peer victimization will by necessity involve themselves with “actual behavior” because the outcome of ultimate interest in these areas is aversive interpersonal behavior. So, in a way we have come full circle: Just as adopting the theories and methods of social psychology can advance research on peer victimization, choosing peer aggression as a topic of research can help return social psychology to its noble roots of explaining and predicting interpersonal behavior.

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