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## Who's to Blame? Elaborating the Role of Attributions in General Strain Theory\*

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**Abstract:** *Agnew's general strain theory (GST) has motivated dozens of criminological studies over the past two decades. Borrowing in part from Cloward and Ohlin's model of delinquency, Agnew claimed that anger, a key component of GST, occurs when adolescents externalize blame for their adversity. This implies that adolescents who blame strain on an external causal agent (e.g., a parent, a teacher, economic disadvantages) are more likely to get angry and thus lash out through delinquent acts. However, this essential characteristic has been largely neglected in studies of GST. The purpose of this article is to show that external attributions of blame remain a fundamental moderator of GST and to elaborate how it affects the association between strain and delinquency. In particular, we draw from research on attribution theory and hostile attribution biases (HAB) to argue that understanding how adolescents interpret adversity is essential to GST.*

**Keywords:** general strain theory, delinquency, attribution of blame, hostile attribution bias

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### INTRODUCTION

General strain theory (GST) has motivated dozens of criminological studies over the past two decades. The developer of GST, Robert Agnew, considered versions of Merton's, Cloward and Ohlin's, and Cohen's strain theories, melded them with innovative concepts from contemporary criminological and social-psychological research, and crafted a new theoretical model of delinquent and criminal behavior. In particular, he re-envisioned this model to emphasize three types of strain and their influence on negative emotionality and delinquency. The three forms of strain addressed by GST are (1) the failure to achieve positively valued goals, (2) the removal of positively valued stimuli, and (3) the presentation of negative stimuli (Agnew 1992). Delinquency results when these strains are interpreted as unjust, high in magnitude, associated with low social control, and have created some pressure to engage in criminal coping (Agnew 2001). Moreover, a key emotion that links strain with delinquency is anger. Anger "increases the individual's feelings of injury, creates a desire for retaliation/vengeance, energizes the individual for action, and lowers inhibitions," resulting in a sense that maladaptive behaviors, particularly

delinquency, aggression, or violence, are justified (Agnew 1992:60). Feelings of anger motivate adolescents to attempt to defend or recover valued stimuli through delinquent actions (Brezina 1996) and may also be aroused through a threat to autonomy, which youths then attempt to reestablish through illicit means (Brezina 2000).

An important issue mentioned briefly in Agnew's seminal GST article involves under what circumstances strain leads to anger and delinquency. Although various coping mechanisms – such as high self-esteem, self-efficacy, self-control, or social support – may alleviate the likelihood of anger, a key factor that increases this negative emotion is when youths blame other people for stressful situations: "Anger results when individuals blame their adversity on others" (Agnew 1992:59). Presumably, this implies that adolescents who blame strain on an external cause (e.g., a parent, a teacher, economic disadvantages) are more likely to get angry and thus lash out through delinquent acts. Yet it also suggests that when the cause of strain is not attributed to others, adolescents do not tend to become angry and thus do not engage in delinquent behavior. Other negative emotions might occur, such as despair or dysphoria, but these will most likely result in depressive symptoms, anxiety, or feelings of

sadness. In general, then, externalizing blame is the key moderating variable in GST.

It is peculiar to note, however, that many studies of GST have addressed the three types of strain, as well as anger and coping resources such as self-esteem, self-efficacy, self-control, and social support (e.g., Agnew 1997, 2001, 2006a; Agnew et al. 2002; Agnew and White 1992; Broidy 2001; Froggio, Zamaro, and Lori 2009; Hoffmann 2009; Hoffmann and Miller 1998; Hoffmann and Su 1997; Mazerolle et al. 2000; Piquero, Gomez-Smith, and Langton 2004; Rebellon et al. 2009; Tittle, Broidy, and Gertz 2008), but there have been few, if any, attempts to study causal attributions even though this mechanism is fundamental to GST and earlier forms of strain theory. Whereas the notion of attributions appears briefly in Agnew's writings, it also has a central role in Cloward and Ohlin's (1960) strain model (see Hoffmann and Ireland 1995). Yet it is perhaps best known to criminologists due to the work of Sykes and Matza (1957), who argued that delinquent behavior is often "neutralized" by attributing the causal factors to others or to uncontrollable events in youths' lives.

We argue that this is a serious, perhaps fatal, omission on the part of general strain theorists and researchers. Ignoring a fundamental mechanism of GST has likely led not only to underfit empirical models that have yielded biased coefficients, but also to a stagnant understanding of how strain might affect delinquency. In particular, it may explain why research has produced such inconsistent empirical results when it comes to whether anger affects the association between strain and delinquency (cf. Agnew et al. 2002; Aseltine, Gore, and Gordon 2000; Mazerolle et al. 2000; Tittle et al. 2008). As we discuss later, understanding who one blames for strain-related experiences is essential to identifying whether anger and, consequently, delinquency ensue. Yet, as we also show in the subsequent discussion, the concept of externalization of blame and the more general category of attributions are sorely underdeveloped in criminological theory in general and in GST in particular.

In this paper, we attempt to overcome the lack of attention to these issues in research on GST by elaborating how causal attributions are a key moderating mechanism for understanding the links between strain, anger, and delinquency. Following a review of some of the early influences on GST, we discuss recent research on attribution theory – in particular, models of how people interpret the situations they experience – to elaborate how strain may require specific forms of external attributions in order to result in anger and, ultimately, aggressive and delinquent behavior. We contend that it is not so much whether some experience that is, perhaps, objectively labeled strain occurs, but how it is interpreted by the adolescent. The interpretation of experiences is acutely influenced by whether the adolescent exhibits an attributional style that identifies other people as causing

the experience as opposed to causal factors such as fate, luck, or personal characteristics. We also propose that hostile attribution bias – which is the tendency to interpret hostile intent on the part of others during what seem to observers as ambiguous social interactions (e.g., Dodge 2006) – is a promising concept for clarifying these linkages.

## THE SOCIAL-PSYCHOLOGICAL UNDERPINNINGS OF GENERAL STRAIN THEORY

As mentioned earlier, Agnew's strain model is a systematic amalgamation of sociological and social-psychological notions about the effects of negative experiences on humans. Although the sociological sources include work by Merton and Cohen, for our purposes an important model in the development of GST is due to Cloward and Ohlin (1960). This is because they emphasized most clearly the role of attributions of blame.<sup>1</sup> In their study of delinquency and opportunity, they proposed that one type of strain leads to delinquency primarily when youths blame their adverse experiences on others. Known generally as *externalization of blame*, this condition was assumed to be a crucial element to their early form of strain theory (Hoffmann and Ireland 1995). In particular, Cloward and Ohlin (1960) argued that those who externalize blame by interpreting their adverse situations with reference to external social factors – such as others, but also on their proximate social environment – are likely to become alienated, withdraw legitimacy from conventional social norms, and find alternative means to gain valued resources. These alternative means typically involve delinquent behavior.

The social-psychological sources of strain theory are found primarily in two related models. First, the frustration-aggression hypothesis was based on studies of the reactions of animals to stressful situations that were assumed to cause frustration. Typically, these involved the blockage of immediate and valuable goals (such as obtaining food or escaping physical pain). In myriad situations, animals (including humans) reacted to these frustrations with aggression, such as trying to gain a particular goal through force (Berkowitz 1989; Miller 1941). Frustration-aggression studies have influenced not only strain theory, but also more general research on aggression and violence (e.g., Bernard 1990; Dill and Anderson 1995; Felson 1992; Moeller 2001).

Second, learned helplessness theory focused on what happens to animals when there is persistent, uncontrollable stress in their lives. In these situations, most animals, after some initial escape attempts, become helpless and avoidant and appear to accept the situation rather than trying to escape it. Although the learned helplessness process seems to work more clearly among animals other than humans, it

has generated a large body of empirical literature and has influenced recent studies of whether stressful life events affect attitudes and behaviors (Hermann 2007; Overmeier 2002; Peterson, Maier, and Seligman 1995). Yet it has also suffered from a general lack of empirical support.

The paucity of empirical support for the ability of the learned helplessness model to explain human behavior led to the development of a revised model. It addressed two limitations of the original model. First, it considered attributional style (also known as *explanatory style*): how people explain the events that they experience. To what broader forces do they causally attribute the events of their lives? This is clearly related to externalization of blame. The second addition to the model involved motivation: What did an aversive event drive the person towards (Peterson et al. 1995; Vázquez et al. 2001)? Much of the research using this revised model has focused on depression or dysphoria, although there are clearly other potential outcomes, including aggression, violence, and various forms of illicit behavior.

Although externalization of blame – or the more general category of attributional style – has a conceptual role in GST (Agnew 1992) and revised learned helplessness models (Peterson et al. 1995), it has generally been neglected in delinquency research (for important exceptions, however, see Sykes and Matza [1957] and Bernard [1990]), even in research on GST. To elaborate this concept more fully, consider that externalization of blame involves attributions of whom or what caused the stressful or anxiety-provoking event. For instance, when an adolescent's parents are going through a divorce, does he blame his father, his mother, or both of them? Does he blame himself? Or does blame fall on conditions outside the family's control? When a student receives a low score on an exam, does she blame the teacher for making the questions too difficult, or is blame attributed to poor study skills, a general lack of intelligence, or not being a skilled test taker?

Although some researchers have viewed externalization of blame as a mediator in the path from strain to delinquency, it is best envisioned as a moderator. In other words, according to both GST and social-psychological depictions of this process, strain tends to lead to maladaptive behaviors such as delinquency among those adolescents who blame others for their adversity. But why should this be so? As discussed later, blaming others increases the risk of anger and frustration in the face of strain. Then, as explained by Agnew, these negative emotions increase the likelihood of delinquency, aggression, and violent behavior.<sup>2</sup> Although this brief description of the strain process has the value of parsimony, focusing on attribution of blame necessitates a much more complex evaluation. We contend that attribution of blame is actually a much richer concept than has heretofore been considered in traditional or general strain theory. Research on attributional styles is

particularly valuable for understanding attributions of blame and how they affect strain, negative emotions, and delinquent behavior. Therefore the next section reviews some of this research to provide a context for our elaboration of GST.

## ATTRIBUTION STYLES

Social-psychological research has identified several attributional styles. Scholars tend to organize these styles along three dimensions: internal vs. external, stable vs. unstable, and local vs. global (Peterson and Seligman 1987; Vázquez et al. 2001; Wise and Rosqvist 2006). Internal vs. external refers to whether people attribute the events they experience to factors external to themselves (other people, random phenomena, fate) or to internal factors that they have inherited genetically or developed in their lives (e.g., their native intelligence, skill levels to perform particular tasks).<sup>3</sup> Stable vs. unstable involves causes that are expected to continue (stable) or those that are seen as temporary or fleeting (unstable). For example, a stable causal factor occurs if youths attribute their poor test taking abilities to a lack of intelligence, whereas an unstable factor is that they didn't get enough sleep the night before the test. Local vs. global concerns whether the cause is assumed to affect only a single aspect of one's life (local), such as taking math tests (e.g., "I'm not good at math"), or affect aspects of one's entire life (global), such as the ability to perform on any test (e.g., "I'm not smart enough to succeed at written tests").

According to research on attributions, negative explanatory styles occur when a person interprets negative events (e.g., the loss of a job, school failure) as caused by internal, stable, and global conditions, whereas positive events are seen as triggered by external, unstable, and local conditions. A positive explanatory style is the opposite. In general usage, those who use negative explanatory styles are labeled pessimists whereas those who use positive explanatory styles are labeled optimists (Jackson, Sellers, and Peterson 2002; Wise and Rosqvist 2006). Among pessimists, bad events are usually understood as being caused by internal limitations (low intelligence, poor judgment), are seen as part of broader, stable conditions, and are thought of as encompassing all aspects of one's life. Good events, on the other hand, are attributed to external conditions (in particular, luck), local (e.g., it will only happen this one time), and unstable conditions.

A substantial body of research suggests that these dimensions of causal attribution are consequential for understanding outcomes such as depression, anxiety, and school failure. Those who utilize internal, global, and stable attribution styles to interpret negative events are likely to experience more negative outcomes, such as school failure and poor interpersonal relations (Boman, Smith, and Curtis 2003; Jackson et al. 2002; Peterson and Seligman 1987; Skinner, Zimmer-Gembeck, and Connell

1998; Vázquez et al. 2001; Wise and Rosqvist 2006). In addition, people tend to attribute causes most often when experiencing negative events (Mikula 2003); positive or neutral events do not as consistently require a causal explanation when they occur. Thus, we should expect that these types of events are particularly germane for research on strain and delinquency.

Nevertheless, it is important to recognize that external attributions actually involve distinct phenomena. Much of the research that has examined this particular dimension focuses on luck or fate as external causes of negative or positive events. For example, in an exceptional instance where attributional styles and criminal behavior have been examined, Maruna (2004) finds that active offenders tend to interpret negative events in their lives as the result of internal, global, and stable conditions. In other words, they tend to rely on a negative explanatory style. They are also more likely to believe that the good events in their lives are the product of external (primarily luck or fate), unstable, and local causes (see also Rowe, Maughan, and Eley 2006). Nevertheless, studies of offender populations indicate that the most serious offenders tend to blame their victims or society for their criminal conduct (e.g., Gudjonsson and Sigurdsson 2004, 2007). Thus, it is important to distinguish whether external attributions involve luck or fate or whether attributions can be linked to particular others with whom youths come in contact.<sup>4</sup>

Unfortunately, most theoretical models and studies of attributions and criminal conduct have involved asking offenders about past behaviors. Sykes and Matza's (1957) description of the "techniques of neutralization" that youths use to rationalize their untoward behaviors – and the research that it motivated – is illustrative of this inclination: they outlined a series of methods that youths use to justify their behaviors, especially by denying responsibility and attributing blame to forces beyond their control. Yet it is not surprising that many offenders use post-hoc excuses or neutralization techniques to explain their illicit behaviors (Maruna 2004; Maruna and Copes 2005; Maruna and Mann 2006). However, these studies do little to help us understand whether attributions condition the association between strain and delinquency. It is clear that we need to address the causal and temporal chain of events better if we are to gain a full picture of the process of strain and attribution of blame.<sup>5</sup>

Moreover, one of the advantages of focusing on attributional styles is that, as shown in the next section, they help explain why some youths react with anger, thus accounting for one of the linchpins of GST. Empirical research has been mixed concerning the necessity of anger as a mediator in the strain process (cf. Agnew et al. 2002; Aseltine et al. 2000; Mazerolle et al. 2000; Tittle et al. 2008), yet this might be because biased attributional styles have not been considered in studies of GST.<sup>6</sup> Without understanding the attributional tendencies of strained youths, it is difficult to determine whether anger ensues

from strain and if anger then affects subsequent delinquent, aggressive, or violent behaviors. In general, then, we are concerned in this article with the attributional process – which is part of the cognitive process youths use to make sense of their lives and situations – that has been mentioned by delinquency and strain theorists but has not been explored sufficiently in conceptual models of strain theory.

## **DOES EXTERNAL ATTRIBUTION OF BLAME MODERATE THE ASSOCIATION BETWEEN STRAIN AND ANGER?**

It is evident from the discussion so far that addressing external attributions only generally without considering their constituent elements is not sufficient. In addition to the distinction between types of external sources (e.g., luck vs. tangible others), an important issue involves the argument that attribution is not the same as blame or how it is focused. Attribution or explanatory style is a general cognitive orientation that affects all or most aspects of the way people try to interpret situations and interactions with others. Blame focuses specifically on culpability; it is especially likely to evoke a hostile or negative response when the event is severe, when the person to whom the event is attributed is present, and when the presumed victim judges that the perpetrator should have known that the act is severe (Hall, French, and Marteau 2003; Tennen and Affleck 1990). This set of conditions has also been found to enhance aggressive reactions in research based on the frustration-aggression hypothesis (Berkowitz 1989; Dill and Anderson 1995). Moreover, when someone causally interprets negative events as the direct product of other people's behaviors – when blame can be attributed directly to another – the probability of subsequent aggressive behaviors increases (Fondacaro and Heller 1990; Powell and Rosén 1999). Much of this research has been based on quasi-experimental designs that provide stimuli to experimental subjects and then examines their reactions. Few studies have used survey research or observational studies in natural settings.

More detailed quasi-experimental studies have shown that anger tends to emerge especially when blame is attributed to others (Berkowitz and Harmon-Jones 2004; Bernard 1990; Miller 2001). These studies indicate that anger is particularly severe when a stressful event is seen as unjustified and under the control of the provocateur (Dill and Anderson 1995; Guerra, Huesmann, and Zelli 1993; Mikula 2003). Moreover, displaced aggression occurs most often when there is more frequent contact between the provocateur and the person but when the intensity of the event is lower (Marcus-Newhall et al., 2000). In general, more intense events – such as those that threaten actual physical harm or are painful – are likely to evoke an immediate response, whereas less intense events

– such as those that seek to make a person feel uncomfortable or that threaten the removal of a valued object – allow a presumed victim to be more cautious, delay the response, and act aggressively against another target. Hence, anger is a common reaction to certain types of negative or stressful events, especially those in which blame may be laid on another person. Interestingly, aggressive responses to anger can actually improve one's subsequent mood (Bushman, Baumeister, and Phillips 2001), thus serving as a coping mechanism (cf. Brezina 1996; Miller 2001).

But why does blaming another rather than blaming, say, fate, bad luck, or internal limitations tend to lead to anger and consequent aggressive reactions? Studies indicate that three specific influences affect this process: (1) blaming others impedes the use of adaptive coping strategies, such as problem solving; (2) it causes the harmed person to dispute positive world views and perceptions of others; and (3) it makes it more difficult to draw upon available social support resources since it negatively affects trust in other people (Hall et al. 2003; Tennen and Affleck 1990). Moreover, we propose that externalization of blame is influenced by particular cognitive biases that are common among aggressive youths.

In general, then, we reaffirm the claims of Cloward and Ohlin (1960) and Agnew (1992, 2006a) that strain becomes channeled toward anger and, consequently, aggression and delinquent behavior when youths directly blame others for the negative situations they find themselves in. Causally attributing blame for negative situations to others, whether the situations involve a failure to achieve positively valued goals, the removal of positively valued stimuli, or the presentation of negative stimuli, is an important, often essential, condition in the pathway from strain to anger. Moreover, anger is particularly likely when the negative event or events are seen as severe, unjustified, and under the control of a provocateur or provocateurs; and when the presumed provocateur or provocateurs are present or in close proximity (Dill and Anderson 1995; Guerra et al. 1993; Hall et al. 2003; Mikula 2003; Miller 2001; Tennen and Affleck 1990). When blame is not causally attributed to another person or group of persons, anger is much less likely to result from negative situations. We propose that under these conditions, other negative or harmful emotions result, such as dysphoria, anxiety, and depression (Aseltine et al. 2000; Hoffmann and Su 1998; Kaufman 2009).<sup>7</sup>

## WHY DO SOME YOUTHS EXTERNALIZE BLAME?

Our elaboration of GST is not complete without considering why some youths blame others whereas other youths do not. What mechanism lies at the heart of

external causal attributions? Rather than being an objective process, we propose that the attributional process involves how youths interpret events, which may or may not be objectively accurate. In order to build this argument, we draw from studies of hostile attribution bias (HAB), which has emerged from research on how people, especially children and adolescents, process sensory information. This is the notion that some children and adolescents are disproportionately likely to interpret hostile intent on the part of others during social interactions. They then tend to generate aggressive responses, which may escalate into violence (Crick and Dodge 1994; Dodge 2003; Dodge, Bates, and Pettit 1990; Fondacaro and Heller 1990; Lösel, Bliesener, and Bender 2007). Although the term attribution is used to define this condition, research on this topic has emerged somewhat independently of other social psychological research on attributional styles. Nevertheless, it holds significant promise for understanding how strain and attributions channel some youths toward anger, aggression, and delinquency.

Studies of HAB find that these youths attribute hostile intent during otherwise ambiguous situations, whereas those without this bias tend to see more benign or inscrutable intentions on the part of others (Dodge 2003, 2006). In general, they are more likely to “jump to conclusions” that others have hostile intentions in these situations and respond with reactive aggression (Hubbard et al. 2002). Kenneth Dodge (2006) argues that the source of these biases stems from neurological functioning, traumatic events in childhood, and a failure to develop secure attachments with parents and other influential adults. In particular, children who manifest HAB are disproportionately likely to have experienced physical and emotional abuse during childhood (Dodge et al. 1990). Thus, the link between experiencing abuse and subsequent delinquent behavior during adolescence is presumed to be mediated by HAB. Those with HAB also tend to have mothers who exhibit the same biases (Bickett, Milich, and Brown 1996) and they demonstrate greater physiological arousal during ambiguous situations (Hubbard et al. 2002).

Moreover, in an argument reminiscent of Gottfredson and Hirschi's (1990) original position on self-control, Dodge (2006) contends that HAB is a natural condition that must be socialized out of the individual. Thus, HAB and self-control are similar concepts, although there are some important differences. For instance, in a recent elaboration of the concept of self-control, Hirschi (2004) argued that it is operationalized best by considering how potential offenders judge a full range of consequences to their behaviors. Reminiscent of social bonding theory, he claimed that those youths who had a higher accumulation of bonding mechanisms in their lives – or what were referred to as *inhibiting factors* – were less likely to engage in analogous acts of misbehavior (see also Piquero and Bouffard 2007). HAB is similar in that it is cognitively oriented and, akin to the judgment aspect of Hirschi's

elaboration, it involves how information is processed. However, HAB is distinct in that its sources are presumed to be affected profoundly by learning experiences in early childhood, as well as by traumatic events and neurological abnormalities that may have a genetic basis.<sup>8</sup> This latter aspect of HAB is especially eschewed by Hirschi (2008).

As far as we have been able to determine, research has not yet linked HAB to GST, but we propose that it serves as a core moderating mechanism for explaining why some youths who experience adverse events or unjust conditions react with anger and aggression, whereas others take a more temperate or internalized route. Thus, we argue that subsequent research on GST should consider whether youths who experience strain and react with anger also disproportionately experience attributional biases. (The next section discusses some ways that HAB might be considered in research on GST.)

Although we do not claim to provide a complete or uniform pathway from strain to delinquency, here is an illustration of how HAB might operate in a GST context. Suppose a negative event occurs in the life of an adolescent; perhaps he is failing a class. Rather than focusing on what he does in this particular situation, we should consider whether he has a general cognitive tendency to externalize the negative experiences of his life. But this will be affected by whether he also manifests HAB. If, say, he blames the event on his teacher's poor treatment of him or lack of skill as an educator (this evaluation of the teacher may or may not be accurate), even when others would observe the situation as ambiguous (his teacher actually treats him fairly but may react to his bad behavior; his teacher is an accomplished educator), he gets angry, feels humiliated, or becomes highly frustrated and takes it out by either disrupting the classroom or through truancy. He may also demonstrate displaced aggressive behaviors such as vandalism, truancy, or fighting with his siblings or with other youths. It is not a matter of poor coping in the traditional sense or even low self-control (although this too could be implicated); rather, the youth's attribution bias conditions the link between strain, anger, and delinquency by affecting how he interprets the adverse events in his life. When ambiguous or uncontrollable strains are perceived as part of a hostile environment by those who display biased attributional styles, their reactions tend to get channeled into anger and frustration and subsequently toward delinquent and aggressive conduct.

For those adolescents who do not have biased attributions that favor hostile interpretations, anger is less likely and strain tends to be directed towards other outcomes such as depression, dysphoria, anxiety, and withdrawal. This may lead to some forms of delinquent acts, such as drug use, but they do not tend to be aggressive forms (cf. Bernard 1990). Of course, some youths may also appear resilient in the face of strain. If youths have strong relations with parents, conventional

peers, solid social support networks, or other positive coping resources, then conventional behaviors likely ensue. But these are still conditioned by a general attributional style, with those who fall on the internal side of the attribution dimension better able to take advantage of coping mechanisms.

Thus, it is not so much whether some event that is, perhaps, objectively labeled strain occurs, but how it is interpreted by the adolescent. The interpretation of events is acutely influenced by whether the adolescent favors an external attributional style that identifies other people rather than fate or luck, manifests hostile attribution bias, and views the events as unjustified and under the control of a presumed provocateur.

We also suggest that the link between a need for autonomy and delinquent behavior may be fruitfully explained by focusing on attributions of blame and HAB. Studies have shown that many youths at high risk for delinquency, including those who experience stressful life situations, seek to manage situations and engage in misbehavior to gain a sense of control over their lives (Agnew 1984; Allen et al. 2002; Brezina 2008; Van Gundy 2002). In terms of GST, we propose that adverse experiences are particularly germane to those with HAB because they are generally interpreted negatively and threaten their sense of control or efficacy. Adolescents with HAB are especially likely to interpret these experiences as unjust and arbitrary. When their sense of autonomy and efficacy is threatened, they may seek control through hostility and aggression. These types of reactions help them feel as if they can gain control and regain their sense of self-efficacy.

Furthermore, attribution biases tend to be self-fulfilling. As an adolescent relies on anger and aggression in the face of strain, this will elicit more presumed mistreatment by others, which perpetuate and may even intensify the tendency to externalize blame and attribute hostile intentions during ambiguous situations. Thus, we propose that there is a reciprocal mechanism at play here that should be explored in research on GST.

## **ASSESSING A MODEL OF HAB, ANGER, AND STRAIN**

Examining the model empirically requires measures of hostile attribution bias, anger, strain, delinquency, and other outcomes such as depression and dysphoria. Such specific data do not generally exist, as far as we have been able to ascertain.<sup>9</sup> One method for examining HAB has been to provide vignettes to respondents to assess how they perceive intentions on the part of others (Hubbard et al. 2002; Lösel et al. 2007; Mikami et al. 2008; Walters 2007). For example, Walters (2007) provided inmates with vignettes that involved being bumped into or jostled on the basketball court. Responses fell along a scale that

included, on one end, that the action was accidental or, on the other, that it was “definitely deliberate.” Mikami et al. (2008), following Dodge (1993), similarly provided vignettes to adolescent girls. They were shown five hypothetical situations involving various peer experiences and asked to tell the interviewer why the other girls behaved as they did. Their responses were then coded as demonstrating negative/hostile attributions or ambiguous attributions. Since vignettes have been used successfully in studies of delinquency and young adult criminal behavior (e.g., Piquero and Bouffard 2007; Piquero et al. 2004), they could be adapted for use in a study of HAB, strain, and delinquency.

As an example that more specifically addresses GST, Agnew and colleagues (2002) used secondary survey data (the 1976 National Survey of Children) to analyze responses to questions about strain, delinquency, and personality traits. They found that negative emotionality/low constraint – which was comprised of measures of impulsivity, hyperactivity, unhappiness, and other negative emotions akin to low self-control – conditioned the association between strain and delinquency. Similarly, in a study of HAB, anger, strain, and delinquency, we anticipate that youths who manifest hostile attributions when presented with vignettes involving interactions with peers and adults will be more likely to report a general trait of anger, and this anger will be channeled into delinquency. Thus, when high levels of strain are reported, those exhibiting a tendency toward HAB are especially likely to become angry and report greater involvement in delinquency. In sum, then, HAB conditions the association between strain and anger, consequently affecting the likelihood of delinquent behaviors.

Experimental research could also be used to measure HAB, strain, anger, and delinquency among adolescents (cf. Hubbard et al. 2002). Vignettes are simple to program into a computer. Youth would be presented with vignettes and their reactions recorded. They could then be placed in provocative situations that are designed to test stress and anger arousal. We anticipate – and this is supported empirically by laboratory research with children – that those exhibiting HAB are more likely to react to stressful situations with anger.

Qualitative studies are also needed to elaborate the potential role of HAB in strain theory. As discussed by Agnew (2006b), qualitative studies suggest that adolescents utilize “storylines” to make sense of their involvement in delinquent behavior. For instance, one of these storylines that has direct relevance for GST is when a youth’s core identity or status is threatened and she blames another for this perceived negative treatment. Peers often provide encouragement for an aggressive or violent response, although exploring the potential role of HAB through in-depth interviews would provide an additional context for this type of research. For example, HAB may

increase the likelihood that a youth’s storylines lean toward a need for vengeance or aggressive reactions to perceived slights. A carefully approached open-ended interview by a skilled researcher could provide important information about whether signs of HAB are present and how they affect a youth’s perceptions of situations both real and imagined. Thus, HAB need not simply be another factor in the positivist tradition of delinquency research; especially since it has implications for self-identity, personalized narratives, and symbolic interactionist notions of how youths perceive reality and their place in the social order (cf. Matsueda 2006).

However, it is also important that these research efforts consider the variety of strains that Agnew proposed are important in GST. Many studies of GST have focused only on stressful or negative life events rather than a full course of strains (e.g., Hoffmann and Miller 1998). Studies should address other strains such as those that elicit feelings of unjustness (cf. Miller 2001), as well as strains that gauge the failure to achieve positively valued goals (cf. Rebellon et al. 2009).

## CONCLUSIONS

GST is a promising model of the etiology of delinquency and crime that has generated dozens of studies over the last two decades. Agnew and others have elaborated GST to take into account additional coping mechanisms, emotions, personality traits, macrosociological conditions, and adult criminal behavior (see, generally, Agnew 2006a). However, one core concept that has been neglected, yet arguably plays a central role in GST as well as in earlier versions of strain theory, involves attributions of blame. Known generally as externalization of blame, several observers have viewed it as the key moderator in the association between strain and delinquency. In this paper, we have revisited this concept and considered it in light of more recent research on attribution theory.

Our main argument is that the key to understanding why some youths react to strain with anger whereas others take an alternate route involves attributional styles. In particular, youths who react with anger tend to have an external attributional style that focuses on blaming other people for their adversity. However, we also contend that those youths who manifest hostile attribution bias are particularly likely to assign hostile intentions to others who they see as the cause of their adversity. When blame can be channeled directly toward another person or group of persons by those with these biases, anger is the likely result. Consequently, for reasons well explicated by Agnew and others, aggression, delinquency, and violence tend to ensue. Moreover, such biases and reactions tend to elicit more presumed negative treatment, which then exacerbates a tendency to externalize blame and react with

anger. Thus, there is likely a long-term reciprocal pathway involved in these associations.

Of course, much more research that explicitly links attributional styles and biases with GST mechanisms is needed. As far as we have been able to ascertain, GST studies have not included measures of attributional style, HAB, or even tendencies to externalize blame in general. It is also uncertain whether attributional styles that place youths at risk of aggression and delinquency may be overcome by conventional coping resources such as positive social support or living in an advantaged neighborhood. Thus, more work is required to determine whether, as we have argued, attributions are the key moderating mechanism in GST, in what specific ways attributions lead to anger in the presence of adverse conditions, or whether other moderators are as consequential for explaining the associations among strain, anger, and delinquency.

## Endnotes

<sup>1</sup> It is curious to note that attributions of blame in Agnew's seminal article were discussed in the context of Cloward and Ohlin's (1960) research. Yet these scholars were influenced by Sykes and Matza's (1957) work on techniques of neutralization that appeared a few years earlier. Although Cloward and Ohlin (1960, pp.134-139) were critical of this neutralization model, they were clearly taken with the notion that attributions of blame can play a central role in the process that leads to delinquent adaptations.

<sup>2</sup> Agnew also discussed other pathways that lead from strain to delinquency, such as when other consequent emotions (e.g., depression) motivate escapist forms of behaviors (e.g., drug use). In this paper, however, we focus on the pathway to delinquency through anger because it has played such a central role in theoretical and empirical examinations of GST.

<sup>3</sup> The internal vs. external dimension is closest to the concept of externalization of blame, though there are subtle differences. For example, externalization of blame is based on dated research that failed to consider broader aspects of attributional styles. The internal vs. external dimension is part of a larger context of how people interpret events, such as how they attribute causality, the factors that affect these attributions, and the likely outcomes that are determined, in part, by these processes.

<sup>4</sup> A related area of research that we do not explore, but likely has implications for research on attributions and delinquency, involves locus of control. This concept refers to the tendency of individuals to attribute events to forces in their control or outside of their control. People who think that they control the forces that affect their lives have an internal locus of control, whereas those who see mostly

the effects of luck or the influence of powerful others on their life course have an external locus of control (Twenge 2007; Twenge, Zhang, and Im 2004). Studies have consistently found that people who manifest external locus of control tend to have problems with depression, anxiety, school failure, self-control, and other negative life course outcomes (Chorpita and Barlow 1998; Kliever and Sandler 1992). Moreover, some research suggests that external locus of control is associated with conduct disorder, aggressiveness, and delinquent behavior (Hindelang 1973; Liu et al. 2000; Peiser and Heaven 1996; Powell and Rosén 1999). Research on locus of control has rarely been linked explicitly to attribution theory or any form of strain theory, though; thus it falls outside the domain of this paper.

<sup>5</sup> Another oversight that is as problematic as failing to consider this causal and temporal chain of events is the emphasis on a positivistic research agenda to conduct these studies. As described later, there is promise in symbolic interactionist based research approaches for understanding attributions and behaviors (cf. Agnew 2006b). For example, linking identity theory, attributional inclinations, strain, and delinquency requires a research agenda that is open to narrative analysis based on in-depth, open-ended interviews and observational protocols. This obviously challenges the use of terms such as "causal attributions" since these approaches tend to subvert attention to "causality," yet they may also be more appropriate to examining the subtleties of understanding delinquent behavior.

<sup>6</sup> A reviewer of an early draft of this paper commented that Agnew et al. (2002) did not focus on anger, but rather addressed the conditioning effect of negative emotionality on the association between strain and delinquency. They found that strain is associated most strongly with delinquency among youths who exhibit negative emotionality/low constraint. However, negative emotionality/low constraint is measured by traits such as impulsivity, hyperactivity, bad temper, argumentative, and unhappiness. Some of these traits have been used to measure low self-control and anger, thus obfuscating the particular personality dimension of concern in studies of GST (cf. Hirschi 2004). Our goal is to show that another type of trait – which involves whether youths externalize blame and among whom this tends to occur – is particularly important for elaborations of strain theory.

<sup>7</sup> Research has also found that depression and delinquency are not independent phenomena; there is substantial co-occurrence of these two conditions among adolescents (e.g., Hagan and Foster 2003; Kaufman 2009). Thus, we do not argue that the pathway from strain to delinquency is uniform or independent of negative conditions such as depressive symptoms; rather, we propose that the association between strain, anger, and



delinquency is conditioned by external attributions of blame that involve tangible others.

<sup>8</sup> Research with primates suggests that getting angry when situations are interpreted as unfair is a typical reaction. Evolutionary psychologists have used this and other evidence to argue that animals, including humans, are “hard-wired” to react to unfair or harmful behavior on the part of others with negative emotions such as anger and anxiety (see Horne [2009] for a concise review of this idea). Thus, it is likely that overcoming – or at least reigning in – such neurological tendencies requires some conventional socializing mechanism; without adequate socialization, perhaps HAB is the natural outcome (Dodge 2006). In a related line of research, children with HAB tend to have greater physiological arousal during stressful interactions, with the stereotypical “hot-headed” reactive aggression ensuing (Hubbard et al. 2002).

<sup>9</sup> Although it would be our preference to test the model we have outlined, the lack of data available that are appropriate for such a test make it impossible to provide an empirical examination in this paper. Moreover, as we suggest later, there are actually several distinct research approaches that are available to test the model. We offer these as an early roadmap to other researchers who may wish to examine HAB’s role in GST.

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