GENERAL STRAIN AMID RESTORATION: AN EXAMINATION OF INSTRUMENTAL AND EXPRESSIVE OFFENSES

By

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GENERAL STRAIN AMID RESTORATION: AN EXAMINATION OF INSTRUMENTAL AND EXPRESSIVE OFFENSES

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Agnew’s general strain theory assumes an interaction among three distinct forms of social psychological strain, negative affect, and deviant or delinquent adaptations. Extant research suggests that the cognitive processes leading to deviant or delinquent adaptations differ markedly based on offense type, personal characteristics, and indirect processes such as delinquent peer exposure and injustice judgments. The present analysis extends previous work by examining general strain theory from an experimental, sociolegal perspective. More specifically, the study looks at whether standard courtroom processing or emotions-based reintegrative shaming conferences moderate strain, negative affect, and prospective criminality for instrumental (juvenile property offending with personal victim; juvenile shoplifting) and expressive (violent) offenses. The impact of a variety of conditioners to include social support, self-efficacy, individual coping strategies, and external attribution is explored, as are implications for future research and public policy.

Findings indicate that individual forms of strain differ considerably in their impact on inward- and outward-oriented affect (depression and anger, respectively) and in their relationship to instrumental and expressive offenses. Findings also indicate important trends related to the cumulative effect of strains, of strain nonlinearity, and of the overarching importance of injustice
judgments. Finally, the present analyses lend support to many, but not all, of the core precepts of restorative justice theory. In short, despite the criminal justice system’s best intentions, many offenders are being treated in a manner that most predisposes them to future criminality.
CHAPTER 1
INTRODUCTION

Finding its theoretical lineage in strain models by Merton (1938), Cohen (1955), and Cloward and Ohlin (1960), Agnew’s (1992) general strain theory (GST) emphasizes how negative relations create pressure toward crime and delinquency. Defined as relationships in which an individual is not treated as he or she would like to be treated (Agnew, 1992), strain is thought to increase negative emotions (anger primarily, but also fear, guilt, or depression) and to increase the need for corrective action, with crime being one such response. While past tests of GST have focused on juvenile populations (e.g., Agnew and White, 1992; Baron, 2004; Mazerolle and Maahs, 2000; Piquero and Sealock, 2004), Agnew (1995) argues that the theory can be applied to both juvenile and adult populations (also see deprived communities, Agnew 1999).

Whereas life stressors can number in the many hundreds (Agnew, 2001; Cohen, Kessler, and Gordon, 1995), GST is organized around three scenarios in which individuals are likely to feel they are being treated badly, namely, when others (1) prevent, or threaten to prevent, an individual from achieving positively valued goals; (2) remove, or threaten to remove, positively valued stimuli; or (3) present, or threaten to present, negatively valued stimuli (Agnew, 1992). As such, GST extends traditional strain theory’s focus on the disjunction between aspirations and expectations (Kornhauser, 1978).

Agnew advances a range of factors that condition the effect of strain on delinquency—factors which influence whether an individual adapts to strain using delinquent or nondelinquent means. The original explication of the theory (Agnew, 1992) points to cognitive, behavioral, and emotional adaptations to strain conditioned by various personal and social resources to include deviant attitudes, deviant peers, and external attributions. The theory also draws attention to the
potential impact of magnitude, recency, duration, and clustering of strainful events insomuch as stress research suggests that adverse events are more influential under these conditions (Thoits, 1983).

Expressed succinctly, strain theory is the only major theory to principally argue that crime results from the negative affect caused by negative relations with others (Agnew, 1992). “Strain” within GST can be thought of as a distal cause of crime; it is through the processes of mediation and conditioning that crime ultimately gets explained (Piquero and Sealock, 2004). Negative affect is presented as mediating the relationship between strain and crime, while other variables condition strain’s effect on crime.¹

As what might be considered a response to critics (e.g., see Jensen (1995:152) regarding the theory’s undue breadth and virtual “unfalsifiability”), Agnew (2001, 2006a) recently completed narrative reviews of GST’s empirical record and attempted to “tighten” any unnecessary amorphism by specifying the types of strain that appear to be most associated with crime. In sum,

. . . crime is related to verbal and physical assaults, including assaults by parents, spouses/partners, teachers, and probably peers. Crime is also related to parental rejection, poor school performance, and work problems, including work in the secondary labor market. Crime is not related to the expected failure to achieve educational/occupational success or to unpopularity with peers. Beyond that, the relationship between various strains and crime is unclear. (Agnew, 2001:325)

The 2001/2006 elaborations also provide guidance on the way forward. Outlining gaps in the literature and lessons learned, Agnew recommends that the next wave of research on GST eliminate cumulative measures of strain (i.e., combining several unrelated, and partly empirically unsupported, strains into single scales), use GST-specific data resources, explore the utility of

¹ For example, see Mazerolle and Maahs’ (2000) assessment of delinquent peer exposure, weak moral constraints, and behavioral propensity as conditioners for strain on crime.
strain and its mediators in new contexts, and be more explicit about the characteristics and conditions that facilitate crime. To the last point, research specifies that strains appear to be more likely to lead to crime when they are seen as unjust, high in magnitude, associated with low social control, and create pressure or incentive to engage in criminal coping (Agnew, 2001:351).

The present study contributes to the literature in several important ways. It employs secondary analysis of data from the Canberra Reintegrative Shaming Experiments (RISE) (1995-1999), a randomized controlled experiment that compares the effectiveness of standard courtroom processing with restorative justice group conferences for four offense types: drunk driving, juvenile property offending with personal victims, youth violent crimes, and juvenile shoplifting offenses (Sherman, Braithwaite, Strang, and Barnes, 2001). The restorative justice-inspired RISE study aims to test four primary hypotheses: (1) that there will be less repeat offending after assignment to conference than after assignment to court; (2) that victims will be more satisfied with conferences than with court; (3) that both offenders and victims will report higher perceptions of procedural fairness in conferences than in court; and (4) that public costs of a conference will be lower, or at a minimum no greater, than traditional courtroom processing (Harris, 2001; Sherman et al., 2001).

Toward this end, three primary data collection methods were utilized by the RISE research team: administrative police reports with arrest/offense data, observations from an offender’s respective treatment (court or conference), and detailed offender interviews following the court or conference proceeding. Interview items measure a variety of matters related to life stressors, court/conference stressors, stigmatization, social support, procedural fairness, and delinquency.

The present study focuses on the detailed offender surveys. In doing so, the present study builds on GST’s empirical record in several ways: (1) no known tests have examined general
strain from a sociolegal perspective, (2) no known tests have utilized experimental data, (3) there has not generally been as rich a set of GST-specific strains and conditioners available for study (e.g., that dealing with four distinct categories of strain, or the impact of injustice judgments, peer deviance, social support, self efficacy, self esteem, external attribution, and cognitive/behavioral coping conditioners), (4) tests have not traditionally utilized active offenders (although see Baron, 2004; Baron and Hartnagel, 2002; Baron, Kennedy, Forde, 2001; Piquero and Sealock, 2000, 2004), (5) tests have not generally examined international contexts (although see Bao et al., 2004; Mesch, Fishman, and Eisikovitz, 2003; Pinhey and Okinaka, 2004), and (6) most tests have failed to utilize subjective measures of strain--or those types of strains stemming from events or conditions that are disliked by the people experiencing them (although see Agnew and White, 1992).

A restorative justice context is particularly apt because it is thought to alter the likelihood that sanctions will be viewed as unjust, viewed as high in magnitude, associated with low social control, or create pressure or incentive to engage in criminal coping--characteristics of strain that are most thought to lead to crime (Agnew, 2001:352). Furthermore, the RISE study’s experimental design allows for the effect of treatment to be disentangled from confounding effects (Weisburd, Lum, and Petrosino, 2001). Agnew (2006a:198) calls for the use of experimental data in tests of the theory, particularly with regard to the detection of conditioners/moderators.
If the social sciences are to advance, researchers must adequately address the interplay between rationality and emotionality in a new paradigm of justice, one that casts emotion as linchpin for criminal justice practice and uses “reason for emotion, rather than emotion against alleged reason . . . to make justice more rational about its effects on the emotional causes and prevention of crime” (Sherman, 2003:2) (also see Massey, 2002). By directing attention to predictors and intervening mechanisms absent or underemphasized in competing theories, social-psychological strain theory provides a useful lens through which to examine emotionality and criminality.

**General Strain: Constraint or Motivation for Crime?**

As Agnew (1995) points out, although strain theory shares characteristics with traditions to include social control theory--that of crime resulting when individuals cannot get what they want or need, for example--it adds the differentiating measure of emotionality by arguing that categories of goal blockage, removal of positive stimuli, or presentation of negative stimuli pressure a person into deviance (p. 114). Assertions by critics of a propositional overlap between strain and social control focus on an assumption that people experiencing strain commit crime because they are freed from controls; in other words, rational actors become free to pursue their own self-interest (Bernard, 1995).

In essence, the debate resides in the determination of which families of theory align with factors that entice or pull individuals into crime on the one hand, and with those factors that pressure or push individuals into crime on the other. One such categorization places social control (Hirschi, 1969; Sampson and Laub, 1993), self-control (Gottfredson and Hirschi, 1990), routine activities (Felson, 1998), rational choice (Cornish and Clarke, 1986), and social learning...
(Akers, 1985) in the former. Here, individuals may be pulled into crime because of factors to include the reinforcement of such behavior, exposure to successful criminal models, the acquisition of beliefs favorable to crime, or a desire for immediate gratification.

The pull/push dichotomy places strain in the latter; as has been discussed, this pressure toward crime centers on negative treatment by others, the experience of a range of negative emotions (e.g., anger, fear, depression), and crime as a corrective response to such pressure (Agnew, 2005:25-26). Here, individuals are unable to disentangle themselves from relationships and situations in which they are not treated as they wish (Vold, Bernard, and Snipes, 2002:324).

Of these varied affective states, anger is thought to be the most prominent mediator of the processes leading from strain to crime because anger increases felt injury and the need for adaptive, delinquent, responses (Agnew, 1992:60). Such responses are more likely when strained individuals’ nondelinquent coping strategies are taxed, chronic strain lowers one’s threshold for adversity, or chronic strain increases the likelihood of negative arousal at any given time (Agnew, 1992; Averill, 1982; Bandura, 1983).

As counterpoint to criminological traditions that may lack sufficiently explicit ties to an intellectual heritage,1 contemporary advancements in strain theory are framed as building on the influential strain theories of Robert K. Merton (1938), Albert Cohen (1955), and Richard Cloward and Lloyd Ohlin (1960). As Agnew (1992, 1995) characterizes the progression, strain theories have become broader, have examined more types of strain, have begun to fold in research from medical sociology/psychology (e.g., stress; frustration-aggression; social learning)

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1 For example, as Beirne (1997) characterizes Beccaria’s core protestations in Dei delitti e delle pene (1764): “(I)n what was more than simply a casual failure to document his sources, Beccaria’s text is virtually bereft of intellectual bearings, which, had he openly pointed to them, would have allowed his readers . . . the privilege of observing more clearly the precise mast to which he chose to nail his colors” (Beirne, 1997:786).
and social psychology (e.g., equity; justice), and hope to explain crime in all social classes—a marked contrast to earlier traditions.

**Sequence of Topics**

To provide adequate context for the study’s use of a large-scale restorative justice program as a platform for testing general strain theory (GST) (Agnew, 1992), the review of literature outlines the theoretical basis, and major research questions, of GST while also providing an overview of restorative justice theory (Braithwaite, 1989). Charting the over half-century of scholarship that forms the basis for GST, the section begins with a discussion of Merton’s foundational work on anomie/strain, scholarship that has been characterized as “the single most influential formulation in the sociology of deviance” (Clinard, 1964:10) and the “purest example of a strain theory” (Hirschi, 1969:3), to be followed by an outline of the subsequent work by Cohen (1955) and Cloward and Ohlin (1960) that attempted to better understand what drives strained individuals toward deviant adaptations.

The review of literature then moves on to an overview of Agnew’s 1985 extension of “classic” strain, the 1992 formulation of GST, and recent empirical tests and elaborations (see Agnew, 2001, 2006a). Prior to a presentation of methodology, the review of literature then segues into an overview of restorative justice theory and of the Canberra Reintegrative Shaming Experiments (RISE) (Sherman et al., 2001).

**The “Continuity” of Strain Theory**

Strain theories propose that socially generated pressures drive people to commit crime—that if one treats another badly, s/he may get mad and engage in crime as a result (Agnew, 1995). This apparent parsimony, an important criterion for sound theory (Akers and Sellers, 2004) but that has not escaped its own share of criticism (e.g., Hirschi, 1969; Jensen, 1995), belies over
sixty years of scholarship that is in many ways a continuity tracking Merton (1938) to Cohen (1955) to Cloward and Ohlin (1960) (Passas, 1995).

Although differing in detail, all invoke a disparity between widely shared ambitions and anticipated or real failure in realizing those ambitions as a source of high rates of crime in disadvantaged groups (Jensen, 1995). Each argues that everyone in the United States, poor as well as rich, aspires to achieve some manner of success (monetary to Merton (1938); middle-class status to Cohen (1955)), but that significant segments of the population are prevented from doing so through legal channels such as a quality education and good job (Agnew, 2006a). Much of the research tradition finds its historical roots in a culture-driven “appetite” (i.e., the acquisition of wealth) failing to work in tandem with structure-driven opportunity to produce strain (Merton, 1938).

**Merton and Strain in American Society**

Merton (1938) posits that the socially induced disjunction between culturally valued goals and the means available for their attainment facilitates an anomic breakdown, or state of deregulation, leading to high rates of deviation. As opposed to Durkheim’s (1951) conceptualization of anomie as an abnormal, pathological phenomenon to be combated, Merton’s social-structural strain theory presumes that the United States’ market economy of the 1930’s, a utilitarian culture that placed great emphasis on success and failure, was characterized by a built-in disposition toward moral normlessness amid the “American dream” ideal (Passas, 1995).

Patterns of immigration during the rise of the urban city also provided a backdrop for a social explanation of egoism amid constricted opportunities:

It appears that this highly visible tower of opportunity attracts substantial numbers of migrants who, rightly or no, believe that they have the talents that can best be developed
and rewarded within the ample confines of the city. But though many are called, comparatively few can be chosen. (Merton, 1968: 223)

Such is Merton’s focus on the disjunction between goals and means and the centrality of money and pecuniary success in the value system of the United States (Passas, 1995). So, to Merton, the link between strain and delinquency is instrumental, or utilitarian, as delinquency becomes a way of obtaining what one wants but cannot get though legitimate channels (Agnew, 1980). Put simply, “in the American Dream there is no final stopping point . . . at each income level Americans want about twenty-five percent more (but of course this ‘just a bit more’ continues to operate once it is obtained)” (Merton, 1968:190).

In light of the present study’s focus targeting GST within a sociolegal framework, a detailed discussion on the disentanglement of Mertonian “anomie” from Mertonian “strain” has been set aside. The issue is far from closed, however. Some have argued that criminology should more clearly distinguish between two theories in the Mertonian paradigm, one focusing on a micro-level theory of deviant motivation (strain) and the other a macro-level theory of social disorganization on the distribution of deviance (anomie) (Messner, 1988). Similarly, Bernard (1987) argues that Merton’s paradigm contains a (conceptually distinct) “cultural argument that focuses on the value of monetary success and the importance of using legitimate means in pursuing that value, and a structural argument that focuses on the distribution of the legitimate opportunities in the society” (Bernard 1987:267). Interestingly, Merton himself acknowledged that his early work had not adequately explained the link between anomie and deviant behavior, an impetus for his work on opportunity structures (Merton, 1995).

Recent research has assessed whether strain and anomie perspectives make contradictory predictions about the effects of money on delinquent involvement. Strain, on the one hand, argues that monetary resources attenuate potential pressures in the face of goal blockage, while
anomie asserts that possession of money facilitates ever-greater degrees of delinquency (Wright, Cullen, Agnew, and Brezina, 2001).

Individuals facing such pressures, particularly those in the lower classes who are at a particular disadvantage, are thought to have a number of ways to respond to the stressful situation of being unable to achieve monetary success through legitimate channels (Agnew, Cullen, Burton, Evans, and Dunaway, 1996). Merton (1938) described these possible adaptations as innovation, conformity, ritualism, retreatism, and rebellion.

**Innovators**

To Merton (1968), most crime that takes place in society manifests through a process of innovation. Innovators remain allegiant to monetary culture goals but find they cannot succeed through education, a legitimate career, and so forth. Although Merton focuses primarily on the lower classes due to inadequate socialization in that stratum, innovation may take form in both new variants of white-collar crime and in more traditional illegal operations such as prostitution, drug dealing, or robbery. Despite the foundational work’s relative lack of attention to the precise factors that determine whether one reacts to blocked goals by innovating, Merton (1968) predicted that those who are less likely to internalize dominant societal norms (e.g., the lower class) are more likely to violate such norms in the pursuit of goals (Agnew, 1985).

**Conformists**

Conformists generally accept the culture goals (e.g., monetary success) and institutionalized means (e.g., education; legitimate career) and strive to achieve wealth through approved methods of middle-class values. In stable societies, most persons will choose conformity; because such behavior is aligned with the basic values of a society, Merton argued that conformity was critical in allowing one to “speak of a human aggregate as comprising a society” (Merton, 1968).
Ritualists

Merton’s third adaptation, ritualism, might best be depicted by Melville’s “Bartleby The Scrivener” (1853), a man who would “prefer not to” face life on life’s terms. Although ritualists reject the goal of material success, they play it safe by concentrating on retaining what little is to be gained by adhering zealously to norms such as honesty and hard work (Akers and Sellers, 2004).

Retreatists

Retreatists, in contrast, drop out--they withdraw from society by rejecting both the cultural goals of material success and the conventional means of achieving this success, often through excessive substance use as psychotics, autists, pariahs, outcasts, and vagabonds (Merton, 1968).

Rebels

Merton’s final adaptation, rebellion, is marked by individuals who replace societal values with new ones, values which can be political (e.g., socialist renewal), spiritual (e.g., higher states of consciousness), or can take other forms.

In short, while conformists strive, innovators cheat, ritualists keep playing with no hope of winning, retreatists quit playing, and rebels attempt to get a different game going (Vold et al., 2002:140). It is important to note that Merton’s adaptations are not static personality traits; instead, they are better viewed as a choice of behaviors in response to strain. Individuals may develop patterns of behavior that draw on several adaptations simultaneously, as in innovation, retreatism, and rebellion being brought to bear by a drug-abusing, professional criminal espousing militant, separatist philosophies (Vold et al., 2002). As an additional point of illustration, students’ reactions to strains--processes which came to inform Agnew’s revised strain theories (1985, 1992)--may run the gamut. Consider a graduate student who experiences significant difficulty succeeding in a course of study: he/she may cheat (innovation), remain in
the program with no hope of finishing (ritualism), quit (retreatism), or establish an entirely
different set of values separating him/herself from the expectations associated with the academic
“ethos” (rebellion). Using this example, it becomes clear why Merton (1968) most directly tied
innovation (primarily), retreatism, and rebellion with delinquency.

Cohen’s Delinquent Boys

As a point of contrast to Merton’s (1968) claim that the link between strain and
delinquency is primarily utilitarian, Albert Cohen (1955) argued that the “facts” of delinquency
suggest otherwise: that most delinquency is nonutilitarian, malicious, and negativistic (i.e., most
delinquents do not hurt or steal for money, but do so for the “hell of it”) and that delinquency
finds its foundation not in individual-level, Mertonian processes but as a byproduct of lower- and
working-class gang formation (Agnew, 1980).

Furthermore, Cohen (1955) asserts that schools provide the testing ground for
criminogenesis--that children of lower social classes are unprepared for the behavioral and
educational expectations (“measuring rods”) that dominate the middle-class culture of the
educational system (1955:88-91). As a result of the strain, some youth undergo a “reaction
formation” and commit malicious, negativistic crimes that reflect a rejection of middle-class
standards. As Cohen explains,

The working-class boy, particularly if his training and values be those we have here
defined as working-class, is more likely than his middle-class peers to find himself at the
bottom of the status hierarchy whenever he moves in a middle-class world, whether it be of adults or of children.

To the degree to which he values middle-class status, either because he values the good
opinion of middle-class persons or because he has to some degree internalized middle-class
standards himself, he faces a problem of adjustment and is in the market for a solution.
(1955:119)

To Cohen, one such solution is the formation of a separate, delinquent subculture in which the
working-class boy can compete successfully. The delinquent subculture provides an alternative
avenue to status, in essence: one that explicitly repudiates the middle-class standards that had placed the child at such a disadvantage in the first place.

Where Merton sees strain stemming from unachieved monetary goals, Cohen sees strain very differently. Rather than strained individuals using illegitimate channels to achieve their goals, Cohen essentially argues that (to use Merton’s term) delinquents utilize rebellious adaptations in response to their inability to achieve middle-class status through either legitimate or illegitimate means; in other words, they construct a new set of goals and means altogether. In sum, through their life experience, these strained juveniles learn that middle-class status is not something you can steal (Agnew, 1980),

Cloward and Ohlin’s Delinquency and Opportunity

But what of those lower-class juveniles who appear to largely resist both a utilitarian and nonutilitarian criminal calculus, or what contemporary research might refer to as a low-level adolescence-limited offender or abstainer (Moffitt, 2003)? As Cloward and Ohlin (1960) questioned, why do some strained youth engage in delinquent adaptations and/or join delinquent subcultures, and why do some youth choose a stable “corner-boy response”? The corner-boy response may involve non-conforming behaviors such as truancy, but generally does not include violent acts that indicate a repudiation of middle-class standards (Cloward and Ohlin, 1960:184).

In an attempt to answer this question, Cloward and Ohlin (1960) developed an extension to strain theory focusing on the relationship between community dynamics and strain. More specifically, they argued that Cohen was only partially correct: that some delinquency is in fact based on a rejection of middle-class values, but that these delinquents tend to engage in less serious offenses. The more serious offenders, on the other hand, are more utilitarian in their outlook: they desire money more than status, and the desire to spend money is conspicuous in nature. In short, these utilitarians desire “fast cars, fancy clothes, and swell dames” (Cloward
and Ohlin, 1960:97). Rather than wishing to live by middle-class standards, Cloward and Ohlin’s extension to strain theory contends that juveniles wish to achieve status on their own, lower-class, terms.

**Importance of community dynamics**

Cloward and Ohlin align with Merton by arguing that most low-class youth are blocked (or anticipate being blocked) from achieving goals of monetary success, but that their extreme, conspicuous emphasis on acquiring and spending money is uniquely lower-class in nature. Perhaps most importantly, the *community dynamics* an anticipated goal blockage is nested within is critical to understanding whether delinquency will emanate. For this reason, Cloward and Ohlin pick up on not only strain/anomie from Merton and Cohen, but also traditions to include social disorganization and differential association.

In essence, Cloward and Ohlin assert that delinquent adaptations are best explained by one’s social location in legitimate and illegitimate opportunity structures— that “just because legitimate opportunities are blocked does not necessarily mean that illegitimate opportunities are freely available . . . . Just as there is unequal access to role models and opportunities to fulfill conforming roles, there is unequal access to illegitimate roles and opportunities” (Akers and Sellers, 2004:168). In light of this distinction, Cloward and Ohlin (1960) assert that delinquent subcultures are necessary to translate strain into crime because social support acts as a form of enabler.

**Conflict subculture**

If an individual’s neighborhood is highly disorganized, a “conflict” subculture will form that is violence-oriented (and harkens back to Cohen’s model for a delinquent subculture). Due to the social disorganization of the neighborhood, few illegal opportunities are available to offset the lack of legal opportunities. Mentors are few, either conventional or deviant. As opposed to
earning status through “connections” or technical skills (or even, for that matter, mere physical strength), status is earned by one’s willingness to risk injury or death (Cloward and Ohlin, 1960).

**Criminal subculture**

If an individual’s neighborhood is more integrated, a “criminal” subculture forms in which older criminals mentor younger ones in obtaining money and power through offenses such as theft and extortion. As such, the criminal subculture is “comprised of pecuniary illicit acts that lead to success as conventionally defined (and) arise in organized slums consisting of stable organization between older and younger criminals, and between criminals and conventional elements (the fence, fix, and bail bondsman)” (Matsueda, Drakulich, and Kubrin, 2006). This subculture corresponds with Merton’s adaptation of innovation.

**Retreatist subculture**

Related to one’s degree of unequal access (Akers and Sellers, 2004), individuals who have failed in both legitimate and illegitimate worlds (and have thereby relinquished both goals and means, legitimate and illegitimate) will join “retreatist” subcultures focused primarily on the consumption of illicit substances. These individuals are in effect “double failures” who have prospects in neither pro-social (good education, good job) nor criminal activities. Earning status or admiration in a retreatist subculture is extremely limited, and can be gained by few activities other than getting high and maintaining a drug habit (Vold et al., 2002).

In sum, Merton, Cohen, and Cloward and Ohlin provide related, yet diverging, pictures of the role of strain on delinquency. Merton (1968) emphasizes a universal emphasis on monetary success, tempered by special disadvantages in the lower classes that lead to strain and delinquent or nondelinquent adaptations. Cohen (1955) emphasizes reaction formations as youth reject middle class “measuring rods.” Finally, Cloward and Ohlin (1960) argue that delinquent
adaptations are best explained by one’s social location in legitimate and illegitimate opportunity structures.

**Evolution of Classic Strain Theory**

After many years of prominence through the 1960’s, strain theory received strong criticism during the 1970’s as research began to suggest a weak relationship between the disjunction of aspirations and expectations for success and the theory’s inability to explain the middle-class delinquency that had been revealed by self-report data (Agnew, 1995). Other criticisms focused on the apparent inability of strain theory to explain variability in delinquency, such as why many delinquents go for long periods without committing delinquent acts (Agnew, 1980), why many strained individuals respond in a conventional, rather than deviant, fashion (Colvin, 2000), and how family-related variables such as marital adjustment and parental discipline relate to delinquency (Agnew, 1980).

Some went so far as to call for abandonment of the theory altogether (Hirschi, 1969; Kornhauser, 1978) for these reasons and for a purportedly unclear linkage between strain and social control. Bernard (1995:83) detailed “conventional wisdom” in criminology in the 1970’s regarding Merton in particular:

She (Kornhauser, 1978:162-65) rejected Merton’s argument that American culture values the goal of economic success more than the institutionalized means of honesty and hard work. On the one hand, she interpreted the desire for economic success in Hobbesian terms, as a natural desire not requiring cultural support. On the other hand, she argued that culture itself should be defined in terms of a design for a moral order that is passed as a valued heritage from generation to generation.

Defined this way, economic success cannot be a component of any culture. The appropriate interpretation is that American culture, with its values of hard work and honesty, is extremely weak and is overwhelmed by the Hobbesian desires for economic success. This then becomes a ‘control’ formulation, with deviance itself requiring no positive explanation other than the weakness of controls. (Bernard, 1995:82-83)
Agnew’s Revised Strain Theory

Introduced partly as a thesis (Agnew, 1980) and then more extensively five years later (Agnew, 1985), Agnew responded to the criticism of strain/anomie theory with a patently micro-level, social psychological strain theory that attempted to address the aspirations/expectations conundrum\(^2\) and other criticisms by essentially reframing the issue: rather than operationalizing strain as a blockage of *goal-seeking* like his predecessors, the revised theory argues that the blockage of *pain avoidance* more closely resonates with adolescents’ life realities as they are often in highly aversive situations from which they have no legal means of escape. Such a life can feel like a closed circle: there is little autonomy from the expectations of family and school, and this lack of power over one’s environment can produce high levels of frustration, thereby leading to illegal escape attempts and anger-based delinquency. Adults, on the other hand, have legal routes of escape from such environments to include divorce, quitting one’s job, or deciding when and if to move to another locale (Agnew, 1985:156).

Other than through its generalized use of negative affect as mediator for strain on delinquency (a proposition, and body of literature, underutilized in earlier iterations of anomie/strain), Agnew’s revised theory (1985) was far better positioned to explain high rates of criminality among adolescents compared to adults, the delinquency perpetrated by more affluent individuals, why a period of time sometimes elapses between delinquent events within individuals (not easily explained, as “strain” had largely been held constant by Merton (1968), for example), and the impact of family-related variables such as parental discipline and marital adjustment (Agnew, 1980:11).

\(^2\) Empirical tests rarely find support for the prediction that delinquency is highest when aspirations for success are high and expectations are low (Agnew, 1985; Kornhauser, 1978). To the contrary, evidence suggests that delinquency is highest when both aspirations and expectations are low, and delinquency is lowest when both aspirations and expectations are high (Hirschi, 1969; Liska, 1971).
In a test of the revised theory using the “Youth in Transition” national sample of adolescent boys, Agnew (1985:161) found that, as expected, location in aversive family and school environments had a direct effect on delinquency and an indirect effect through negative affect. His results also held after social control and subcultural variables were controlled. Taken as a whole, the revised strain theory of delinquency ushered in a new avenue of focus for criminology and more detailed specifications for the types of strain most related to delinquency. It is to this that the present study next draws attention.

**General Strain Theory**

Somewhat similar to the intellectual flourish in the late 1960’s and early 1970’s (Akers, 1973; Hirschi, 1969; Lemert, 1967; Quinney 1970), the dynamic years surrounding 1990 provided criminology with a social-psychological “ethos” that advanced a multitude of theoretical perspectives to include shaming and restoration (Braithwaite, 1989), self-control (Gottfredson and Hirschi, 1990), procedural justice (Tyler, 1990), developmental taxonomies (Moffitt, 1993), and defiance (Sherman, 1993). The “ethos” also influenced criminal justice research in areas to include police response to spousal assault (Paternoster, Brame, and Bachman, 1997) and choice models in corporate crime (Paternoster and Simpson, 1996).

Such was the case in advancements related to strain. Leveraging work in medical sociology and psychology (e.g., stress; frustration-aggression) and social psychology (e.g., equity; justice), Agnew’s general strain theory of crime and delinquency (1992:48) specified three major sources of strain, explained how GST differed from longstanding traditions in differential association/social learning and social control, provided guidelines for the measurement of strain, and listed the factors impacting the choice of nondelinquent and delinquent adaptations.
Foundational Principles and Types of Strain

As touched on earlier, general strain theory (GST) emphasizes how negative relations create pressure toward crime and delinquency. Defined as events or conditions that are disliked by individuals, strain is thought to increase negative emotions (anger, most importantly, but also fear, guilt, or depression) and to increase the need for corrective action, with crime being one such response (Agnew, 2006a).

Although strains number in the hundreds (Agnew, 2001), GST is organized around the proposition that individuals are likely to feel they are being treated badly when they (1) fail to get something they want, (2) lose something they value, or (3) receive something bad (Agnew, 2006a). A more formalized conceptualization reads as goal blockage, removal of positively valued stimuli, and presentation of negatively valued stimuli, respectively (Agnew, 1992). Life conditions tying to the first condition may include having little money, autonomy, or status; the second condition, a friend or family member dying, or the dissolution of a valued romantic relationship; the third condition, sexual or physical abuse by family or hurtful insults by peers (Agnew, 2006a).

Perhaps not surprisingly given its incorporation of multiple threads of scholarship from multiple disciplines, GST has been criticized on the grounds of a lack of attention to strain caused by non-social factors such as illness (Agnew, 1992:75), a lack of consistency in the meaning attached to key measures (Agnew, 2001:320), a failure to fully recognize the implications of strain for social control and the social learning of delinquency (Agnew, 2001:348), and an unwieldy breadth. 3

3 “If strain can be defined in so many different ways, then strain theory is virtually unfalsifiable. There is always a new measure that might salvage the theory” (Jensen, 1995:152).
Mediators and Conditioners

As discussed earlier, “strain” can be thought of as a distal cause of crime; it is through the processes of mediation and conditioning that crime is explained (Piquero and Sealock, 2004). Negative affect such as anger, fear, or depression mediate the relationship between strain and crime, while other variables (e.g., personal and social resources to include deviant peers) condition strain’s effect on crime. The mediation process can be depicted as (strain $\rightarrow$ negative affect $\rightarrow$ crime) while the conditioning process (with regard to criminal coping) as ((strain * coping) $\rightarrow$ crime) (Piquero and Sealock, 2004:127). Although Agnew frames much of the theory through the lens of mediators and conditioners, one could just as easily view the conditioning processes (e.g., social control, injustice judgments) as moderators. An independent variable (in this case, strain) causes the mediator, which then causes an outcome (i.e., delinquent or non-delinquent adaptation). Moderators are associated with statistical interactions, or changes in the direction and/or strength of the relationship (Baron and Kenny, 1986).

General strain theory highlights anger as its primary mediator. Drawing on the emotions and justice literature coupling unjust treatment with anger (e.g., Mikula, 1993; Tedeschi and Felson, 1994) and GST-specific data coupling anger with crime (e.g., Brezina, 1998; Mazerolle and Piquero, 1998; Piquero and Sealock, 2000), anger is thought to:

... foster crime because it disrupts cognitive processes in ways that impede noncriminal coping; for example, it leads individuals to disregard information that may help resolve the situation, and it reduces the ability to clearly express grievances. Anger also reduces the actual and perceived costs of crime; for example, angry individuals are less likely to feel guilt for their criminal behavior because they believe that the injustice they suffered justifies crime. Finally, anger energizes the individual for action, creates a sense of power or control, and creates a desire for revenge or retribution--all of which lead individuals to view crime in a more favorable light. (Agnew, 2001:327)
Predictably, as opposed to negative affective states such as jealousy, depression, or fear, most empirical work on GST has highlighted anger as the mediator to be tested for its relationship with both strain and individuals’ corrective actions (although see Aseltine, Gore, and Gordon, 2000; Bao, Haas, and Pi, 2004; Sharp, Terling-Watt, Atkins, and Gilliam, 2001).

Efforts have also been made to better understand subcategories of this affective state. For example, Mazerolle and Piquero (1998) advance the idea that there are two primary dimensions of anger: dispositional (trait) anger and situational (reactive) anger, and that situational anger is in many ways more tightly aligned with GST because it refers to anger stemming from a particular strain. The researchers do assert, however, that the two dimensions are not mutually exclusive: that those with a greater disposition toward anger may be more likely to exhibit situational anger while exposed to strain (also Mazerolle, Piquero, and Capowich, 2003).

**Characteristics of Strain That are Most Likely to Cause Crime**

General strain theory specifies a number of characteristics of strain that are thought to increase the likelihood for criminal coping. For example, GST’s recent elaboration (Agnew, 2001, 2006a) draws attention to strains that are perceived to be unjust, high in magnitude, are associated with low social control, or create pressure or incentive to engage in criminal coping. The following section provides an overview of these characteristics, among others, that have been outlined in GST’s theoretical and empirical work.

**Strain as unjust**

As a modification to the theory’s original placement of injustice judgments under the strain category “failure to achieve positively valued goals” (i.e., strain as a disjunction between just/fair outcomes and actual outcomes), GST specifies that unjust treatment is not a distinct type of strain but can instead be used to classify any type of strain. In other words, any strain seen as
unjust should be more likely to lead to crime because it is more likely to activate emotions conducive to crime such as anger (Agnew, 2001:327).

**Strain as high in magnitude**

Strain that is perceived to be high in magnitude is more likely to be associated with crime in that it negatively influences one’s ability to accurately assess the costs of noncriminal versus criminal coping, it makes it more difficult to minimize the impact of high levels of strain, and it negatively impacts one’s ability to behaviorally cope in a nondelinquent nature (e.g., working harder on schoolwork in the face of very severe performance deficits/poor grades). In addition, strain that is perceived to be high in magnitude is often associated with depression—which taxes one’s overall coping ability itself—and may also generate ever-larger degrees of anger, thereby increasing the likelihood of criminal coping per the theory (Agnew, 2001:332).

**Strain associated with low social control**

As one of several indicators that GST is informed by psychological, social-psychological, and sociological perspectives, strains are also predicted to lead to crime when they are caused by or associated with low social control. Drawing on longstanding scholarship by Hirschi (1969) and others that argues that social control is ineffective when an individual’s bond to conventional society is weak, GST argues that low social control in the forms of (for example) erratic parental discipline (low direct control), homelessness (low direct control, attachment, and commitment), parental rejection (low attachment), or work in the secondary labor market (low commitment) cause crime through an attenuation of the perceived cost of crime and ability to cope in a noncriminal manner (Agnew, 2001:335). Conversely, a high degree of social control/social support is thought to enable people to cope more successfully with stressful events, it may trigger certain stress-related behaviors that function proactively to eliminate stressful events before they
occur, and/or it may prevent a stressful event from infringing on other aspects of a person’s life (Taylor and Aspinwall, 1996).

Interestingly, there may also be a reciprocal effect between social support and stress. Those who respond to stress with high degrees of vocalized distress may drive away potential members of a support structure, while too those who respond to stress in an exceedingly passive manner may also fail to garner support (Matt and Dean, 1993; Smith and Wallston, 1992).

Pressure/incentive to engage in criminal coping

Agnew draws on scholarship from social learning (Akers, 1985) primarily, but also routine activities (Felson, 1998), to argue that the type of strain that one experiences impacts the availability and appeal of noncriminal and criminal coping. That is, that certain types of strain are associated with exposure to individuals who effectively model crime, reinforce crime, and present beliefs favorable to crime (e.g., as in the case of child abuse or bullying) (see Akers, 1985 for social learning assumptions).

Furthermore, Agnew (2001:337) asserts that the causal mechanism is strain-specific by considering Anderson’s (1999) inner city Philadelphia. In that context, the presentation of negative stimuli takes the form of disrespectful treatment: young males learn on an almost daily basis via models, reinforcers, and the presentation of beliefs to respond to such treatment with

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4 Relatedly, the psychosocial stress literature suggests that social support may moderate stress both directly and indirectly. The direct effects hypothesis specifies that social support has a generalized effect: it is beneficial in both stressful and nonstressful periods. The indirect (“buffering”) hypothesis maintains that the benefits of social support are most evident during periods of high stress (Cohen and Hoberman, 1983). More specifically (and of particular import to Agnew’s theses (2001)), direct effects have been found in research that assesses the numbers of individuals one identifies as friends or the number of organizations to which one belongs; when assessed qualitatively regarding to the degree to which an individual feels that there are those in the environment who can help him if he needs it, buffering effects have been found (Taylor and Aspinwall, 1996).

5 Whether there exists an easily measurable, and empirically supportable, “middle ground” on vocalization of distress and social support remains an important question for GST; we may find that ((strain * social support) → crime) (diagram based on Piquero and Sealock, 2004) is informed by within-person and without-person processes not typically assessed in past tests of GST.
violence. Efforts to cognitively reinterpret one’s strain or to cope in a noncriminal manner are ineffective due to ever-increasing levels of abuse by perpetrators and regular reminders from members of the community that such abuse requires “action” (Anderson, 1999; Agnew, 2001).

Taken within the context of the broader discussion, Anderson’s ethnography (also see Bernard, 1990) vividly illustrates the other characteristics of strain that are most likely to lead to criminal adaptations as well: that of strain (here: overt, severe disrespect) being seen as violating justice rules, being perceived to be high in magnitude (in degree, duration, frequency, recency, and centrality) (see below), and in being associated with low social control (e.g., as in an inadequate police presence).

**Magnitude and duration/frequency**

Features of strains to include their duration, frequency, recency, and centrality (i.e., relationship to one’s values/activities/goals/needs) are thought to influence an individual’s perception of magnitude (Agnew, 2001). With regard to duration and frequency, chronic strains and/or those of high frequency are thought to be more deleterious than those that are short-lived and/or of low frequency. This prediction is consistent with research that models a nonlinear relationship between chronic/cumulative stress and psychological distress (Wheaton, Roszell, and Hall, 1997).

**Magnitude and recency**

Recent strains are thought to be more injurious than older ones. As with duration and frequency, recency is an important concept in attempts to disaggregate the effects of acute stressors from chronic strains. There, “life events checklists” are oftentimes designed to not only

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6 Also see Bandura (1983:128): “People are most frequently rewarded for following the behavior of models who . . . possess certain social and technical competencies, command social power, and who, by their adroitness, occupy high positions in various social hierarchies.”

7 But see Jang and Johnson (2003), who argue that chronicity may have an inverse, “dulling” effect.
estimate the effect of chronic strain on psychological distress separately from the effect of acute stressors, but also to estimate the timing of discrete stressors to gauge the effect of more recent stressors from those that occurred earlier (Avison and Turner, 1988).

**Magnitude and centrality**

Centrality, on the other hand, refers to the relationship between a strain and the identities, activities, needs, values, or goals of an individual (Agnew, 2001). GST predicts that strains that are highly “central” to an individual are more likely to be associated with negative affective states and the need for corrective action. Consider, for example, the case of three sisters who experience an identical objective strain: the death of a parent. Research indicates that the subjective evaluation of that strain can differ markedly between such sisters--that factors to include its centrality (a byproduct of the perceived role of the parent in one’s life vis-à-vis needs, activities, and identities), personal and social resources, and individual traits impact the perceived magnitude of the death.

**Cumulative impact of characteristics**

The four characteristics of strain outlined earlier (re: unjust/high magnitude/social control/social learning) are “roughly equal in importance and . . . the absence of any one characteristic substantially reduces the likelihood that strains will result in crime--although strains with only some of these characteristics may still increase the likelihood of crime” (Agnew, 2006a:70). At present, the empirical record is quite limited on the cumulative impact of these characteristics.

**Types of Strain That Are Most Likely to Cause Crime**

As a complement to the characteristics of strain that are thought to be most likely to lead to crime, the GST elaborations (Agnew, 2001, 2006a) also review the types of strain that have received the strongest degrees of direct empirical support or, in the event of limited tests, are
most likely to be conditioned by injustice judgments, perceptions of high magnitude, low social control, or pressure or incentive to engage in criminal coping:

. . . certain types of strain are related to crime whereas others are not. At this point, it seems safe to conclude that crime is related to verbal and physical assaults, including assaults by parents, spouses/partners, teachers, and probably peers. Crime is also related to parental rejection, poor school performance, and work problems, including work in the secondary labor market. Crime is not related to the expected failure to achieve educational/occupational success or to unpopularity with peers. Beyond that, the relationship between various strains and crime is unclear. (Agnew, 2001:325)

Agnew does not intend for the list of strains to be considered closed, or altogether definitive. Some positive evidence may even be considered “ad hoc” (Agnew, 2001:325), as in predictors that are less driven by GST itself than by complementary research that holds strong promise; for example, in predictors related to one’s status, or in the blockage of autonomy goals (Anderson, 1999; Moffitt, 1993). As “empirical research is starting to point to those types of strains that are and are not related to crime, it is not wise to depend on such research to fully resolve the issue. There are hundreds of specific types of strain; it will take empirical researchers a long while to determine their relative importance . . . .” (Agnew, 2001: 326).

**GST Samples and Areas of Inquiry**

This is not to say that empiricists have failed to better specify GST. There have been over thirty direct tests of individual-level GST to-date not to include, for example, complementary studies that examine macro-level strain (Agnew, 1999), delinquent problem solving (Brezina, 2000), life trajectories on strain and delinquent adaptations (Hoffmann and Cerbone, 1999), the influence of money on delinquent involvement (Wright, Cullen, Agnew and Brezina, 2001), and the impact of opportunity structures (Hoffmann and Ireland, 2004). Tests have been conducted with a diverse array of samples, methodologies, and operationalizations and is dynamic with regard to specification (e.g., Agnew, 2001).
As outlined in Figure 2-1, the array of studies includes national-level samples of adolescents (Agnew, Brezina, Wright and Cullen, 2002; Brezina, 1999; Jang and Johnson, 2003; Mazerolle, 1998; Paternoster and Mazerolle, 1994), state, city, and community-level samples of adolescents (Agnew and White, 1992; Aseltine, Gore and Gordon, 2000; Bao, Haas and Pi, 2004; Baron, 2004; Hay, 2003; Piquero and Sealock, 2000, 2004), university samples (Broidy, 2001; Mazerolle et al., 2003; Sharp et al., 2001), and adult community samples (Burton, Cullen, Evans and Dunaway, 1994; Eitle, 2002). Researchers have also explored the theory’s ability to account for demographic differences in crime with regard to gender (Broidy and Agnew, 1997; Eitle, 2002; Piquero and Sealock, 2004; Slocum, Simpson, and Smith, 2005) and race (Eitle and Turner, 2003; Jang and Johnson, 2003; Kaufman, Rebellon, Thaxton, and Agnew, 2005) and have begun to test the theory among youth in different cultures and economic systems (Bao et al., 2004; Mesch, Fishman, and Eisikovitz, 2003; Pinhey and Okinaka, 2004).

Tests Related to the Strains Most Likely to Cause Crime

GST is a propositionally dense, multifaceted theoretical effort. Rather than continue to focus on research questions and samples that have received little support since 1992, future specifications should continue to build on what works. To this end, an overview of evidence for several of the most promising types of strain follows.

Failure to achieve goals related to thrills, autonomy, status, acquisition of money

The pursuit of the goals of thrills/excitement, high autonomy, masculine status, and the immediate acquisition of money relates more to individual traits such as thrill seeking, exposure

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8 Agnew places the following strains in this category: (1) failure to achieve goals such as educational success, occupational success, and middle-class status; (2) supervision/discipline by authority figures (e.g., parents, teachers) that is consistent, not excessive, and not abusive; (3) burdens associated with the care of conventional others; (4) strong demands associated with conventional pursuits that provide external rewards or intrinsic satisfaction; (5) unpopularity with peers and isolation from unsupervised peer activities (note: Agnew explains that the lack of empirical support for these strains is for typical, non-extreme cases) (Agnew, 2006a: 75-78).
to subcultural groups, or structural conditions (e.g., poverty) than it does to conventional socialization or social control (Agnew, 2001:343). The pressure underlying each of these types of strain is more easily alleviated by crime than what one finds with occupational or educational strain.  

Further, despite the relative paucity of research in criminology focusing on economic goals as compared to educational or occupational ones, evidence suggests that crime (as an adaptation) is frequently used to acquire money. Farnworth and Leiber (1989), for example, found that the failure to achieve monetary goals was a more significant predictor of crime than were educational expectations. Relatedly, Cernkovich, Giordano, and Rudolph (2000:131) attempted to assess the impact of economic goals (the “American dream”) on delinquent behavior. Their results provided a level of support for the prediction of economic strain on income-generating offense involvement. Moreover, in a test of GST with homeless street youth, Baron (2004) found that monetary dissatisfaction was related to the study’s measure of total crime and of property offending. Another concept strongly associated with monetary dissatisfaction, that of relative deprivation (i.e., whether an individual feels that s/he is worse off monetarily than his/her comparative reference group) (Passas, 1995), was found to be related to property, violent, and total crime. In general, assessments of monetary dissatisfaction may be particularly useful indicators of strain because they tap into “the reality of the moment” (Agnew et al., 1996).

Criminal victimization

A burgeoning body of literature suggests that criminal victimization is strongly related to criminal offending. In addition to non-strain-specific research which provides a degree of

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support (e.g., Lauritsen, Sampson and Laub, 1991; Sampson and Lauritsen, 1993), direct tests suggest that victimization is a particularly acute type of strain that holds up under scrutiny. Victimization is typically perceived as high in magnitude, perceived as unjust, is likely to occur in environments typified by low social control, and because it is more common in delinquent peer groups, it likely activates mechanisms inherent to the social learning of crime (Agnew, 2001).

In Baron’s (2004) study of homeless street youth, property victimization and violent victimization (i.e., personal attack by another) were related to engaging in all measures of crime; robbery victimization (force used, or threatened to be used, against the individual to get their money or other possessions) was related to engaging in violent offending. In Eitle and Turner’s (2002:217) study of risk and protective factors associated with young adult substance use and mental health, the strain characteristics of victimization were embellished; instead of only operationalizing “victimization” via personal experience as victim, the researchers broadened the concept to include witnessing community and domestic violence and hearing about the violent victimization of significant others. That is, their study included the possible strain of “vicarious” victimization. Findings indicated that proximal exposure to violence in the community, a history of receiving traumatic news, and direct victimizations in the community increased the risk for young adult criminal offending (Eitle and Turner, 2002:231-2). Relatedly, Agnew’s (2002:629) examination of a national sample of adolescent boys indicated that experienced physical victimization and certain types of anticipated and vicarious victimization were associated with delinquency. He cautions, however, that additional research is required to better understand the victimization/offender relationship and the possible impact of personality traits, coping skills, physical size, and association with delinquent peers.
Homelessness

Agnew’s review (2001) also identifies a particularly intense form of experienced strain that represents “a major challenge to a broad range of (an individual’s) goals, needs, values, activities, and identities” (p. 345): homelessness itself. In Baron’s (2004) study, homelessness was found to be related to the study’s measure of total crime, while an earlier study (Baron and Hartnagel, 1997) of homeless youths found familial and school factors to have minimal influence on criminal behavior; instead criminal behavior was found to be more influenced by immediate factors to include homelessness, lengthy unemployment, lack of income, and criminal peers. Relatedly, Hagan and McCarthy (1992, 1997) found life on the street to be an important intervening variable of social control and strain on crime.

Discrimination based on ascribed characteristics

Despite the centrality of matters of race, ethnicity, gender, and discrimination within the social sciences, until recently scant attention has been paid to these subpopulations vis-à-vis intra-group processes and the impact of stress on offending (Cernkovich and Giordano, 1992). Utilizing a sample related to risk and protective factors associated with young adult substance use and mental health, Eitle and Turner (2003) examined whether racial differences in criminal involvement were explained by group differences in exposure to strains, group differences in the strength of coping mechanisms, a combination of the two, or group differences in the strength of relationship between stress exposure and crime. Their findings revealed that racial differences in criminal involvement were explained by differences in exposure to strain. In other words, race was found to be a marker for increased risk of stress exposure.

In related work utilizing a sample of African American children, Simons, Chen, Stewart, and Brody (2003) set out to assess an association between exposure to discrimination and delinquent behavior. For African American boys, they found that an association between
discrimination and delinquency was mediated by feelings of anger and depression and by the belief that aggression is a necessary interpersonal tactic. For African American girls, anger and depression were found to mediate part of the effect of discrimination on delinquency, but discrimination continued to display a small, direct effect.

And finally, in a test featuring the same population as Eitle and Turner (2003) but split by gender, Eitle (2002) explored whether discrimination experiences were related to criminal activity and/or substance use disorders. Discrimination was found to be a significant predictor of crime and substance use disorders.

**Child abuse and neglect**

Extant GST scholarship (also see Colvin, 2000) suggest that physical, emotional, and sexual abuse of children are related to stress and crime and are of particular salience when they have been experienced recently (Agnew, 2006a). As in the case of homelessness, child abuse and neglect threatens a child’s identities, needs, activities, and goals and is oftentimes perceived as unjust. Long-term impacts of abuse and neglect include posttraumatic effects, cognitive distortions, altered emotionality (e.g., depression, anxiety), dissociation (e.g., detachment, numbing), and disturbed relatedness (e.g., altered sexuality, aggression) (Briere, 1992). Such treatment undermines attachments and commitments (thereby resulting in low social control), oftentimes leads children to model the behavior of their parents (Fagan and Wexler, 1987), and may lead children to associate with stigmatized others, including deviant peers. Patterson (1975), for example, illustrates that parent-child interaction is a predictor of deviant behavior later in life via social learning mechanisms.

There may also be a temporal matter at hand. In a longitudinal analysis of the varying impact of childhood and adolescent maltreatment on multiple problem outcomes, Thornberry, Ireland, and Smith (2001:957) found that adolescent and persistent maltreatment had stronger
and more consistent negative consequences during adolescence than did maltreatment experienced only in childhood. Individuals who experience chronic strains develop negative emotionality because chronicity reduces a person’s ability to cope in a legal manner (Agnew, 2006a).

Using interview data with youths who had been identified as chemically abusing or dependent and had been adjudicated for a variety of offenses (e.g., major property felonies, misdemeanors, felonious assaults), Piquero and Sealock (2000) examined the amount of physical and emotional abuse directed toward youth in their household and the amount of physical abuse directed toward others in the household (i.e., vicarious strain) (Agnew, 2002). Analyses indicated that exposure to abuse was predictive of property crime and interpersonal aggression. Further, in building on their earlier work, Piquero and Sealock (2004) found that males within their sample were more likely to cope with emotional and physical abuse with crime. Relatedly, Baron (2004) found emotional, sexual, and physical abuse to be associated with criminal involvement among his sample of homeless street youth.

Overall, the many types of possible maltreatment within a family is a fruitful area for research in that emotionally abused children oftentimes come to perceive the world as a hostile place (Nicholas and Bieber, 1996). As such, GST’s inclusion of a host of mediators and conditioners allows for detailed specification of what might constitute a “hostile place.” For example, does such a determination center on perceptions of injustice, a compounding of perceptions related to strain magnitude, low social control, social learning-inspired incentives to engage in criminal coping, or some other mechanism altogether?

Other empirically supported strains

As strains number in the hundreds (Agnew, 2001) and the types of strains most strongly related to crime number in the dozens, only a sample of empirically supported predictors has
been outlined above. In addition to these strains, evidence also provides support for the following: (1) supervision/discipline that is erratic, excessive, and/or harsh, (2) negative secondary school experiences, (3) abusive peer relations, (4) work in the secondary labor market, (5) unemployment – especially when it is persistent and blamed on others, (6) marital problems, (7) residence in economically disadvantaged communities, and (8) parental rejection (Agnew, 2006a:71-74).

Although child abuse is separated from parental rejection in the types of strain most likely to lead to crime (Agnew, 2006a), the empirical record suggests that rejection and abuse may be different sides of the same coin. In one such study, Weatherburn and Lind (1997:7) found that parental neglect accounted for most of the explained variation in juvenile participation in crime when included in a model with poverty, single parent household, and crowded dwelling. Similar results were found when the measure for abuse replaced that of neglect, but the researchers cautioned that this was likely due to the high correlation between abuse and neglect. The possible confluence raises important questions about overarching strain categories. While child abuse no doubt falls into the category of the presentation of a negative stimulus, what of parental neglect? It would appear that the perceptual component is paramount: would a parent who fails to express love or affection for a child be better framed as negative stimulus or the removal of a positive stimulus? The theory’s original explication anticipated this issue, as the major categories of strain were presented as “ideal types” (Agnew, 1992:50).

While many of the categories above pick up on general strain theory-specific scholarship (e.g., Agnew and Brezina, 1997 on relational problems with peers; Agnew, 1999 on community differences in crime rates), a great many are underdeveloped or rely on criminology-wide research such as Sampson and Laub (1993) on parental rejection, excessive discipline, negative
secondary school experiences, and marital problems. In short, despite the approximately fifteen years that have elapsed since GST’s introduction, a great many questions remain as to the strains that are likely to lead to crime and perhaps more centrally, the relationship between the strains, mediators, conditioners, and outcome variables. Other key, and yet to be unanswered, questions include how general strain theory “operates” in sociolegal and experimental contexts--questions that the present study works to address.

Moving forward, prior to a presentation of study methodology the literature review segues into an overview of restorative justice theory and the Canberra Reintegrative Shaming Experiments (RISE) (Sherman et al., 2001).

**Restorative Justice Theory**

As one of the largest and most methodologically sophisticated restorative justice efforts to date, the Canberra Reintegrative Shaming Experiments (RISE) project provides a singularly unique, practical application of the theory. At its core, restorative justice “is about the notion that because crime (or any other kind of injustice) hurts, justice should heal. This is an alternative to the view that justice must be punitive--responding to hurt with hurt that is the wrongdoer’s just deserts. So restorative justice is about hurt begetting healing as an alternative to hurt begetting hurt” (Braithwaite and Braithwaite, 2001:4-5). Standing as a complement to efforts which also “invert” longstanding emphases on punitiveness (e.g., defiance theory) (Sherman, 1993), restorative justice theory establishes its voice particularly well in “micro arenas” such as criminal justice by emphasizing the restoration of harm by offenders to victims as well as reintegration of the offender back into the community (Braithwaite and Braithwaite, 2001; Kurki, 2000).
Relationship to Retributism

Rather than viewing “justice” retributively--that of classic, utilitarian standards of punishment and deterrence, or as crime being primarily a violation of the law and act against the state--restorative justice presumes that crime is, in no small measure, also a violation of one person by another. According to the theory, crime causes harm and suffering to both victims, offenders, and the larger community. Retribution increases suffering and alienates parties from one another and from the community, healing and reparation fail to occur, while social capital and informal social controls lose strength (Christie, 1977; Tosouni, 2004; Zehr, 1990).

Restorative approaches, to the contrary, focus on problem solving, obligations, dialogue, negotiation, restitution and reconciliation (Zehr, 1990). Restorative justice interventions directly involve offenders, victims and members of the community in the problem solving process, and offenders are held accountable for repairing the victim’s loss (physical and/or emotional) without being stigmatized as a criminal (Kurki, 2000; Tosouni, 2004).

Reintegrative Shaming

Instead of labeling the person as deviant (see Lemert, 1967), reintegrative shaming focuses on labeling the harmful (criminal) act as evil, treating the offender with respect, while at the same time criticizing his or her behavior (Braithwaite, 1989). In short, the crime is rejected while the person retains a level of respect. As opposed to passive responsibility underpinning the retributive paradigm, reintegrative shaming emphasizes active responsibility--a wholesale shift in orientation that is thought to change an offender’s attitude toward the law and facilitate conformity through emotional motivation and conformity (Kurki, 2000). The more traditional criminal justice process, that of stigmatization, is thought to increase reoffending through its abject disrespect and humiliation of the individual; s/he becomes cast as pariah instead of recipient of just and right punishment (Braithwaite, 1989; also see Sherman, 1993).
It is important to note, however, that there are voices who reject a strict “oppositional contrast” between retributive and restorative justice. Daly, for example, argues that there are parallels between retributive, rehabilitative, and restorative justice that should be recognized by scholars:

Specifically, restorative justice practices do focus on the offence and the offender; they are concerned with censuring past behaviour and with changing future behaviour; they are concerned with sanctions or outcomes that are proportionate and that also "make things right" in individual cases. Restorative justice practices assume mentally competent and hence morally culpable actors, who are expected to take responsibility for their actions, not only to the parties directly injured, but perhaps also to a wider community. (Daly, 2001)

Nonetheless, although retributive principles are still dominant in public opinion, there is evidence of a burgeoning interest in punishment that is less vindictive and more concerned with strengthening social bonds and empowering families (Umbreit, 1994). In some ways public sentiments are punitive and progressive at once, wishing the correctional system to do justice, protect the public, and reform the wayward (Cullen, Fisher, and Applegate, 2000).

A number of justice programs have been designed with restorative justice/reintegrative shaming principles at their core. As outlined by Bazemore and Umbreit (2001) and the Office of Juvenile Justice and Delinquency (1998), such programs include victim-offender mediation, peacemaking circles, restorative community service, financial restitution and personal services, victim impact panels, victim empathy classes, and family group conferencing. As family group conferencing is the program design that ties most closely to the Canberra Reintegrative Shaming Experiment (RISE), it is to this that attention is drawn.

In family group conferences (FGC), offenders face victims in the presence of family and friends (of both offender and victim), discuss their misconduct, and attempt to restore the material and emotional harm the misconduct caused to society and to the victim (Morris and Maxwell, 1998). FGC’s rationale focuses on the inherent strength and integrity of the family
unit, the importance of community support, the opportunity for parents to be intimately involved in misconduct by their children, and the fundamental right for victims of crime to have a role in the resolution of offenses (Hudson, Galaway, Morris, and Maxwell, 1996; Tosouni, 2004). Braithwaite and Mugford (1994) describe conferencing as a reintegration ceremony where emotional disapproval is communicated within a continuum of respect for the offender. They suggest that the confrontation with the victim contributes to the shaming, while the participation of caring supporters contributes to the reintegration. On balance, such forums are thought to be applicable to minor as well as serious crimes and to both adult and youthful offenders (Cunneen, 2002). In practice, however, most programs center on youthful non-violent offenders (Kurki, 2000).

Consistent with the detection, interpretation, and analysis of program effects in the social sciences (see Rossi, Lipsey, and Freeman, 2004), past research has explored specific elements within these programs that, compared to longstanding methods rooted in retributive justice, appear to be associated with crime reduction and greater satisfaction by the parties involved. Considerable scholarship suggests that crime reduction and satisfaction are inextricably linked--that strategies of regulation based on the way in which members of the public are treated by legal authorities can enhance their willingness to cooperate with and defer to those legal authorities (Tyler, 1990).

Analogous with research in procedural justice (Tyler, 1990), for example, most program evaluations have tended to focus on a whole range of positive outcomes in addition to reoffending to include participant satisfaction, perceptions of fairness and justice, participation rates, and agreement completion rates (Morris and Maxwell, 1998). Levels of perceived satisfaction and procedural fairness are almost universally high regardless of participant
characteristics (see Tosouni, 2004 for discussion), and these perceptions tend to be higher than what one finds in traditional courtroom processing (Latimer, Dowden, and Muise, 2001). With regard to participation, while offender attendance has been found to be high in most initiatives, victim participation typically ranges between forty and sixty percent (Bonta, Wallace-Capretta, and Rooney, 1998; Maxwell and Morris, 1996).\(^{10}\) In general, high participation rates do not necessarily correlate with participation by the offender’s family; instead, they more commonly relate to being provided an opportunity to have a voice in the process (Robertson, 1996).\(^{11}\) Regarding agreement completion, agreements are completed in the vast majority of restorative cases and tend to exceed rates of completion in traditional programs (Latimer et al., 2001).

With regard to recidivism, meta-analytic techniques have been used as a counterpart to comparative, narrative, assessments. Reviewing fourteen restorative justice evaluations (most of which were not randomized, nor were many easily comparable), Bonta et al. (1998) found a small reduction (8\%) in reoffending among participants in restorative justice interventions. In a separate analysis of more methodologically rigorous programs, Latimer et al. (2001) found a small, positive effect size (+.07) (see Tosouni, 2004).

**Canberra Reintegrative Shaming Experiments (RISE)**

A large experimental study carried out in Canberra, Australia between 1995 and 1999, The Reintegrative Shaming Experiments (RISE) project (Sherman et al., 2001) sought to test core tenets of restorative justice theory primarily, while also including research questions which tap into related efforts that “invert” longstanding emphases on punitiveness such as defiance theory

\(^{10}\) Analyses suggest that a “fear of offender” or “sympathy for juvenile” effect may be at play as victims are more likely to want to participate when the offender is a juvenile (Umbreit and Bradshaw, 1997).

\(^{11}\) Other dynamics may also be at play, as in research that suggests that when victims have no supporters with them, or when the offenders’ supporters outnumber their own, the likelihood of victim revictimization (i.e., feeling upset, perceiving that s/he is being disrespected) is significantly higher (Daly, 2001).
(Sherman, 1993) and procedural justice (Tyler, 1990). Reflective of the spread of family group conferencing in many other parts of the world (e.g., New Zealand, USA, Britain, South Africa, Canada), the Canberra RISE project is comprised of four separate experiments that compare the effectiveness of standard courtroom processes and restorative justice conferences for four offense types: drunk driving (over .08 blood alcohol content), juvenile property offending with personal victims, juvenile shoplifting offenses, and youth violent crimes (Harris, 2001).12

**Study hypotheses**

The study aimed to test four primary hypotheses (Sherman et al., 2001). The first hypothesis, drawing on Braithwaite’s (1989) assertion that formal court justice stigmatizes offenders and makes it difficult for them to lead fully productive lives, predicted less repeat offending after assignment to conference than after assignment to court. Also consistent with relevant research (e.g., Bazemore and Umbreit, 2001; Strang, 2004; Tyler, 2003), the second and third hypotheses predicted that victims who participated in conferences would be more satisfied than court participants, and that offenders and victims would report higher perceptions of procedural fairness in conferences than in court. The fourth and final hypothesis predicted that public costs of a conference would be lower, or at a minimum no greater, than traditional courtroom processing.

**Data collection methods**

Three methods were used: (1) Administrative police reports of the offender’s attitude, the police station and officer that referred the case, blood alcohol content (drunk driving only), blood.

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12 It is important to note that while there are four major categories for which RISE organizes its reports and findings, there is more than one offense type within the property and violence offending categories. Offenses in the property experiment include “theft, burglary, car theft, shoplifting in owner-operated shops (not big stores), criminal damage, fraud, vehicle break-in and receiving or possession of stolen goods,” while offenses in the violence category include “mostly assault occasioning actual bodily harm, common assault, fighting and arson” (Sherman, Strang, Angel, Woods, Barnes, et al., 2006).
offense type, RISE assigned treatment, and re-offending data. (2) Observations from both treatments on the duration of the treatment, violent incidents, presence of supporters, levels of expressed reintegrative shaming, offender guilt admission, apology, defiance, and contribution to the outcome. (3) Participant interview surveys following the court or conference proceedings, with items measuring a variety of variables to include restoration and reintegrative shaming, procedural justice, and self-reported pre-treatment delinquency (Sherman et al., 2001).

Participant interviews were sought between two and four weeks after final treatment of the case (Harris, 2001).

Acceptance criteria

Consistent with the Wagga-Wagga communitarian model of justice (Moore and O’Connell, 1994), conferences were facilitated by police officers. Because the aim of the RISE experiments was to compare cases that were assigned to court with equally serious cases that were assigned to conference, a case could be accepted into the experiments only if it would normally be dealt with by a court. The research protocol also required that eligible cases not be so serious that in the estimation of the apprehending police officer they could only be dealt with in court. Thus, the aim was to include "middle-range" offenses, neither so serious that officers would be reluctant to bypass traditional processing, nor so trivial that they would normally warrant a warning (Sherman et al., 2001).

Cases were randomly assigned (see below for protocol) based on police referral to RISE and eligibility criteria to include: (1) the crime was one of the target offenses, (2) the offender(s) had made a full admission of responsibility for the offense, (3) a sergeant had approved the case being sent to RISE, (4) there was no reason to believe the offender would object to a conference if the case was assigned to a conference, (5) the offender did not have any outstanding warrants or bonds requiring him/her to go to court, (6) the offender lived in the Australian Capital
Territory (ACT), and (7) the police officer referring the case agreed to accept the RISE recommendation for all co-offenders in the case. Additional drunk driving criteria also applied.

All individuals who fit the profile were eligible for referral. Eligible offenders for juvenile personal property and juvenile property security offenses had to be under 18 years old and violent crime offenders had to be under 30 years old.13

**Method of randomization**

When police officers had a matter that was RISE eligible, they called a 24-hour mobile phone number that was in the custody of a member of the research team. Officers were then asked a series of ten screening questions to verify the eligibility of the case. Once case details were entered into a log, an envelope containing the random assignment (court or conference) was opened and the officer was informed of the disposition. Prior to commencement of data collection, treatments were randomly assigned using a sequence of quasi-random numbers.

After being informed of the treatment (court or conference) by the RISE staffer, the apprehending officer processed the case accordingly. Victim data were limited to the juvenile personal property and youth violence experiments. No drunk driving offenses included direct victims, so consequently there was no drunk driving data on victims. Files were created consisting of data from reports by police officers, data from observations by trained RISE research staff of court and conference treatments, and offender interview data from RISE staff after the court or conference proceedings (Sherman et al., 2001).

There were a number of reasons why cases assigned to conference went to court: (a) the offender rejected conferencing when it was assigned and asserted the right to have his/her case processed in the normal way through court, (b) the offender reoffended immediately after being...

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13 Although the violent crime category includes offenders up to the age of twenty-nine, the RISE study refers to it as “youth violent crime.”
assigned to conference and assignment was altered to court, (c) the offender withdrew his/her full admission of the offense, requiring a determination of guilt by a court, (d) the offender persistently failed to show up for the conference, or did so in an intoxicated state, (e) the offender's attitude or behavior was such that the officer decided to send the case to court, (f) because of an administrative error on the part of the police, the case was sent to court when it had been assigned to conference, (g) the conference failed to reach an outcome accepted by all parties and the facilitator referred the matter to court (Sherman et al., 2001).

**Ethical considerations**

Consistent with guidelines for successful interventions, all conferences were voluntary in nature in that participants could choose to withdraw and have their case heard in court. Informed consent was gained from participants at several points in the process to include consent from the offender immediately after randomization, from all those in attendance (e.g., offender, victim, offender’s family) prior to observation of conference cases (not required for courtroom proceedings, as was a public venue), and from the offender prior to follow-up interview. As Harris (2001) explains, “Randomization simply involved offering some offenders the option of choosing an alternative to the normal intervention and thus did not require explicit consent to the randomization…. This was important because it provided some protection against knowledge of being randomly assigned affecting offenders’ behavior or perceptions” (p. 96).

**Response rates**

Eighty-six percent of drunk drivers, 66% of juvenile property offending with personal victims, 75% of juvenile shoplifting, and 68% of youth violent offenders were the subject of at least one observation. Offender interviews were reported at 85%, 76%, 76%, and 72%, respectively.
RISE findings

The RISE research team has released a variety of process and outcome evaluations; early results from interviews with the first 548 offenders comprising all four experimental groups and from observations of 597 drunk driving and 133 youth crime cases provide a number of useful insights (Sherman and Barnes, 1997; Sherman and Strang, 1997). Conferences were likely to last far longer than court proceedings (conferencing lasted approximately ninety minutes as compared to ten minutes for court processing (Harris, 2001)). There were higher levels of reintegrative shaming observed during conferences as compared to court (Sherman and Strang, 1997). Contrary to prediction, there was no less--and at times, more--stigmatizing shaming during conferences than during court processing. Young offenders in conferences were twice as likely to apologize and to receive forgiveness and were more emotional and remorseful than their court counterparts. There was also a higher perceived level of procedural justice in conference as compared to court (Sherman and Barnes, 1997). There was also a reported improvement in attitudes toward the justice system overall (court and police). Feelings of bitterness and anger between the groups were found not to differ with the exception of drunk drivers, who were significantly more likely to be angry after court (Sherman and Barnes, 1997).

Interestingly, and perhaps not altogether of primary concern to those who suggest that “success” in restorative justice can, and should, be measured both directly (via reoffending) and indirectly (through measures of satisfaction and perceptions of fairness) (Makkai and Braithwaite, 1994; Morris and Maxwell, 1998), the RISE recidivism findings report (Sherman, Strang, and Woods, 2000) offers a mixed picture. Across the four experiments that make up RISE, very different results were found to have emerged across the different offense categories. Among the youth violence participants, offenders who were assigned to conference subsequently offended at substantially lower levels than did those assigned to court: thirty-eight fewer offenses
per year per one hundred offenders. In contrast, this trend was not found for any of the other experiments. For drunk driving offenders, for example, a very small increase in detected reoffending was found for the conferenced offenders (relative to court): approximately four offenses per year per one hundred offenders (Sherman et al., 2000).

In the report of findings, the research team recommends more nuanced analysis to explore the reasons for the differences across offense type. Despite the fact that conference-assigned offenders reported their treatment to be more procedurally fair than did conference-assigned offenders, that trend did not appear to translate into higher levels of compliance with the law in three of the four offense categories. As opposed to combining disparate offense types together in subsequent research, the researchers recommend that testing continue to delineate different effects for different offenses as opposed to concentrating on variability in offender background.

In brief, according to Sherman et al. (2000), “The substantive conclusion of RISE is that restorative justice can work, and can even reduce crime by violent offenders. But there is no guarantee that it will work for all offense types. Caution and more research are needed before rapid expansion of any new approach to treating crime. Less caution is needed, however, in testing restorative justice on more serious types of violent offences. The findings in this report provide firm ground for repeating the violence experiment in many other venues and with more refined types of violent offenses, including robbery, assault, and grievous bodily harm” (pp. 18-19).

**More Recent Efforts: Jerry Lee Program**

It is important to note that RISE is but one effort. Over the past several years, Sherman, Strang and colleagues have been designing and implementing a variety of tests of face-to-face

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14 The final recidivism report was based on one-year before and after standardized periods of comparison.
restorative justice programs in the United States, England, and Australia under the auspices of the Jerry Lee Program in Randomized Controlled Trials of Restorative Justice (Sherman and Strang, 2004).\(^{15}\) Taken together, the research projects have yielded the following conclusions: (1) there are substantial benefits for crime victims, as measured by interview; (2) there are substantial reductions in repeat offending in some tests, in some settings, with some demographic groups, as measured by arrest or charge data; (3) there are substantial increases in repeat offending in other tests, in some settings, with some demographic groups, as measured by arrest or charge data; (4) there are consistent and substantial reductions in crime victims’ stated desires for violent revenge against offenders; and (5) in several tests, restorative justice makes no significant difference in repeat offending across demographic groups (Sherman and Strang, 2004).

**Departure from RISE / Restorative Justice Focus**

While there are certain commonalities between general strain theory and restorative justice theory, most notably regarding the importance of social support (see Agnew, 2006:180-1), the present study departs from a restorative justice-centered assessment in several ways. The restorative justice approach, on the one hand, generally centers on decision points such as a formal plan to repair harm (e.g., through restitution), community mentoring through volunteer efforts or facilitated employment opportunities, the differentiation of shame from guilt and embarrassment, and an overarching focus of the consequences of stigmatizing versus reintegrative shaming (Braithwaite, 1989).\(^{16}\) In practice, however,

\(^{15}\) As of August, 2004, the Jerry Lee Program had almost thirty randomized, controlled trials in deliberative restorative justice completed or underway; structural dimensions of the trials include with or without courts (e.g., diversion), with or without deliberation, and with personal versus collective victims (Sherman and Strang, 2004).

\(^{16}\) For example, Harris’ (2001) and Tosouni’s (2004) tests of restorative justice theory utilize measures to include reintegration, stigmatization, shame-guilt, embarrassment-exposure, and unresolved shame.
the research literature on restorative justice has not risen to the challenge of capturing (collective emotional dynamics) in the research reports . . . . The result of this failing is that even the most literate of criminologists and criminal lawyers understand restorative justice in terms of material reparation to victims rather than in terms of the symbolic reparation which all evidence to date suggests is more important. (Braithwaite and Braithwaite, 2001:59)

The present general strain theory approach, on the other hand, works to disentangle four distinct sources of strain and two measures of negative affect among a host of understudied GST conditioners to include cognitive avoidance, injustice judgments, self-efficacy, and external attribution. While it is altogether possible that restorative justice proponents would place Agnew’s (1992) categories of strain under an umbrella term “stigmatization,” only GST provides a fully adequate framework to map the varied sources of strain that manifest in social life (four, here) onto specific forms of negative affect. It is important to note, however, that both theories presume that there are consequences for sanctions that are administered in ways that are disliked (Agnew, 2001:352), and both theories have been characterized as “consensus” theories that presume that compliance with the law is an important social goal (Braithwaite, 1989:38).
Figure 2-1. General strain theory samples and areas of inquiry.

Representative Scholarship:
(1) Agnew and White (1992); Broidy (2001); Mazerolle and Piquero (1998); Burton, Cullen, Evans, and Dunaway (1994).
(2) Broidy and Agnew (1997); Mazerolle (1998); Piquero and Sealock (2004); Eitle (2002); Hoffmann and Su (1997); Landau (1997).
(3) Jang and Johnson (2003); Eitle and Turner (2003); Landau, 1998.
(6) Agnew (2002); Eitle and Turner (2003).
(7) Mazerolle, Piquero and Capowich (2003); Aseltine, Gore and Gordon (2000); Baron (2004).
(9) Agnew, Brezina, Wright and Cullen (2002).

Note: These areas of inquiry, and examples of scholarship, are by no means exhaustive. Other important efforts include the assessment of delinquent problem solving (Brezina, 2000), opportunity structures (Hoffmann and Ireland (2004), and life-course trajectories on strain and delinquent adaptations (e.g., Agnew, 1997; Hoffmann and Cerbone, 1999).
The present study employs secondary analysis of data from the Canberra Reintegrative Shaming Experiments (RISE) (1995-1999), a randomized controlled experiment that set out to compare the effectiveness of standard courtroom processing with restorative justice group conferences for four offense types: drunk driving, juvenile property offending with personal victims, youth violent crimes, and juvenile shoplifting offenses (Sherman et al., 2000; Sherman et al., 2001). The RISE study concentrates on repeat offending after conference or court, victim satisfaction with the overall process, offender and victim perceptions of procedural fairness, and financial cost to the public (Sherman et al., 2001; Harris, 2001). Toward this end, the research team captured administrative police reports, third-party observations of both treatments, and participant interviews following the court or conference with items measuring a variety of variables to include restoration and reintegrative shaming, procedural justice, and self-reported pre-treatment delinquency (Sherman et al., 2001).

Sample

In order to minimize data loss across collection points, the present study is organized around cross-sectional analysis of the interview data. The RISE research team conducted the interviews approximately two to six weeks after final treatment (Harris, 2001:98). In the interviews, offenders were asked questions related to initial contact with police, the experience in

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1 The administrative, observational, and interview data are available through the Inter-university Consortium for Political and Social Research (ICPSR 2993).

2 Cases were randomly assigned based on police referral to RISE and eligibility criteria. Among the criteria is that the offender had made a full admission of responsibility for the offense. The research protocol also required that eligible cases not be so serious that in the estimation of the apprehending police officer they could only be dealt with in court. Thus, the aim was to include only "middle-range" offenses, neither so serious that officers would be reluctant to bypass traditional processing, nor so trivial that they would normally warrant a warning (Sherman et al., 2001). All conferences were facilitated by police officers and in most cases all known offenders were in the room along with victims, victim supporters, and offender supporters.
court or conference, and reflections and experiences in the period of time that elapsed since the
treatment. This design lends support to proper temporal order being established, despite the fact
that all data were collected during the same session (also see Piquero and Sealock, 2000, 2004).³

The survey instrument features approximately two hundred individual questions with
additional (branch) questions based on offender response. Interviews took approximately one
hour and twenty minutes to administer (Harris, 2001).⁴ Post-project assessment indicates that
conferences took approximately ninety minutes to complete compared to ten minutes for court
(Sherman et al., 2001).

The present analysis relies on a subset of the full RISE sample. Despite the RISE study’s
inclusion of drunk driving offenders (N = 737 interviews), the present study solely focuses on
survey data from juvenile personal property offenders (N = 111 interviews), juvenile property
(shoplifting) offenders (N = 86 interviews), and youth violent crime offenders (N = 52
interviews) (i.e., N = 249 total respondents).⁵

Despite the possibly deleterious effect on statistical power by disregarding several hundred
offenders, it was determined that analysis of reintegrative shaming-centered survey data that is
devoid of its “symbolic heart” (Sarat, 2001)—namely, direct victims—would too seriously impact
the efficacy of study variables and would likely render court/conference split-sample analysis

³ Reliance on retrospective reports about psychosocial variables should be approached with caution, however
(Henry, Moffitt, Caspi, Langley, et al., 1994).

⁴ The instrument underwent extensive pre-testing with offenders from a range of backgrounds and offense types.
All survey questions involved responding to questions that were read word-for-word and answered on preestablished
scales. During some sections of the interview, the interviewer captured all responses while in others (particularly for
potentially sensitive issues) the respondent recorded answers in a separate booklet (Harris, 2001:98-9).

⁵ Interviews are based upon completion rates of 76 percent of juvenile personal property offenders, 73 percent of
juvenile property security offenders, and 72 percent of youth violent crime offenders.
fatally flawed. By its very nature, reintegrative shaming wishes to advance a different model for “doing justice” by reintroducing into the system those most directly harmed by crime (i.e., victims) (Strang, 2004:1). By designing an experimental treatment facilitated by police and lacking direct victim involvement, a question of “apples to apples” comparisons (drunk driving court versus drunk driving conference) may have been warranted.

As discussed, offenders from the three crime types were randomly assigned to either standard courtroom processing (N = 125) or conferencing circle (N = 124). Due to the relatively few cases available in the juvenile violent crime category, the RISE research team amended its selection criteria mid-project to include violent offenders up to the age of twenty-nine (Sherman et al., 2001). Offenders eligible for placement into the juvenile personal property and juvenile property security offenses were seventeen or younger. As most data sets capable of testing GST involve surveys of adolescents (Agnew, 1992:48), the violent crime sample’s inclusion of older offenders represents an improvement over the age range found in most earlier research (although see, e.g., Burton et al.’s (1994) Mertonian strain assessment).

**Measures**

**Strain**

Although life stressors can number in the many hundreds (Agnew, 2001; Cohen, Kessler, and Gordon, 1995), as discussed earlier general strain theory (GST) is organized around three scenarios in which individuals are likely to feel they are being treated badly: when others (1) prevent, or threaten to prevent, an individual from achieving positively valued goals; (2) remove, or threaten to remove, a positively valued stimuli; or (3) present, or threaten to present, noxious

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6 In the pursuit of experimental homogeneity, the RISE research team excluded drunk driving offenses involving an accident causing injury or damage. Therefore, drunk driving conferences stand apart as treatments that included no direct victims. Instead, a community representative attended some of the conferences and discussed the dangers of drunk driving; in addition, the police officer would provide information about blood alcohol levels and risks (Harris, 2001).
or negatively valued stimuli (Agnew, 1992). Viewed through the lens of general strain, the Canberra reintegrative shaming experiments (RISE) survey data provide a unique opportunity to test for strain/stressors from a “behavior of law” perspective. That is, to better understand offenders’ negative relations with agents of social control and to assess attenuating or aggravating effects of family/friendship networks on such stressors.

As a response to tests of GST that oftentimes fail to include a comprehensive assortment of strain measures, particularly those related to categories of goal blockage and certain types of negative treatment (Agnew, 2001:323) (although see Baron, 2004; Mazerolle and Piquero, 1998), the present study measures strain as (1) disjunction between expectations and actual achievements, (2) disjunction between aspirations and expectations, (3) removal of positive stimuli, and (4) presentation of negative stimuli. The construction of each strain measure aligns with Agnew’s (2001:324) recommendation that future tests not employ cumulative measures of strain; such measures encompass a wide range of strains, some contributing to crime and others not, thereby weakening the cumulative measure’s overall impact on crime. Complementing other studies which have examined the impact of distinct types of strain on crime (e.g., Agnew and White, 1992; Aseltine et al., 2000; Baron, 2004; Paternoster and Mazerolle, 1994), the present study’s analytic plan is designed to assess how, and under what conditions, some strains may have a strong impact on crime while others do not.

Figure 3-1 outlines all study variables. The relationship between the study’s four measures of strain and two measures of negative affect (anger, depression) will be assessed, as will the relationship between affect and criminality. Consistent with theory (Agnew, 1992, 2001), the potential role of negative affect as mediator between strain and criminality will also be assessed, as will the relationship between the facilitators and constraints for delinquent coping and strain,
affect, and criminality. Finally, a series of legal and demographic variables will be utilized as multivariate controls and for split-sample analysis of the theory’s core proposition of strain → affect → criminality.

**Disjunction between expectations and actual achievements**

As opposed to strains that purportedly stem from ideal goals rooted in an economic or cultural system (e.g., Merton, 1968; Messner and Rosenfeld, 2001), strain as a disjunction between expectations and actual achievements is rooted in research on justice in social psychology whereby a failure to achieve personal expectations (derived from social comparison and/or past experience) facilitates emotions such as anger, resentment, rage, and disappointment (Agnew, 2001:52). This type of strain is of particular interest to researchers because there is reason to believe that experienced strain is more consequential than anticipated strain (Agnew, 2002). Although largely unstudied within the context of jurisprudence and GST, related research suggests that in a courtroom or conferencing circle a failure to gain voluntary deference to the decisions of legal authorities may center on an individual’s assessment that authorities are not using fair procedures and their motives are not trustworthy (Tyler and Huo, 2002).

The present study’s measure taps into the argument that expectations are “existentially based” (Agnew, 1992:52)—that they are grounded in the manner in which one would expect to achieve a valued goal. The scale for this measure is comprised of two items: “You felt pushed around in the conference/court case by people with more power than you” and “During the conference/court you felt pushed into things you did not agree with.” Higher values in this additive scale indicate a greater degree of perceived strain. Factor analysis for the scale yields

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7 For the purpose of illustration, in a multilevel assessment of community, strain, and delinquency, Wareham, Cochran, Dembo, and Sellers (2005) utilized the following survey items as measures of the disjunction: “my teachers don't respect my opinions as much as I would like; people my age treat me like I'm still just a kid; my parents don't respect my opinions as much as I would like.”
one factor confirming the scale’s unidimensionality; Cronbach’s alpha indicates good reliability ($\alpha = .75$). Item-to-scale correlations can be found in Appendix A.

**Disjunction between aspirations and expectations**

Harking back to traditions that argue that strain is largely a function of a disjunction between ideal goals and expected levels of goal achievement (e.g., Cloward and Ohlin, 1960; Cohen, 1955) (see Burton et al., 1994; Paternoster and Mazerolle, 1994), the present study’s strain measure is comprised of the single survey item: “During the conference/court case I felt that I had stuffed up at least some of my future opportunities.” Higher values indicate a greater degree of perceived strain.

**Presentation of negative stimuli**

A category of strain still largely understudied in tests of GST (although see Baron, 2004; Mazerolle and Piquero, 1998; Piquero and Sealock, 2000, 2004), Agnew’s elaboration (2001:344) indicates that a particular form of negative stimulus--that of supervision/discipline that is strict or excessive given the infraction or particularly harsh--is likely to be strongly related to crime because it is seen as unjust, high in magnitude, and associated with low social control. Criminal justice officials who employ such behaviors are known to increase the likelihood of crime by those on the receiving end of such negative treatment (Sherman, 1993; Tyler, 1990).

In support of this line of inquiry, the scale for the measure is comprised of five items: “Were you treated in the conference/court as though you were likely to commit another offense?” “Did people during the conference/court case make negative judgments about what kind of person you are?” “During the conference/court case were you treated as though you were a criminal?” “During the conference/court case did any of the people who are important to you reject you because of the offence?” and “During the conference/court case were you treated as though you were a bad person?” Higher values in this additive scale indicate a greater degree of
perceived strain. Factor analysis for the scale yields one factor confirming the scale’s unidimensionality; Cronbach’s alpha indicates good reliability ($\alpha = .74$).

**Removal of positive stimuli**

The removal of a positively valued stimulus is likely to create strain because it may threaten an individual’s goals, values, needs, and/or identities (Agnew, 2001). Such loss is regularly featured in inventories of stressful life events in psychology (Thoits, 1983) and may lead to delinquency as the individual tries to prevent the loss, retrieve the loss, or seek revenge against those responsible (Agnew, 1992:5-6). Extant tests of GST have operationalized this strain in several ways to include parents taking away privileges, the death of an immediate family member or friend, the remarriage of one’s mother/father, or being forced to live apart from one or both parents (Capowich, Mazerolle, and Piquero, 2001).

With regard to the present study, a legal context is especially appropriate because of the stakes: one is vulnerable to punishment of both a formal (loss of freedom) and informal nature (e.g., loss of respect, loss of honor) (see Toby, 1957). Conceptions of justice have been found to tie to both a person’s self-esteem (Lerner, 1987) and overarching personhood (Sampson, 1983). Relatedly, concerns for respect and honor within a social network can elicit strong negative emotions when treatment is perceived to be arbitrary or unjust. In literature outlining the natural “tension” between procedural and distributive justice, evidence suggests that processual threats to prestige or status weigh more heavily on an individual’s mind than do unfavorable outcomes (Lind and Tyler, 1988).

The RISE survey data allows for operationalization of this strain through a scale comprised of two items: “During the conference/court I felt like I had lost respect or honour among my family” and “During the conference/court I felt like I had lost respect or honour among my
friends.” Higher values in the additive scale indicate a greater degree of perceived strain. Factor analysis yields one factor confirming unidimensionality; Cronbach’s alpha indicates good reliability ($\alpha = .68$).

**Empirical independence of strain categories**

Agnew (1992:50) consciously presents the major categories of strain as ideal types, or heuristics, to ensure that a full range of strainful events is included in empirical research. For example, one could frame negative relations between an individual and his/her partner as either the presentation of negative stimuli or removal of positive stimuli (i.e., loss of healthy relations).

Nonetheless, to the extent that GST’s major categories of strain measure distinct concepts, one would hope to find that factor analysis yields more than one factor across examined families of strain; in other words, there should be empirical independence between the constructs (Mazerolle and Piquero, 1998:200). Toward this end, the survey items utilized for the presentation of negative stimuli scale and for the removal of positive stimuli scale were factor analyzed. Results (Table 3-1) indicate that two distinct factors are at play: the first five survey items appear to measure the factor for presentation of negative stimuli, while the last two items appear to measure the factor for removal of positive stimuli.

**Negative Affect**

Distress is an unpleasant subjective state that takes form in anxiety, anger, and depression (Mirowsky and Ross, 1989). GST highlights negative affect (anger, mostly, but also depression) as its key mediator in the face of objective and subjective strain (Agnew, 1992/2001). The mediation process may be depicted as (strain $\rightarrow$ negative emotion $\rightarrow$ delinquency) (Piquero and Sealock, 2004).

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8 Interestingly, the theory’s original explication asserts that there should not be an expectation that factor analysis reproduces strain’s major categories (Agnew, 1992: 50, 59).
Of the varied affective states, anger is thought to be the most prominent mediator of the processes leading from strain to delinquency because anger increases felt injury and the need for adaptive, delinquent, responses (Agnew, 1992:60). It disrupts cognitive processes in ways that impede noncriminal coping and also reduces the actual and perceived costs of crime (Agnew, 2001:327). Predictably, most empirical work on GST has highlighted anger as the mediator to be tested for its relationship with both strain and individuals’ corrective actions (although see depression, jealousy, and fear: Aseltine et al., 2000; Bao et al., 2004; Sharp et al., 2000).

As opposed to measures that reflect generalized (trait-based) emotions (see Brezina, 1996; Mazerolle and Piquero, 1997, 1998; Piquero and Sealock, 2000, 2004), the present study utilizes reactive, situationally-based measures of anger and depression in its analyses. Although trait-based and state-based negative affect has been found to be correlated (Capowich et al., 2001) and may not (in action) be mutually exclusive (Mazerolle et al., 2003),9 the present study’s state-based measures are consistent with Agnew’s (1992, 2001) causal chain of delinquent adaptations resulting from the negative affect caused by negative relations in one’s immediate social environment. Furthermore, the following variables are context-specific, supporting the call for measures that are tailored to the experienced strain (Mazerolle et al., 2003).

The study’s measures of anger and depression are comprised of the single survey items “The conference/court case just made you angry” and “During the conference/court case I felt sad or depressed.” Higher values indicate a greater degree of perceived anger or depression. There is little association between anger and depression (r = .05) (p > .05), and the two are treated as separate measures throughout the analyses.

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9 Those with a greater disposition toward anger may be more likely to exhibit situational anger while exposed to strain (Mazerolle et al., 2003)
In sum, the present study features four categories of strain on two measures of negative affect.

**Intervening Variables**

As explained earlier, general strain theory sets out to not only specify sources of strain and negative emotion, but also the conditions under which strain and affect increase or reduce an individual’s likelihood for delinquent coping. While affect mediates the relationship between strain and delinquency, other variables such as social support, self-efficacy, self-esteem, delinquent peers, external attribution, and emotional/cognitive coping condition strain’s effect on delinquency. Each measure is presented below in one of two categories: those conditioners that are theorized to act as constraints to delinquent coping, and those conditioners that are theorized to act as facilitators to delinquent coping.

**Constraints to delinquent coping**

**Conventional social support.** Social support is the sense of being someone important in the eyes of others, being esteemed and valued as a person, and of having someone who will understand and help when needed (Mirowsky and Ross, 1989:13). General strain theory is informed by research that suggests that high degrees of social support enable individuals to cope more successfully with stressful events, trigger behaviors that function proactively to eliminate stressful events before they occur, and/or may prevent a stressful event from infringing on other aspects of a person’s life (Taylor and Aspinwall, 1996). Among clinically depressed individuals, for example, high levels of social support from family members, work associates, and close friends are associated with increases in problem-solving coping and decreases in emotional discharge coping (Fondacaro and Moos, 1987). The present study measures social support using a scale comprised of the following five items: “Did people in the conference/court case say that it was not like you to do something that was wrong?,” “Did you learn from the conference/court
case that there are people who care about you?,” “During the conference/court case did people suggest that they loved you regardless of what you did?,” “During the conference/court case did people talk about aspects of yourself which they like?,” and “Were you treated as a trustworthy person in the conference/court?” Higher values indicate a greater degree of social support. Factor analysis yields one factor confirming unidimensionality; Cronbach’s alpha indicates good reliability ($\alpha = .65$).

**Self-efficacy.** Self-efficacy refers to a belief in one’s own capacity to execute courses of action required to manage prospective situations. As such, a high degree of self-efficacy affords individuals with personal and social benefits; a lack may breed apprehension, apathy, or despair (Bandura, 1997:2). Relatedly, GST argues that those who are high in self-efficacy are more likely to feel that strain can be alleviated through nondelinquent coping (Agnew, 1992:71). The study measures self-efficacy by a scale comprised of two items: “If I can’t do a job the first time, I keep trying until I can” and “When trying to learn something new, I soon give up if I am not initially successful” (reversed). Higher values indicate a higher level of self-efficacy. Factor analysis yields one factor confirming unidimensionality; Cronbach’s alpha indicates acceptable reliability ($\alpha = .58$).

**Self-esteem.** A high degree of self-esteem relates to resilience, or the ability to achieve good outcomes as one faces stressful life circumstances. Similar to self-efficacy as a self-referent construct, positive self-attitude serves as a protective function between stressors/strains and undesirable outcomes (Kaplan, 1996). Self-esteem is measured by a scale consisting of five items: “I feel I’m a person of worth, at least on an equal plane with others,” “I feel that I have a number of good qualities,” “I am able to do things as well as most other people,” “I take a positive attitude towards myself,” and “On the whole, I am satisfied with myself.” Higher values
indicate higher self-esteem. Factor analysis yields one factor confirming unidimensionality; Cronbach’s alpha indicates good reliability ($\alpha = .74$).

**Cognitive/behavioral coping strategies.** Individuals cognitively reinterpret objective strains to minimize their subjective adversity (Agnew, 2001). The coping strategies that have received the most attention in the psychosocial stress literature are the avoidant, or minimizing, coping style and the active, confrontive, vigilant coping style (Taylor and Aspinwall, 1996). GST outlines a typology of major coping strategies to include cognitive, emotional, and behavioral (Agnew, 1992). Of particular relevance to the present study is the cognitive coping strategy of avoidance and the behavioral coping strategy of a desire for revenge. Complementing Merton’s (1938) adaptations of ritualism and retreatism, avoidance centers on an individual strongly minimizing, or altogether ignoring, the importance of adversity by cognitively “removing” him or herself from the strainful environment (Agnew, 1992). The behavioral coping strategy of a desire for revenge is, on the other hand, a more confrontive coping style and is distinguished by minimizing strain through a desire for “getting back” at those who are perceived to have facilitated a strain.\(^\text{10}\) In the present study, cognitive coping (avoidance) is measured by the item “During the conference/court case I felt so exposed, I wished I could just disappear.” Behavioral coping (desire for revenge) is measured by the item “You wish that you could get back at the people who were accusing you in the conference/court case.” Higher values indicate a higher degree of utilization of that coping strategy.

As Agnew (1992:69) explains, vengeful attitudes can assume either conventional or delinquent forms, although an individuals’ likelihood for delinquency is high. In order to be

\(^\text{10}\) One area that has gone largely understudied within extant tests of GST is whether the effectiveness of avoidant (versus active) coping styles are dependent on characteristics of strain itself (e.g., short-lived v. chronic) not to mention whether environmental resources (e.g., social support, a good job) moderate the use of one type of coping strategy over another. Research indicates that this may be the case (Holahan and Moos, 1987).
most consistent with the literature, the present study puts the coping strategy of avoidance in the
category of constraint to delinquent coping, while the coping strategy of a desire for revenge is
included with facilitators of delinquent coping (see below).

**Facilitators of delinquent coping**

**Strain as unjust.** The inclusion of injustice judgments as a facilitator of delinquent coping
reflects a modification to GST (Agnew, 1992). Originally, Agnew placed such judgments under
the category of strain as disjunction between just/fair outcomes and actual outcomes. More
recently, however, Agnew argues that the perception of unjust treatment is not a distinct type of
strain but can instead be used to classify any type of strain (Agnew, 2001). In other words, a
strain seen as unjust is more likely to lead to crime because it activates emotions conducive to
crime (Agnew, 2001:327). With regard to the context of RISE, a failure to gain voluntary
deference to the decisions of legal authorities oftentimes centers on an individual’s assessment
that authorities are not using fair procedures and their motives are not trustworthy (Tyler and
Huo, 2002). Relatedly, the legal forum itself may make a difference: research indicates that both
plea-bargaining and mediation are rated fairer than trial (Tyler, 2003).

The perceived violation of justice rules is measured by a scale consisting of ten items:
“You feel that people who have committed the same offense are treated the same way by
conferences/courts,” “People were polite to you in the court/conference,” “You understood what
was going on in the court/conference,” “You understood what your rights were during the
processing of the case,” “You felt you had the opportunity to express your views in the
conference/court,” “All sides got a fair chance to bring out the facts in the conference/court,”
“You felt you had enough control over the way things were run in the conference/court,” “The
conference/court took account of what you said in deciding what should be done,” “You feel you
were treated with respect in the conference/court,” and “The police were fair during the
court/conference.” In this scale, lower values indicate a greater perceived violation of justice rules. Factor analysis yields one factor confirming unidimensionality; Cronbach’s alpha indicates good reliability ($\alpha = .86$).

**Pressure/incentive to engage in criminal coping.** GST draws on scholarship from social learning (Akers, 1985) primarily, but also routine activities (Felson, 1998), to argue that the type of strain that one experiences impacts the availability and appeal of noncriminal and criminal coping, and that certain types of strain are associated with exposure to individuals who effectively model crime, reinforce crime, and present beliefs favorable to crime (Agnew, 2001, 2006a) (see Akers, 1985). A particular form of strain will also create pressure or incentive when it receives strong subcultural support (Agnew, 2001). As such, and in light of research suggesting that differential association with law-violating peers is among the strongest predictors of criminal behavior (e.g., Loeber and Stouthamer-Loeber, 1986; Warr, 2002), the present study measures this conditioner with the item “What do your close friends think about what you did?” Higher values indicate a great degree of acceptance by one’s peers of the respondent’s criminal offense.\(^{11}\)

**External attribution.** Another factor affecting the disposition to delinquency is external attribution, or the tendency to attribute one’s own adversity onto others. Such attribution is associated with greater degrees of anger, which GST then associates with crime (Agnew, 1992). Researchers in the areas of aggression and coercive action synthesize the process as a form of self-justification: as one shifts blame onto others, culpability begets exoneration (Warner, 1986). Or put thusly, “There is nothing wrong with me; there is something wrong with you” (Novaco, 1974).

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\(^{11}\) Research which taps into tolerance for deviance within a social network indicates that such tolerance may partially be a function of cynicism toward the criminal justice system (Sampson and Bartusch, 1998). As such, there may be important reciprocal effects between violations of justice rules and pressure/incentive to engage in criminal coping.
1976:1125). The present study measures external attribution accordingly: “You feel that the people who accused you in the conference/court case were more wrong than you were.” Higher values indicate a higher degree of external attribution.12

Outcome Measure

Attitudinal proxies for reoffending form the basis for the outcome variable, a scale comprised of two items: “The conference/court case will help prevent you from breaking the law in the future” and “What happened in the conference/court will encourage you to obey the law in the future.” Higher values in the scale indicate a lack of intention to be law-abiding in the future. Factor analysis yields one factor, confirming unidimensionality; Cronbach’s alpha indicates good reliability (α = .75). Here, “criminality” refers to a propensity for criminal behavior (Gottfredson and Hirschi, 1990). This reoffending proxy is consistent with Agnew’s (1992:62) assertion that:

Each type of strain may create a predisposition for delinquency or function as a situational event that instigates a particular delinquent act (emphasis in original). In the words of Hirschi and Gottfredson (1986), then, the strain theory presented in this paper is a theory of both ‘criminality’ and ‘crime’ (or to use the words of Clarke and Cornish (1985), it is a theory of both ‘criminal involvement’ and ‘criminal events’).

To Clarke and Cornish (1985), generalized criminal involvement and specific criminal events tie together in no small measure. Similar to Agnew (1992), Clarke and Cornish (1985:167) cast background influences (e.g., psychological, familial, sociodemographic) as orienting functions “...exposing people to particular problems and particular opportunities and leading them to perceive and evaluate these in particular (criminal) ways.”

12 With this variable, it is important to remember that a criterion for inclusion in the RISE project is that the offender made a full admission of responsibility for the offense. Although offenders may indeed feel that others are partially responsible for their act, the admission of responsibility reinforces the variable’s content validity. That is, that external attribution is in fact being measured, as opposed to the vagaries of the criminal justice system and its questions of guilt and innocence.
Past tests of GST have utilized measures related to projected criminality/intentions to commit crime (e.g., Capowich et al., 2001; Hay, 2003; Mazerolle et al., 2003; Mazerolle and Piquero, 1997, 1998). Relatedly, projected delinquency measures have been found to correlate with self-reported offending in longitudinal studies (Green, 1989; Tittle, 1980).

Efforts were made to secure RISE recidivism data, but such data were not available for release from the research team (Lawrence W. Sherman, personal correspondence, 10/16/04) or from the Inter-university Consortium for Political and Social Research (ICPSR) (12/10/05). The RISE interviews do provide information on the offender’s level of involvement in burglary, car theft, theft, vandalism, violence with and without weapon, and illicit drug use, but those survey items measure the offender’s activities for the twelve months prior to the experiment (to include the offense for which the offender was apprehended) (Sherman et al., 2001). In other words, the survey that forms the basis for the present study does not measure criminal involvement in the period of time between court/conference and interview. As the present study focuses on the consequences of strainful events in court or conference, only post-treatment criminal involvement is relevant.

The majority of past tests of GST have utilized cross-sectional data (Agnew, 2001), which raise issues of proper temporal ordering between strain, affect, and delinquency. On the other hand, tests that have attempted to “correct” for the issue by utilizing longitudinal designs may have suffered from sizable lags between strain and delinquency (e.g., Brezina, 1996; Mazerolle and Maahs, 2000). Lags can be problematic due to the typically proximate nature of strain, affect, and outcome (Agnew, 1992).13

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13 One possible solution is for future studies to use diaries to capture daily life stressors, affect, and related conditioners (Broidy, 2001).
Sociodemographics/controls

GST also predicts that personal characteristics may affect one’s likelihood for criminal coping. As such, previous tests have examined the manner in which strain, negative affect, and conditioners operate across sociodemographics. The present study includes the social and legal variables sex (female/male), age group (non-juvenile/juvenile), minority status (non-minority/Aboriginal-Torres Strait Islander), crime type (instrumental/expressive), and assigned treatment (court/conference) (each coded 0/1).

Descriptive Statistics

Descriptive statistics for the variables and scales used in the analysis are reported in Table 3-2. Sociodemographic and legal (case) descriptives indicate that the sample is 24% female, 21% adult, and 11% Aboriginal/Torres Strait Islander. Twenty-one percent of the offenders were arrested for violence (79% combined for the three instrumental crimes), and half of the offenders were assigned to each of the two experimental conditions.
Table 3-1. Factor analysis (rotated) for presentation of negative stimuli (Factor 1) and removal of positive stimuli (Factor 2)

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 1</th>
<th>Factor 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Treated as if likely to commit another offense</td>
<td>.649</td>
<td>-.057</td>
</tr>
<tr>
<td>2. Did people make negative judgments</td>
<td>.698</td>
<td>-.106</td>
</tr>
<tr>
<td>3. Treated as if criminal</td>
<td>.791</td>
<td>.116</td>
</tr>
<tr>
<td>4. Important people rejected you</td>
<td>.476</td>
<td>.459</td>
</tr>
<tr>
<td>5. Treated as though bad person</td>
<td>.850</td>
<td>.010</td>
</tr>
<tr>
<td>6. Felt I had lost respect among family</td>
<td>-.045</td>
<td>.831</td>
</tr>
<tr>
<td>7. Felt I had lost respect among friends</td>
<td>-.073</td>
<td>.856</td>
</tr>
</tbody>
</table>
Table 3-2. Descriptive statistics.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Failure to achieve positively valued goals</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Disjunction between expectations, achievements</td>
<td>5.17</td>
<td>2.06</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>- Disjunction between aspirations, expectations</td>
<td>2.56</td>
<td>1.21</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Presentation of negative stimuli</td>
<td>9.72</td>
<td>3.25</td>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td>Removal of positive stimuli</td>
<td>4.24</td>
<td>1.96</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Negative affect: Anger</td>
<td>2.46</td>
<td>1.18</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Negative affect: Depression</td>
<td>2.41</td>
<td>1.23</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Social support</td>
<td>12.47</td>
<td>3.54</td>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>6.95</td>
<td>1.08</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Self-esteem</td>
<td>15.04</td>
<td>2.06</td>
<td>6</td>
<td>20</td>
</tr>
<tr>
<td>Cognitive coping: avoidance</td>
<td>2.23</td>
<td>1.34</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Behavioral coping: revenge</td>
<td>2.07</td>
<td>1.05</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Violation of justice rules</td>
<td>35.66</td>
<td>6.70</td>
<td>10</td>
<td>49</td>
</tr>
<tr>
<td>Pressure/incentive for criminal coping (delinq peers)</td>
<td>2.25</td>
<td>1.14</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>External attribution</td>
<td>2.43</td>
<td>1.15</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Offender sex</td>
<td>.76</td>
<td>.43</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Offender age group</td>
<td>.79</td>
<td>.41</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Offender minority status</td>
<td>.11</td>
<td>.31</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Crime type</td>
<td>.21</td>
<td>.41</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Assigned treatment</td>
<td>.50</td>
<td>.50</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Outcome measure: delinquent adaptation</td>
<td>4.07</td>
<td>1.54</td>
<td>2</td>
<td>10</td>
</tr>
</tbody>
</table>
Figure 3-1. Study variables.

- **Strain**
  - Disjunction between expectations and actual achievements
  - Disjunction between aspirations and expectations
  - Presentation of negative stimuli
  - Removal of positive stimuli

- **Negative affect**
  - Anger
  - Depression

- **Criminality**

- **Facilitators / constraints for delinquent coping**
  - Justice rules
  - Social support
  - Self-efficacy
  - Self-esteem
  - External attribution
  - Delinquent peers
  - Coping: revenge
  - Coping: avoidance

- **Legal / demographic**
  - Sex
  - Juvenile / adult
  - Minority status
  - Crime type
  - Experimental treatment
Inasmuch as recent tests of general strain theory (GST) have moved beyond the theory’s core tenets to examine its predictors, mediators, moderators, and delinquent/non-delinquent adaptations in more granular detail (e.g., as in vicarious and anticipated strain (Agnew, 2002), differing manifestations of anger (Mazerolle and Piquero, 1998), or delinquency as problem-solving (Brezina, 2000)), so too have empirical tests utilized different analytic plans. Consistent with their units of analysis and sampling designs (i.e., individual-level/cross-sectional;\textsuperscript{1} individual-level/longitudinal;\textsuperscript{2} multi-level/cross-sectional\textsuperscript{3}), the over thirty tests of GST to-date have most commonly utilized ordinary least squares (OLS) or logistic regression analysis but have also utilized contingency table analysis (Mazerolle and Maahs, 2000), structural equation methods (e.g., Aseltine et al., 2000; Brezina, 1999; Hoffmann and Su, 1997), growth curve models (Hoffmann and Cerbone, 1999), and multilevel linear regression models (Hoffmann, 2002).

The present study is the first known test of GST to utilize data collected in a randomized, controlled setting. As such, its analytic plan operates in concert with common statistical methods in the experimental literature (see Farrington and Welsh, 2005). By randomly assigning offenders at arrest to one of the two experimental conditions, it best isolates the strains and associated emotions directly attributable to the behavior of law. After random assignment but prior to the treatment, the average score of all the persons in one group (e.g., in preexisting measures of self-efficacy, self-esteem, or external attribution) should not have differed from the

\textsuperscript{1} The majority of tests utilize this design.

\textsuperscript{2} See e.g., Brezina, 1999; Hoffmann and Cerbone, 1999; Mazerolle, 1998.

\textsuperscript{3} See e.g., Hoffmann, 2002.
average scores in the other group; in other words, the biserial correlation of preexisting attitudes
and treatment (if scored as 0/1) should not have differed from zero (Cook and Campbell, 1979).

Assessment of post-treatment differences between randomly formed groups is less biased
than with nonequivalent groups, magnitude estimates of effects can be made with greater faith,
and most threats to internal validity (e.g., selection, selection-maturation, regression) are
minimized or eliminated altogether (Cook and Campbell, 1979). Further, because randomization
equates conditions for all measured and unmeasured variables, multivariate analysis that
disaggregates results for subgroups (e.g., males versus females) or controls for preexisting
differences between conditions are generally unnecessary (Farrington and Welsh, 2005).

**Analytic Plan**

The analysis begins with a presentation of relationships between strain, negative affect,
GST conditioners, legal/demographic information, and criminality. Within that discussion, the
cumulative impact of strain is assessed, as is the potential for nonlinear effects between strain,
affect, and criminality. In addition (the caution by Farrington and Welsh (2005) above duly
noted), in order to facilitate comparisons of these results with related studies criminality is
regressed on the independent variables to explore underlying relationships and the mediating
function of negative affect. The presentation of findings then goes on to present comparisons
between the conditioners and legal/demographic characteristics on mean levels of predictors
(also see Eitle, 2002; Mazerolle, 1998). The section ends with an exploratory analysis of
outcomes of interest to restorative justice theory (Braithwaite, 1989).

**Hypothesized Relationships**

Table 4-1 outlines the expected relationships between the study variables. Each prediction
is based on foundational scholarship (Agnew, 1992, 2001, 2006a). Firstly, the disjunction
between expectations and actual achievements, the disjunction between aspirations and
expectations, the presentation of negative stimuli, and the removal of positive stimuli will be positively associated with anger and with depression. Secondly, the cumulative impact of strain will relate to higher criminality. Thirdly, there will be a nonlinear relationship between strain and criminality; that is, greater degrees of strain will increase the likelihood of criminality. Fourthly, the strain measures and negative affect will be positively associated with criminality controlling for other predictors. Next, behavioral coping (revenge), a perceived violation of justice rules, external attribution, and the pressure/incentive to engage in criminal coping (delinquent peers) will be positively associated with criminality. Relatedly, social support, self-efficacy, self-esteem, and cognitive coping (avoidance) will be negatively associated with criminality. Additionally, mean level comparisons will support major findings from the empirical literature. Finally, study variables related to restorative justice theory (Braithwaite, 1989) will perform as expected across the experimental conditions (conference/court); specifically, offenders assigned to conference will report lesser degrees of strain, anger, depression, and criminality and will also report a lesser degree of violations of justice rules--a metric that is often used to measure the efficacy of restorative justice interventions (Makkai and Braithwaite, 1994).

Measure associations

Appendix B reports full-sample zero-order correlations among study variables. Each of the four measures of strain is moderately associated with criminality, although two of the strain types (disjunction between aspirations and expectations; removal of positive stimuli) do not relate to criminality in the expected direction.

First, the lack of predicted support for the removal of positive stimuli, measured as loss of respect or honor among family or friends, may tap into a fine nuance between a perceived loss of honor or respect as compared to a perceived administration of disrespectful treatment, a
particularly egregious form of strain that has received support in GST and related literature (Agnew, 2001, 2006a; Anderson, 1999). The former (as loss) appears to relate to inward-oriented affect (i.e., depression) \( r = .46 \) and a reduced likelihood for criminality \( r = -.29 \), while the presentation of negative stimuli (measured by survey items tapping into an overt administration of disrespect (i.e., offender treated as criminal; offender treated as a bad person) shows a moderate association with anger \( r = .38 \) and an increased likelihood for criminality \( r = .30 \).

The same holds true for the two measures of strain as goal blockage: the disjunction between expectations and actual achievements is worded as one being overtly “pushed around” or “pushed into things” and this type of strain is strongly associated with anger \( r = .55 \) and moderately associated with criminality \( r = .33 \). The other category of goal blockage, a disjunction between aspirations and expectations, is worded as a loss of future opportunity and is not positively associated with anger. Instead, it is positively associated with depression \( r = .45 \) and a decreased likelihood for criminality \( r = -.31 \).

Agnew has argued that it is unclear whether depression causes a predisposition for crime when it is not accompanied by anger (2006a:35). Here, it is interesting to note that depression is negatively associated with criminality \( r = -.34 \), there is little if any association between anger and depression \( r = .05 \) \( p > .05 \), and for none of the four measures of strain does one find both anger and depression to be statistically significant. In short, they appear to be singularly distinct constructs. As depression may be more strongly associated with passive crimes such as drug use (see Agnew, 2006a; Jang and Johnson, 2003), the present study’s outcome variable may inadequately capture a full range of delinquent adaptations.
**Cumulative effect of strain**

Agnew (2001) argues that despite the tendency for past research to construct scales combining several types of strain—an analytic strategy that he first recommended (Agnew, 1992) but that has its shortcomings due to the difficulty in disentangling empirically supported strains from those that exhibit little relationship to crime—future research should principally test strains *individually* to assess their empirical adequacy.

Toward this end, the present study separates out the four sources of strain. As discussed, it appears that the disjuncture between expectations and actual achievements and the presentation of negative stimuli impact offenders’ emotional responses and prospective criminality as predicted by theory. But what of the *cumulative effect* of strain on criminality (Agnew, 1992; Agnew and White, 1992)? Exploratory analysis (not shown) indicates that for those offenders who score highly on both measures of strain (i.e., are above the median for both measures) (n = 72), the mean score for criminality is 4.65 (st.dev. = 1.72). For those offenders who score lower on both measures of strain (i.e., are below the median point for both measures) (n = 22), the mean score on criminality is 3.05 (st.dev. = .90), a percentage decrease on the scale of 34%.

Relatedly, the high-strain composite is positively associated with criminality ($r = .25, p < .01$) while the low-strain composite inverses the relationship ($r = -.21, p < .01$). In addition, moderate effects are found between the high-strain composite and anger ($r = .482, p < .01$) and the low-strain composite and anger ($r = -.335, p < .01$).

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4 For example, Mazerolle and Piquero (1997:330) constructed a composite measure of strain by summing scores of all strain variables. The researchers did, however, call for future research to examine the range of different strains on specific deviant outcomes (Mazerolle and Piquero:339).
Nonlinearity

There may also be a nonlinear effect between strain and criminality; that is, certain strains may predict delinquency more strongly after a certain threshold point is passed, and common analytical methods may underreport a relationship between strain and crime due to the relatively few respondents who surpass those high levels (Agnew, 2002:624). Whereas mild to moderate strain will not cause most people to engage in crime, strains at the highest levels are thought to lead to a greater degree of anger and will tax a person’s legitimate coping resources (Agnew, 2005:130).

As has been assessed in research on victimization and delinquency (Agnew, 2002), Table 4-2 presents the mean criminality score across levels of the strain most strongly related to criminality in baseline analyses: the disjunction between expectations and actual achievements. As one can see pictorially in Figure 4-1, there appears to be an interesting nonlinear relationship at the very highest levels of strain (i.e., an offender scoring a nine or ten on the scale). Complementary analysis (see Figure 4-2) mapping mean anger scores across levels of the disjunction between expectations and actual achievements yields a similar slope at the highest level of strain: mean anger of 3.14 at score of 8 on strain, 3.30 at 9, and 4.25 at 10. While the graphing of strain on anger does not depict the same degree of nonlinearity as of strain on criminality, both map as positive, concave upward curves--trend lines that have been found in research on strain (Paternoster and Mazerolle, 1994) and other areas of criminological scholarship (Tittle, 1995).

Facilitators of delinquent coping

As discussed earlier, GST sets out to specify not only the sources of strain and negative emotion that tie to crime and delinquency, but also the conditions under which strain/affect increase or reduce an individual’s likelihood for delinquent coping. Therefore, those
facilitators/conditioners that have been found to be tied to delinquent coping in their respective literatures (e.g., stress, equity, social learning) should be found to tie to criminality in the present test. As predicted (see Appendix B), each of the facilitators of delinquent coping exhibit moderate to strong associations with criminality: (1) behavioral coping (revenge): \( r = .39 \); (2) perceived violations of justice rules: \( r = -.51 \); (3) external attribution: \( r = .27 \); (4) the pressure/incentive to engage in criminal coping (delinquent peers): \( r = .29 \). Conditioners are associated with changes in the direction and/or strength of a relationship (Baron and Kenny, 1986).

The particularly strong relationship between the perceived violation of justice rules and criminality \( (r = -.51) \) may support Agnew’s recent modification to the theory where the perception of unjust treatment is no longer categorized as a distinct type of strain but can instead by used to classify any type of strain (Agnew, 2001, 2006a). Future research should work to better disentangle the effect. Strains that are viewed as unjust are more likely to lead to crime because they activate anger and related emotions, tend to reduce social control (e.g., as in unjust treatment by parents relating to strained ties), and are more likely to facilitate the social learning of crime (Agnew, 2006a:61-2). Although the cross-sectional nature of the data limits inferences regarding the relationship between injustice judgments and the pressure/incentive to engage in criminal coping (re: temporal ordering and delinquent peer association), it is interesting to note that perceived injustice exhibits a similarly strong relationship with anger \( (r = -.52) \) as it does with prospective criminality \( (r = -.51) \).

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5 The violation of justice rules measures are coded 1-5, with 1 representing the greatest degree of perceived injustice. Higher values for all other measures indicate greater degrees of that construct.

6 Within the present context, strategies of regulation based on the way in which members of the public are treated by legal authorities enhances their willingness to cooperate with and defer to legal authorities (Tyler, 1990).
Also note the degree to which the facilitators of delinquent coping align with strain. Without exception, each facilitator associates with strain in the same direction as the strains do with criminality. For example, the pressure/incentive to engage in criminal coping (delinquent peers) is positively, and significantly, associated with the disjunction between expectations and actual achievements and with the presentation of negative stimuli, whereas it is negatively associated with the disjunction between aspirations and expectations and the removal of positive stimuli.

While remaining cognizant of the limitations of cross-sectional data, it is interesting to note how the four types of strains relate to these measures of interest in predictable ways. If two sources of strain within this sociolegal context associate with anger and criminality while two sources of strain associate with differentially manifested affect (i.e., depression), one would expect to see these facilitators/moderators operate exactly as they do. As depression relates to self-blame, self-isolation, wishful thinking, and distancing (Kaplan, 1996:202), the constellation of measures discussed above may operate at some distance from those most strongly related to inwardly-oriented affect and adaptation.

**Constraints to delinquent coping**

As predicted, each of the constraints to delinquent coping exhibits a negative relationship with criminality, with three of the four measures as statistically significant (see Appendix B): (1) cognitive coping (avoidance): $r = -.22$; (2) social support: $r = -.24$; (3) self-efficacy: $r = -.15$; (4) self-esteem: $r = - .12$ ($p > .05$). Although related branches of research would likely predict a stronger negative association between social support and criminality (e.g., Cullen, 1994), its sign and significance differentiates itself among tests of GST that show mixed support (Eitle and Turner, 2003; Jang and Johnson, 2005). Social support exhibits a small, but significant, inverse
relationship with anger \( (r = -.14) \) and depression \( (r = .14) \), providing additional support for the measures being distinct categories of affect.\(^7\)

Interestingly, one of the strongest coefficients in the present study is between cognitive coping (avoidance) and depression \( (r = .55) \), a relationship that receives support in community psychology. As Billings and Moos (1984:887) explain, one’s “choice of coping strategies has been associated with the degree of pathology in depressed patients, with active coping strategies associated with less severe dysfunction and avoidance coping linked to more serious depression.” Also interestingly, the relationship between cognitive avoidance and strain is strongest for those strains least associated with criminality: the disjunction between aspirations and expectations \( (r = .35) \) and the removal of positive stimuli \( (r = .34) \). Research on coping effectiveness indicates that while active behavioral coping is generally adaptive (“healthy,” if you will), avoidant coping is a negative strategy that may occur in response to situations that are perceived as unchangeable (Mattlin, Wethington, and Kessler, 1990:117). Similar to questions that were raised earlier, there may be a palpable difference between responses to strains that are thrust onto a person (e.g., perceived disrespect, perceived power differentials) from those that represent the loss of something of value (e.g., future opportunities, respect and honor among family and friends).

Finally, self-esteem and self-efficacy are found to be moderately related \( (r = .42) \). Recent research indicates that these widely used traits in psychology are indeed strongly related and may be markers for the same underlying construct (Judge, Erez, Bono, and Thoresen, 2002). Relating back to cognitive avoidance, the strongest statistically significant relationships for self-esteem

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\(^7\) As research indicates that increased social support relates to coping/affect differently across sex (e.g., Fondacaro and Moos, 1987), means were compared. Males (12.41) and females (12.67) do not significantly differ on social support \( (t = .470, p > .05) \), nor do males (2.34) and females (2.66) significantly differ on depression \( (t = 1.64, p > .05) \). Additional split-sample analyses follow.
and self-efficacy are with the disjunction between aspirations and expectations ($r = -.19 / -.15$) and with the removal of positive stimuli ($r = -.13 / -.16$). Although somewhat weak effects, the strains most relating to a loss of “self” may affect self-regard (self-esteem) and psychological control (self-efficacy) in unique ways that warrant future inquiry.

**Mean-level Differences between Groups of Interest**

Table 4-3 presents a comparison between the demographic/legal variables on mean levels of predictor variables.

**Sex**

Despite past research which has isolated important differences between men and women on measures of strain, affect, and delinquent/nondelinquent adaptations (Beutel and Marini, 1995; Broidy, 2001; Broidy and Agnew, 1997; Eitle and Turner, 2002; Hay, 2003; Mazerolle, 1998; Piquero and Sealock, 2004), the only significant measure in the analysis is avoidant coping ($t = 2.76$) with women (24% of sample) more apt to wish to cognitively “remove” themselves from the strainful conference/court environment. A greater degree of avoidance coping among women has received empirical support, particularly with regard to how it interacts with low conventional social support (Cronkite and Moos, 1984).

The apparent overall lack of sex differences runs contrary to evidence that males may experience more strains conducive to crime,\(^{8}\) engage in more crime, have lower levels of depression, exhibit higher degrees of anger,\(^{9}\) have lower levels of emotional social support, and are more likely to associate with other criminals (see Agnew, 2006a for discussion). Perhaps

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\(^{8}\) But perhaps not the number of strains in total. Women experience specific strains in higher numbers than men, such as sexual assault/abuse, partner abuse, and gender discrimination. The key difference may be that men’s strains are more conducive to criminal coping (see Agnew, 2006a:134).

\(^{9}\) That is, higher degrees of anger related to moral outrage. Women, on the other hand, may exhibit similar degrees of anger, but anger that is coupled with guilt, fear, depression, etc. (Broidy, 2001; Hoffmann and Su, 1997; Piquero and Sealock, 2004).
there is something unique about this legal context, and it may stem from the fact that general strain theory centers on one key point: the initial perception of one or more significant strains in one’s life. Without that perception, the theory’s intermediate measures do not come into play. Whereas males may be more likely to experience a whole host of high magnitude strains in their daily lives (e.g., abusive peer relations, threats to masculine status, monetary problems, criminal victimization, homelessness) (Agnew, 2006a), the present study’s legal context may preclude males from perceiving a measurably greater level of high magnitude, unjust strains as compared to females. Put another way, an offender’s full life history is not really being tapped into because the study measures focus solely on strains experienced in court or conference--not in one’s school or neighborhood or in a patrol car.

Particularly in light of the preponderance of instrumental crimes in the sample (79%), the apparent lack of gender differences may also tap into a closing gender gap in crime and of women’s increased economic marginalization (Heimer, 2000). Further, GST’s emphasis on violations of justice rules (Agnew, 2001, 2006a) may relate to empirical evidence that like people in general, even high-risk males are willing to defer to the decisions of legal authorities when those decisions are viewed as procedurally just and trustworthy (Tyler and Huo, 2002). In short, it may be possible that sex differences are “washed out” at their inception.

**Age**

Table 4-3 indicates statistically significant age-based differences for two measures, the violation of justice rules and the pressure/incentive to engage in criminal coping (delinquent peers), with adults (21% of sample) expressing a greater degree of perceived violations of justice rules ($t = 2.08$) and a greater perceived acceptance of their crime among peers ($t = 2.12$). In essence, this analysis by age is that of all juvenile offenders (in all three offense categories) crossed with adult violent offenders, so age may act more as a proxy for offense type.
(instrumental v. expressive) than for one’s developmental stage.\textsuperscript{10} Mean-level differences by offense type are outlined later.

Nonetheless, more detailed procedural justice measures would provide information into whether these adult offenders are more sensitized to perceived injustice than their younger counterparts, perhaps due to perceived chronic threats to social identity (see Tyler, 2003). And although much of the research on social learning relates to the experiences of juveniles, an inclusion of multi-level measures may explain whether an adult offender’s structural conditions (e.g., economic inequality, social disorganization) impact the breadth and depth of his or her delinquent peer network (see Akers, 1992).

\textbf{Minority/majority}

Aboriginal/Torres Strait Islander offenders (11\% of sample) express a lesser degree of perceived violations of justice rules ($t = 2.66$). This unanticipated effect is particularly interesting given the relationship between the minority experience and procedural injustice (Tyler, 2003), and of Australian Aboriginals sometimes rejecting the “white man’s” criminal justice system as discriminatory against blacks, adopting different standards regarding appropriate punishment (e.g., corporal punishment), and viewing their traditional justice system as superior (Braithwaite, 1989:95). As such, it would not have been unreasonable to assume differences in affect (anger or depression), external attribution, and/or behavioral and cognitive coping. The overall lack of significant differences across the study measures (save one) also runs contrary to evidence that disadvantaged segments within a society experience unique forms

\textsuperscript{10} Due to the relatively few cases in the juvenile violent crime category, the RISE research team amended its selection criteria mid-project to include violent offenders up to the age of twenty-nine. Property offenders are age seventeen or younger (Sherman et al., 2001).
of strain, particularly with regard to discrimination grounded in ascribed characteristics (Agnew, 2001).

Crime type

Mean-level differences (Table 4-3) indicate a good deal of differentiation by crime type (instrumental v. expressive), with offenders arrested for violence expressing a greater degree of (1) strain as disjunction between expectations and actual achievements \((t = 1.99)\), (2) self-efficacy \((t = 2.13)\), (3) violations of justice rules \((t = 2.10)\), (4) external attribution \((t = 3.82)\), (5) pressure/incentive to engage in criminal coping (delinquent peers) \((t = 4.19)\), and (6) prospective criminality \((t = 2.77)\). Instrumental offenders, on the other hand, express a greater degree of (1) strain as removal of positive stimuli \((t = 3.74)\). Despite evidence that many offenders exhibit diverse and versatile offending patterns (Mazerolle, Brame, Paternoster, Piquero, and Dean, 2000), past research has split by offense type because some offenses (e.g., theft) are thought to call on risks/rewards calculations as compared to expressive crimes, which call for more immediate action (Schoepfer and Piquero, 2006).

As discussed within the section on age, it is important to question whether offenders arrested for violence may already be more sensitized to perceived injustice because of the context of their arrests and the fact that many expressive crimes are tied to threats to social identity (Anderson, 1999; Tyler, 2003). Victimization, for example, a phenomenon already tied to high rates of perceived injustice, cannot be understood apart from offending (Lauritsen et al., 1991). It is interesting to note, however, that violent offenders do not appear to differ in a likely concomitant emotion: anger. As was raised earlier, the study’s focus on offenders’ reactions to their experimental condition may “wash out” pre-experimental cognitive and emotional states.

Furthermore, it is interesting to note that violent offenders score higher on self-efficacy \((t = 2.13)\), a construct measuring perceived psychological control that GST argues is a facilitator of
nondelinquent coping (Agnew, 1992). Perhaps the observed effect centers on one’s use of psychological control as research indicates that individuals who have a history of successful social influence through coercion may develop high self-efficacy/self-confidence in coercive means to solve problems (Tedeschi and Felson, 1994:210).

Finally, the relationship between expressive crime in particular and the pressure/incentive to engage in criminal coping (delinquent peers) ($t = 4.19$) is interesting considering that social learning theory has been applied to nearly all crime types and problem behaviors (Akers, 1985). Future research should assess whether in a legal, partly shaming-centered context such as this, other-directed (violent) offenders differentially draw on purported “peer acceptance” as a neutralization technique (Sykes and Matza, 1957).

**Regression Estimations**

In order to facilitate comparisons to past tests of general strain theory, and particularly to those of active offenders (e.g., Baron, 2004; Baron and Hartnagel, 2002; Baron et al., 2001; Piquero and Sealock, 2000, 2004), Table 4-4 presents five stepwise OLS regression estimations for the full sample. Each model presents both standardized and unstandardized coefficients.\(^{11}\)

Model 1 includes each of the strain variables (disjunction between expectations and actual achievements, disjunction between aspirations and expectations, presentation of negative stimuli, and removal of positive stimuli) and four control variables (sex, age group, minority status, and crime type). As expected, the results are substantively similar to the earlier zero-order correlations (see that discussion) with all four strain variables exhibiting significant ($p < .01$) effects on criminality. Offender sex, age group, and minority group fail to exhibit significant effects as

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\(^{11}\) Correlations among the independent variables do not indicate problems with multicollinearity.
anticipated, while crime type (i.e., expressive crime) fails to achieve significance as it had in the correlation matrix (Appendix B).

Model 2 presents the same equation as Model 1, but includes anger as measure of negative affect. As expected, anger exhibits a significant ($p < .01$) positive effect on criminality. Of particular importance is that the introduction of anger into the model does not substantively alter the statistical significance of the strain variables. In other words, anger does not largely mediate the effects of strain on criminality (i.e., strain has a direct, but not indirect, effect on criminality). The inclusion of anger into the model does, however, lower the coefficients for three of the four strain variables (disjunction between expectations and actual achievements, presentation of negative stimuli, and removal of positive stimuli).

Model 3 replaces anger with the measure of depression. Consistent with earlier analysis, depression exhibit a significant ($p < .01$) negative effect on criminality. Interestingly, unlike with anger (Model 2), the inclusion of depression into the model renders strain as disjunction between aspirations and expectations and strain as removal of positive stimuli statistically insignificant, lending support to GST’s prediction that affect (in this case, depression) largely mediates the relationship between strain and criminality (Agnew, 1992). It is important to note, once again, that the baseline relationship of these two strains on criminality is inverted from theoretical expectation (i.e., negative), raising questions about whether strain as the loss of something of value (e.g., opportunity, honor among family and friends) is qualitatively different from strain as presentation of stressors.

Model 4 estimates the effects on criminality with both measures of affect in the model. Anger and depression remain statistically significant ($p < .05, p < .01$, respectively), and the personal/legal variables still fail to exhibit significant effects. As compared to the previous
model, strain as disjunction between aspirations and expectations becomes statistically significant ($p < .05$), which is likely a byproduct of its high coefficient ($\beta = -.23$) in the anger-only model.

Model 5 adds the remaining study measures to the equation. As opposed to earlier analysis that indicates that adults more strongly perceive violations of justice rules and the pressure/incentive to engage in criminal coping (delinquent peers) (Table 4-3), Model 5 indicates that adults report higher prospective criminality than juveniles ($\beta = .14$). Crime type (i.e., violent offenders) ($\beta = .13$) exerts a significant and positive effect on criminality, as does a greater degree of perceived violations of justice rules ($\beta = -.41$). High social support ($\beta = -.12$), high self-efficacy ($\beta = -.13$), and cognitive coping (avoidance) ($\beta = -.15$) all exert negative and significant effects on criminality. All four strain variables fail to exert significant effects on criminality in the full model. The relative influence of the standardized coefficient for the violation of justice rules ($\beta = -.41$) should be noted.

A word of caution should be made regarding these regression estimates, however. Just as Farrington and Welsh (2005) argue that controlled, randomized studies generally do not require multivariate analysis that controls for preexisting differences, simulations have shown that stepwise regression can indicate statistically significant results for predictors that are unrelated to the outcome variable (Bushway, Sweeten, and Wilson, 2006). As such, the regression of criminality on the study variables should be viewed as exploratory, with all due emphasis placed on the complementary analyses outlined earlier.

**Study Measures and Restorative Justice**

The analysis to this point has concentrated on manifestations of strain, affect, and delinquent coping across the full offender group, regardless of experimental treatment. In other
words, as a direct test of general strain theory and not of restorative justice theory (Braithwaite, 1989), to this point little attention has been paid to whether emotions important to general strain theory differ across an offender’s random assignment to court or conference. Table 4-5 presents the statistically significant mean-level differences. Consistent with RISE assessments outlined in the review of literature, offenders assigned to court are considerably more likely to perceive violations of justice rules ($t = 5.22$). Taken on balance, this finding is not only consistent with the RISE research team’s assessment, but is also consistent with procedural justice scholarship that emphasizes the power of participation (Thibaut and Walker, 1975). As Tyler (2003) explains,

(P)eople are more satisfied with a procedure that allows them to participate by explaining their situation and communicating their views to the authorities about that situation and how should be handled. This participation effect makes clear why procedures such as mediation are more popular than the courts. Of primary importance is the ability to state one’s views to an authority and to feel that those views are being considered (p. 300).

Offenders assigned to court are also more likely to feel angry ($t = 2.02$), perceive a level of support for their delinquency among their peers ($t = 2.35$), exhibit a desire to behaviorally cope through revenge ($t = 2.95$), and to perceive strains related to a disjunction between expectations/actual achievements and aspirations/expectations.

Overall, it is interesting to note that all the statistically significant facilitators of delinquent coping associate with court assignment. It is perhaps equally important to note, however, that no theorized inhibitors to delinquent coping associate with conference assignment.

In addition, and perhaps more centrally, the present study’s measure of prospective criminality does not differ across experimental treatment with regard to statistical significance.\footnote{Means for criminality do differ (descriptively) for court (x-bar = 4.18) and conference (x-bar = 3.96).}

\footnote{For example, see Tosouni (2004).}
Although restorative justice initiatives are often deemed successful with criteria other than reoffending (Makkai and Braithwaite, 1994), this is still noteworthy. Taking into account the RISE recidivism report (Sherman et al., 2002) that found that violent offenders assigned to conference reoffended at substantially lower levels than those assigned to court, an additional comparison-of-means was conducted for only that offense. Criminality was found to not significantly differ across court or conference for violent offenders ($t = 1.21$) ($p > .05$).\(^{14}\) Agnew (1992) asserts that GST is a theory of both “crime” and “criminality” (p. 62); the present analysis may cast these outcome measures as potentially distinct from one another. Nonetheless, as was expressed in the discussion of OLS estimates, caution should be used in interpreting a lack of statistical significance. In both offender samples, prospective criminality is found to reduce in the expected direction: that of those assigned to conference. In this randomized, controlled environment, it is altogether possible for effects to be analytically interesting but statistically non-significant (Bushway et al., 2006).

\(^{14}\) Means for criminality among violent offenders do differ (descriptively) for court ($x$-$\text{bar} = 4.88$) and conference ($x$-$\text{bar} = 4.32$).
Table 4-1. Predicted relationships, study measures and criminality.

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Variable ↔ criminality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disjunction between Expectations and Actual Achievements</td>
<td>Positive</td>
</tr>
<tr>
<td>Disjunction between Aspirations and Expectations</td>
<td>Positive</td>
</tr>
<tr>
<td>Presentation of Negative Stimuli</td>
<td>Positive</td>
</tr>
<tr>
<td>Removal of Positive Stimuli</td>
<td>Positive</td>
</tr>
<tr>
<td>Anger</td>
<td>Positive</td>
</tr>
<tr>
<td>Depression</td>
<td>Positive</td>
</tr>
<tr>
<td>Behavioral Coping (Revenge)</td>
<td>Positive</td>
</tr>
<tr>
<td>Violation of Justice Rules</td>
<td>Positive</td>
</tr>
<tr>
<td>External Attribution</td>
<td>Positive</td>
</tr>
<tr>
<td>Delinquent Peers</td>
<td>Positive</td>
</tr>
<tr>
<td>Social Support</td>
<td>Negative</td>
</tr>
<tr>
<td>Self Efficacy</td>
<td>Negative</td>
</tr>
<tr>
<td>Self Esteem</td>
<td>Negative</td>
</tr>
<tr>
<td>Cognitive Coping (Avoidance)</td>
<td>Negative</td>
</tr>
<tr>
<td>Sex</td>
<td>No Prediction</td>
</tr>
<tr>
<td>Age Group</td>
<td>No Prediction</td>
</tr>
<tr>
<td>Minority</td>
<td>No Prediction</td>
</tr>
<tr>
<td>Crime Type</td>
<td>No Prediction</td>
</tr>
<tr>
<td>Treatment (1=conference)</td>
<td>Negative</td>
</tr>
</tbody>
</table>
Table 4-2. Nonlinear effect, strain on criminality.

<table>
<thead>
<tr>
<th>Level of strain: Disjunction between expectations and actual achievements</th>
<th>Mean criminality score</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 (low)</td>
<td>3.39</td>
<td>23</td>
</tr>
<tr>
<td>3</td>
<td>3.33</td>
<td>12</td>
</tr>
<tr>
<td>4</td>
<td>3.88</td>
<td>85</td>
</tr>
<tr>
<td>5</td>
<td>3.90</td>
<td>21</td>
</tr>
<tr>
<td>6</td>
<td>4.03</td>
<td>38</td>
</tr>
<tr>
<td>7</td>
<td>4.71</td>
<td>17</td>
</tr>
<tr>
<td>8</td>
<td>4.64</td>
<td>22</td>
</tr>
<tr>
<td>9</td>
<td>4.90</td>
<td>10</td>
</tr>
<tr>
<td>10</td>
<td>6.00</td>
<td>8</td>
</tr>
</tbody>
</table>
Table 4-3. Mean-level differences by social/legal measures.

<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th>Female</th>
<th>T-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>Cognitive coping: avoidance</td>
<td>2.09</td>
<td>1.28</td>
<td>2.67</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Juveniles</th>
<th>Adults</th>
<th>T-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>Violation of justice rules</td>
<td>36.09</td>
<td>6.49</td>
<td>33.80</td>
</tr>
<tr>
<td>Pressure/incentive (delinq peers)</td>
<td>2.15</td>
<td>1.03</td>
<td>2.60</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Aboriginal/Torres Strait</th>
<th>Non-Aborig/Torres</th>
<th>T-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>Violation of justice rules</td>
<td>37.96</td>
<td>4.44</td>
<td>35.35</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Instrumental Crime</th>
<th>Expressive Crime</th>
<th>T-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>Disjunction betwn expect/achieve</td>
<td>5.03</td>
<td>2.04</td>
<td>5.68</td>
</tr>
<tr>
<td>Removal of positive stimuli</td>
<td>4.47</td>
<td>1.96</td>
<td>3.40</td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>6.88</td>
<td>1.08</td>
<td>7.24</td>
</tr>
<tr>
<td>Violation of justice rules</td>
<td>36.22</td>
<td>6.06</td>
<td>33.56</td>
</tr>
<tr>
<td>External attribution</td>
<td>2.27</td>
<td>1.04</td>
<td>3.04</td>
</tr>
<tr>
<td>Pressure/incentive (delinq peers)</td>
<td>2.05</td>
<td>.93</td>
<td>2.98</td>
</tr>
<tr>
<td>Criminality</td>
<td>3.93</td>
<td>1.48</td>
<td>4.60</td>
</tr>
</tbody>
</table>

Note: Only measures w/ significant differences are included ($p < .05$). T-values are presented as absolute values. For violation of justice rules, lower values indicate greater perceived injustice. For all other measures, higher values indicate a greater degree of that construct.
Table 4-4. Criminality regressed on study variables.

<table>
<thead>
<tr>
<th>Measures</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disjunction between expectations, achievements</td>
<td>.25 (.18)*</td>
<td>.17 (.12)*</td>
<td>.23 (.17)*</td>
<td>.16 (.12)**</td>
<td>-.07 (-.05)</td>
</tr>
<tr>
<td>Disjunction between aspirations, expectations</td>
<td>-.20 (-.26)*</td>
<td>-.23 (-.29)*</td>
<td>-.13 (-.17)</td>
<td>-.15 (-.20)**</td>
<td>-.12 (-.16)</td>
</tr>
<tr>
<td>Presentation of negative stimuli</td>
<td>.18 (.08)*</td>
<td>.16 (.07)*</td>
<td>.24 (.12)*</td>
<td>.21 (.11)*</td>
<td>.14 (.07)</td>
</tr>
<tr>
<td>Removal of positive stimuli</td>
<td>-.16 (-.12)*</td>
<td>-.15 (-.12)*</td>
<td>-.05 (-.04)</td>
<td>-.05 (-.04)</td>
<td>.02 (.01)</td>
</tr>
<tr>
<td>Offender sex</td>
<td>-.05 (-.16)</td>
<td>-.04 (-.14)</td>
<td>-.06 (-.20)</td>
<td>-.05 (-.17)</td>
<td>-.03 (-.13)</td>
</tr>
<tr>
<td>Offender age group</td>
<td>.04 (.17)</td>
<td>.04 (.16)</td>
<td>.09 (.33)</td>
<td>.08 (.33)</td>
<td>.14 (.55)**</td>
</tr>
<tr>
<td>Offender minority group</td>
<td>.01 (.05)</td>
<td>.01 (.05)</td>
<td>.01 (.06)</td>
<td>.01 (.04)</td>
<td>.07 (.33)</td>
</tr>
<tr>
<td>Crime type</td>
<td>.09 (.37)</td>
<td>.09 (.32)</td>
<td>.11 (.42)</td>
<td>.11 (.42)</td>
<td>.13 (.51)**</td>
</tr>
<tr>
<td>Anger</td>
<td>-</td>
<td>.16 (.20)*</td>
<td>.15 (.19)**</td>
<td>-.02 (-.03)</td>
<td></td>
</tr>
<tr>
<td>Depression</td>
<td></td>
<td>-.27 (-.35)*</td>
<td>-.27 (-.34)*</td>
<td>-.09 (-.11)</td>
<td>-.12 (-.05)**</td>
</tr>
<tr>
<td>Social support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.13 (-.19)**</td>
</tr>
<tr>
<td>Self efficacy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.15 (-.18)**</td>
</tr>
<tr>
<td>Cognitive coping: avoidance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.41 (-.09)*</td>
</tr>
<tr>
<td>Behavioral coping: revenge</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.11 (.15)</td>
</tr>
<tr>
<td>Violation of justice rules</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.05 (.07)</td>
</tr>
<tr>
<td>Pressure/incentive crim coping (delinquent peers)</td>
<td>.05 (.07)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>External attribution</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.06 (.09)</td>
</tr>
<tr>
<td>Constant</td>
<td>3.40</td>
<td>3.34</td>
<td>3.31</td>
<td>3.24</td>
<td>9.33</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>.24</td>
<td>.25</td>
<td>.31</td>
<td>.32</td>
<td>.43</td>
</tr>
</tbody>
</table>

Note: Standardized effects shown, with unstandardized effects in parentheses.

* $p < .01$; ** $p < .05$
Table 4-5. Mean-level differences by RISE treatment.

<table>
<thead>
<tr>
<th></th>
<th>Court</th>
<th></th>
<th>Conference</th>
<th></th>
<th>T-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
<td></td>
</tr>
<tr>
<td>Disjunction betwn expect/achieve</td>
<td>5.41</td>
<td>2.03</td>
<td>4.92</td>
<td>2.07</td>
<td>1.82+</td>
</tr>
<tr>
<td>Disjunction betwn aspir/expect</td>
<td>2.70</td>
<td>1.15</td>
<td>2.43</td>
<td>1.25</td>
<td>1.72+</td>
</tr>
<tr>
<td>Anger</td>
<td>2.62</td>
<td>1.20</td>
<td>2.31</td>
<td>1.16</td>
<td>2.02*</td>
</tr>
<tr>
<td>Behavioral coping: revenge</td>
<td>2.27</td>
<td>1.14</td>
<td>1.87</td>
<td>.92</td>
<td>2.95*</td>
</tr>
<tr>
<td>Violation of justice rules</td>
<td>33.50</td>
<td>6.41</td>
<td>37.83</td>
<td>6.30</td>
<td>5.22*</td>
</tr>
<tr>
<td>Pressure/incentive (delinq peers)</td>
<td>2.42</td>
<td>1.19</td>
<td>2.08</td>
<td>1.05</td>
<td>2.35*</td>
</tr>
</tbody>
</table>

Note: Only measures w/ significant differences are included. T-values are presented as absolute values. For violation of justice rules, lower values indicate greater perceived injustice. For all other measures, higher values indicate a greater degree of that construct.

+<sup>p</sup> < .10  *<sup>p</sup> < .05
Figure 4-1. Strain on criminality: Nonlinearity.
Figure 4-2. Strain on anger: Nonlinearity.
CHAPTER 5
DISCUSSION AND CONCLUSION

Key Contributions

The present study builds on general strain theory’s empirical record in several ways. Most notably, no known tests have examined general strain from a sociolegal perspective and no known tests have utilized experimental data. Additionally, few tests have explored GST internationally (although see Bao et al., 2004; Mesch et al., 2003; Pinhey and Okinaka, 2004), tests have not traditionally utilized active offenders (although see Baron, 2004; Baron and Hartnagel, 2002; Baron et al., 2001; Piquero and Sealock, 2000, 2004), most tests have failed to utilize subjective measures of strain (i.e., those types of strains stemming from events or conditions that are disliked by the people experiencing them) (although see Agnew and White, 1992), and most tests have not featured as rich a set of GST-specific strains, conditioners, and measures of affect.

While the study finds major support for many of the theory’s key tenets, it also raises important questions about how certain categories of strain, negative affect, and conditioners operate sociolegally. More specifically, the disjunction between aspirations and expectations, the removal of positive stimuli, and the expression of depression separated themselves as measures that will likely require more detailed specifications in future tests.

In short, the perceived loss of future opportunities and/or loss of respect or honor among family or friends operated very differently from an administration of disrespectful treatment. The former (as loss) related to inward-oriented affect (i.e., depression) and to a lower degree of criminality, while the latter associated with outward-oriented affect (i.e., anger) and a higher degree of criminality. Considering that depression may be more strongly associated with passive crimes (see Agnew, 2006a), it is possible that the present study’s criminality measure does not
capture a full range of delinquent adaptations. In light of the fact that none of the offenders was arrested for a drug offense, and questions regarding future criminality were queried in an environment centering on explicit expressive and instrumental crimes, it is likely that outward-oriented criminality was at the perceptual fore. As recent critiques indicate that different strains can impact people differently (Agnew, 2001, 2006a; also see Briere, 1992), the findings raise interesting possibilities.

Consistent with theoretical prediction, an examination of the cumulative effect of the strains most associated with criminality in this study (disjunction between expectations and actual achievements; the presentation of negative stimuli) indicated a sizable difference between high-strain and low-strain offenders and criminality; a similar effect was also found for anger.

Also consistent with prediction regarding nonlinearity in GST, offenders experiencing the highest levels of the study’s most empirically supported strain (disjunction between expectations and actual achievements) were found to exhibit a disproportionally high degree of both criminality and anger. Similar to the case of cumulative effects, future tests may benefit from understanding whether common analytical methods underreport a relationship between strain and crime due to the relatively few respondents who surpass very high levels (Agnew, 2002:624).

The present analysis also assessed the relative influence of facilitators and inhibitors to delinquent coping. As predicted, each of the facilitators of delinquent coping exhibited moderate to strong associations with criminality. Without exception, each facilitator of delinquent coping was found to associate with strain in the same direction as the strains did with criminality. As explained earlier, if two sources of strain within this sociolegal context associate with anger and

---

1 Related research has found that composite measures based on individuals at the “right tail” can elucidate interesting trends in perceptual data. In one such study, blacks were found to be over three times more likely than whites to surpass the highest levels of perceived violations of justice rules (Rice and Piquero, 2005).
criminality while two sources of strain associate with differentially manifested affect (i.e., depression), one would have expected to see the facilitators operate exactly as they did. The violation of justice rules separated itself in particular. It was strongly associated with the types of strains most associated with criminality, with anger, with the facilitators of delinquent coping, with criminality itself, and then also (as expected) exhibited an inverse relationship with the inhibitors of delinquent coping (e.g., social support).

With regard to the inhibitors to delinquent coping, as predicted each associated with a reduced likelihood for criminality, and all but one associated with a lower degree of anger. The one outlier is the cognitive coping mechanism of avoidance, a conditioner that raised particularly interesting questions. As a measure with a strong association with depression, cognitive avoidance also associated most strongly with the strains negatively associated with criminality. Future tests of GST may wish to work to better understand whether avoidance coping is actually an inhibitor or a facilitator of delinquency, depending on the specific strain and form of negative affect.

Unlike past tests of GST that have found important differences across sex, age, and minority status, the present study found few differences. Violations of justice rules once again played a prominent role, with adult (expressive) offenders and Australian non-Aboriginals perceiving greater injustice. Across crime type (instrumental v. expressive), more differences were noted. Offenders arrested for violence expressed a greater degree of strain as disjunction between expectations and actual achievements, self-efficacy, violations of justice rules, external attribution, pressure/incentive to engage in criminal coping (delinquent peers), and prospective criminality. Instrumental offenders, on the other hand, expressed a greater degree of strain as removal of positive stimuli. Future research should examine whether such trends reflect
differing cost/benefit calculations across offense type or are misspecified in light of diverse offending patterns among many criminals.

The multivariate analysis was somewhat similar to what was found at the bivariate level, although it is important to note that contrary to theoretical prediction, anger was found not to mediate the effects of strain on criminality. Interestingly, the replacement of depression for anger in the multivariate models indicated that depression mediated the (inverse) relationship between strain as disjunction between aspirations/expectations and strain as the removal of positive stimuli onto criminality, once again supporting a call for future research to better understand how depression operates within this context. As opposed to earlier analysis, a multivariate model including all study variables indicated that juveniles were higher than adults in prospective criminality, and the four strain variables failed to exert significant effects on criminality in the full model. As a randomized, controlled experiment, due attention should be paid to the relative utility of multivariate findings, on balance.

Finally, differences were also assessed from the perspective of restorative justice theory. Largely consistent with both theory and RISE program and outcomes assessments (e.g., Sherman et al., 2000, 2004), offenders assigned to court were more likely to perceive violations of justice rules, to feel angry, to perceive a level of support for their delinquency among their peers, and to exhibit a desire to behaviorally cope through revenge. These offenders were also found to more likely perceive strains related to a disjunction between expectations/actual achievements and aspirations/expectations. In other words, offenders assigned to court were more likely to feel that they felt pushed around by people with more power, pushed into things s/he did not agree with, and had “stuffed up” future opportunities.
Interestingly, all the significant facilitators of delinquent coping were associated with court assignment. As discussed earlier, however, no theorized inhibitors to delinquent coping (e.g., perceived social support, high self esteem) associated with conference assignment. In addition, and perhaps most centrally, the study’s measure of prospective criminality did not significantly differ (statistically) across experimental treatment for the full sample or violent subsample. As an experimental context, however, it should be noted that descriptive (mean-level) measures of criminality were higher for court assignees in both full and violent samples.

**Limitations**

Several important limitations to the present study are worth mentioning. Despite the past tests of GST that have utilized projected criminality/intentions to commit crime as dependent variable, the present study would have most certainly benefited from RISE recidivism data. At a minimum, it would have been interesting to assess to what degree projected criminality correlated with self-reported and/or officially reported offending (see Green, 1989; Tittle, 1980).

Next, it is critical to note that the RISE surveys were based upon completion rates of 76 percent of juvenile personal property offenders, 73 percent of juvenile property security offenders, and 72 percent of violent crime offenders (Sherman et al., 2001). Ongoing outcomes assessments by the RISE research teams may help us to understand whether, and to what degree, these completion rates reflect random, or non-random, missing data. Relatedly, in a working paper Sherman and Strang (2004:7) drew attention to the fact that in the property experiment, one-third of the offenders assigned to conferencing did not meet their victims.

Additionally, the measures for the disjunction between aspirations and expectations, anger, depression, cognitive coping, emotional coping, pressure/incentive to engage in criminal coping, and external attribution were based on individual survey items, not scales. As events and
conditions related to strain are by all means multifaceted, future research may find that instruments made up of several indicators are best suited to the task.

**Policy Implications**

As might be expected in light of the legal context, the study’s findings have several important policy implications. Most notably, it is quite clear that despite the criminal justice system’s best intentions, many offenders are being treated in a manner that most predisposes them to future criminality (see Sherman, 1993). More specifically, the traditional processing of offenders appears to be associated with greater degrees of several forms of strain, a greater degree of anger, a greater desire for revenge, and an overarching sense of injustice. An imposing demonstration of state power may counter a justice system’s purported purpose and may bespeak intractable problems for that state in years to come.

As such, justice systems may be well served to consider the relative shortcomings of a retributive paradigm. Coupled with restorative justice and reintegrative shaming principles (Braithwaite, 1992; Sherman and Strang, 1997), general strain theory would appear to be an excellent way to frame inputs to an effective legal system—a system that administers sanctions that are seen as just, appropriate in magnitude, do not create pressure or incentive to engage in crime, and do not reduce key elements of social control (also see Agnew, 2001:352).

**Future Directions for Research**

The study’s findings also suggest several directions for future research. For example, despite past efforts that have been undertaken to better understand subcategories of negative affect (e.g., Mazerolle and Piquero, 1998; Mazerolle et al., 2003), future research may wish to test the social functions of affect. That is, to assess under what circumstances anger is mistakenly entangled with reactive aggression. Literature on violence and aggression suggests that there are multiple functions of anger in social situations to include defensive, energizing,
expressive, disruptive, and that of self-presentation (Novaco, 1976; Tedeschi and Felson, 1994). Relatedly, and as has been the case with efforts to better specify process-based judgments onto the social regulatory activities of agents of social control (Tyler, 2003), future research should better specify perceived violations of relevant justice norms onto the varied social functions of affect. For example, whether the reactive expression of self-presentation maps onto the prevention of achieving positively valued goals, whether expressive anger maps onto the removal of positively valued stimuli, and so forth.

In addition, as has been argued in Thornberry’s (1987) interactional theory and in Agnew’s (2005) general theory, future research may wish to better understand whether the characteristics of strain have reciprocal effects on one another; for example, whether injustice judgments influence perceptions of high magnitude, while high magnitude also influences injustice judgments. Further, research may wish to gauge the impact of crime on these strain characteristics, such as in the possible case of crime leading to lower degrees of social control, which then leads to ever-higher involvement in crime. As such, there may be any number of effects underway that warrant additional inquiry. One such effect may be the “storyline,” or the temporal level between background and situational factors in offending; in other words, an event that is out of the ordinary that alters an individual’s characteristics, interactions, or settings for interactions and increases one’s likelihood for offending (e.g., in an unresolved dispute or a brief, tempting opportunity for crime) (Agnew, 2006b:129-134).

In closing, it would appear that a legal context can become a particularly fruitful area for general strain theory scholarship. Just as research suggests that in judging the courts people are less concerned with performance issues than they are with quality of treatment (Tyler and Huo, 2002:188), so too does general strain theory focus on the implications of negative relations with
others. A propositional alignment is clearly evident, and the theory will likely benefit from the undertaking.
APPENDIX A
INDIVIDUAL SURVEY ITEMS AND SCALE CONSTRUCTION

Strain 1: Disjunction between expectations and actual achievements. ($\alpha = .75$)

1. You felt pushed around in the conference/court case by people with more power than you. ($r = .91$)
   (1) Strongly Disagree, (2) Disagree, (3) Neither, (4) Agree, (5) Strongly Agree
2. During the conference/court you felt pushed into things you did not agree with ($r = .88$)
   (1) Strongly Disagree, (2) Disagree, (3) Neither, (4) Agree, (5) Strongly Agree

Strain 2: Disjunction between aspirations and expectations.

1. During the conference/court case I felt that I had stuffed up at least some of my future opportunities.
   (1) Strongly Disagree, (2) Disagree, (3) Neither, (4) Agree, (5) Strongly Agree

Strain 3: Presentation of negative stimuli. ($\alpha = .74$)

1. Were you treated in the conference/court as though you were likely to commit another offense? ($r = .66$)
   (1) Not at all, (2) A little, (3) Somewhat, (4) A lot
2. Did people during the conference/court case make negative judgments about what kind of person you are? ($r = .71$)
   (1) Not at all, (2) A little, (3) Somewhat, (4) A lot
3. During the conference/court case were you treated as though you were a criminal. ($r = .78$)
   (1) Not at all, (2) A little, (3) Somewhat, (4) A lot
4. During the conference/court case did any of the people who are important to you reject you because of the offence? ($r = .53$)
   (1) Not at all, (2) A little, (3) Somewhat, (4) A lot
5. During the conference/court case were you treated as though you were a bad person? ($r = .82$)
   (1) Not at all, (2) A little, (3) Somewhat, (4) A lot

Strain 4: Removal of positive stimuli. ($\alpha = .68$)

1. During the conference/court case I felt like I had lost respect or honour among my family. ($r = .90$)
   (1) Not at all, (2) A little, (3) Quite a bit, (4) A lot, (5) Felt overwhelmed by it
2. During the conference/court case I felt like I had lost respect or honour among my friends. ($r = .85$)
   (1) Not at all, (2) A little, (3) Quite a bit, (4) A lot, (5) Felt overwhelmed by it

Negative affect 1: Anger

1. The conference/court case just made you angry.
   (1) Strongly Disagree, (2) Disagree, (3) Neither, (4) Agree, (5) Strongly Agree
Negative affect 2: Depression

1. During the conference/court case I felt sad or depressed.
   
   (1) Not at all, (2) A little, (3) Quite a bit, (4) A lot, (5) Felt overwhelmed by it

Conventional social support. ($\alpha = .65$)

1. Did people in the conference/court case say that it was not like you to do something that was wrong? ($r = .59$)
   
   (1) Not at all, (2) A little, (3) Somewhat, (4) A lot

2. Did you learn from the conference/court case that there are people who care about you? ($r = .69$)
   
   (1) Not at all, (2) A little, (3) Somewhat, (4) A lot

3. During the conference/court case did people suggest that they loved you regardless of what you did? ($r = .72$)
   
   (1) Not at all, (2) A little, (3) Somewhat, (4) A lot

4. During the conference/court case did people talk about aspects of yourself which they like? ($r = .73$)
   
   (1) Not at all, (2) A little, (3) Somewhat, (4) A lot

5. Were you treated as a trustworthy person in the conference/court? ($r = .51$)
   
   (1) Not at all, (2) A little, (3) Somewhat, (4) A lot

Self-efficacy. ($\alpha = .58$)

1. If I can’t do a job the first time, I keep trying until I can. ($r = .82$)
   
   (1) Strongly Disagree, (2) Disagree, (3) Neither, (4) Agree, (5) Strongly Agree

2. When trying to learn something new, I soon give up if I am not initially successful (reversed). ($r = .85$)
   
   (1) Strongly Disagree, (2) Disagree, (3) Neither, (4) Agree, (5) Strongly Agree

Self-esteem. ($\alpha = .74$)

1. I feel that I’m a person of worth, at least on an equal plane with others. ($r = .75$)
   
   (1) Strongly Disagree, (2) Disagree, (3) Neither, (4) Agree, (5) Strongly Agree

2. I feel that I have a number of good qualities. ($r = .72$)
   
   (1) Strongly Disagree, (2) Disagree, (3) Neither, (4) Agree, (5) Strongly Agree

3. I am able to do things as well as most other people. ($r = .61$)
   
   (1) Strongly Disagree, (2) Disagree, (3) Neither, (4) Agree, (5) Strongly Agree

4. I take a positive attitude towards myself. ($r = .72$)
   
   (1) Strongly Disagree, (2) Disagree, (3) Neither, (4) Agree, (5) Strongly Agree

5. On the whole, I am satisfied with myself. ($r = .69$)
   
   (1) Strongly Disagree, (2) Disagree, (3) Neither, (4) Agree, (5) Strongly Agree
Cognitive coping strategy: avoidance.

1. During the conference/court case I felt so exposed, I wished I could just disappear.
   (1) Not at all, (2) A little, (3) Quite a bit, (4) A lot, (5) Felt overwhelmed by it

Emotional coping strategy: revenge.

1. You wish that you could get back at the people who were accusing you in the conference/court case.
   (1) Strongly Disagree, (2) Disagree, (3) Neither, (4) Agree, (5) Strongly Agree

Violation of relevant justice rules. ($\alpha = .86$)

1. You feel that people who have committed the same offense are treated the same way by conferences/courts. ($r = .47$)
   (1) Strongly Disagree, (2) Disagree, (3) Neither, (4) Agree, (5) Strongly Agree
2. People were polite to you in the court/conference. ($r = .62$)
   (1) Strongly Disagree, (2) Disagree, (3) Neither, (4) Agree, (5) Strongly Agree
3. You understood what was going on in the court/conference. ($r = .57$)
   (1) Strongly Disagree, (2) Disagree, (3) Neither, (4) Agree, (5) Strongly Agree
4. You understood what your rights were during the processing of the case. ($r = .67$)
   (1) Strongly Disagree, (2) Disagree, (3) Neither, (4) Agree, (5) Strongly Agree
5. You felt you had the opportunity to express your views in the conference/court. ($r = .76$)
   (1) Strongly Disagree, (2) Disagree, (3) Neither, (4) Agree, (5) Strongly Agree
6. All sides got a fair chance to bring out the facts in the conference/court. ($r = .76$)
   (1) Strongly Disagree, (2) Disagree, (3) Neither, (4) Agree, (5) Strongly Agree
7. You felt you had enough control over the way things were run in the conference/court. ($r = .77$)
   (1) Strongly Disagree, (2) Disagree, (3) Neither, (4) Agree, (5) Strongly Agree
8. The conference/court took account of what you said in deciding what should be done. ($r = .71$)
   (1) Strongly Disagree, (2) Disagree, (3) Neither, (4) Agree, (5) Strongly Agree
9. You feel you were treated with respect in the conference/court. ($r = .73$)
   (1) Strongly Disagree, (2) Disagree, (3) Neither, (4) Agree, (5) Strongly Agree
10. The police were fair during the court/conference. ($r = .65$)
    (1) Strongly Disagree, (2) Disagree, (3) Neither, (4) Agree, (5) Strongly Agree

Pressure/incentive to engage in criminal coping.

1. What do your close friends think about what you did? Do they think that the offence you committed was:
   (1) Totally wrong, (2) In some way wrong, (3) Neither right nor wrong, (4) In some way right, (5) Totally right
External attribution.

1. You feel that the people who accused you in the conference/court case were more wrong than you were.
   (1) Strongly Disagree, (2) Disagree, (3) Neither, (4) Agree, (5) Strongly Agree

Outcome measure: delinquent adaptation ($\alpha = .73$)

1. The conference/court case will help prevent you from breaking the law in the future. ($r = .91$)
   (1) Strongly Agree, (2) Agree, (3) Neither, (4) Disagree, (5) Strongly Disagree
2. What happened in the conference/court will encourage you to obey the law in the future. ($r = .87$)
   (1) Strongly Agree, (2) Agree, (3) Neither, (4) Disagree, (5) Strongly Disagree

Background/Control variables

1. Offender sex. Female (0), Male (1)
2. Offender age group. Non-juvenile (0), Juvenile (1)
3. Offender minority status (Aboriginal/Torres Strait Islander). No (0), Yes (1)
4. Crime type. Instrumental (0), Expressive (1)
5. Assigned treatment. Court (0), Conference (1)

Note: A computation of the sum of individual survey items was used to construct the scales. Tests for unidimensionality indicate the loading on one factor for each scale. Item-to-scale correlations are presented in parentheses for each scale item.
APPENDIX B
CORRELATION MATRIX

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Note: (p < .05) in bold (2-tailed)
LIST OF REFERENCES


BIOGRAPHICAL SKETCH

Stephen K. Rice was born on July 2, 1967, in New York City. Growing up in New York City and Daytona Beach, Florida, he graduated from Spruce Creek High School in 1985. He earned a B.A. in English from the University of Florida in 1989, an M.S. in criminology and criminal justice from Florida State University in 1993, and an M.A. in sociology from the University of Florida in 2003.

Stephen is an Assistant Professor at John Jay College of Criminal Justice in New York City. His research interests include criminological theory and the sociology/social psychology of punishment. His scholarship has appeared in the journals *Criminology*, *Journal of Criminal Justice*, *Journal of Criminal Justice Education*, *Policing*, *Journal of Ethnicity in Criminal Justice*, *Australian and New Zealand Journal of Criminology*, and the Brill series *Race and Ethnicity: Across Time, Space and Discipline*.

Stephen has been married to Karen Collins Rice for 16 years. They have two sons: Connor, age 9, and Brogan, age 2.