Using General Strain Theory to Explain Crime in Asian Societies

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Abstract This paper provides an overview of general strain theory (GST) and argues that the theory can shed much light on the causes of crime in Asian societies. The paper is in five parts, with these parts describing (1) the strains most likely to cause crime; (2) why these strains cause crime; (3) the factors influencing whether strained individuals cope through crime; (4) how GST explains group differences in crime, such as the higher crime rate of males; and (5) how GST explains changes in crime over time, such as the recent increase in delinquency in certain Asian societies. Each section begins by describing the key arguments of GST and the research on these arguments. This is followed by a discussion of the extent to which these arguments apply to Asian societies. GST is said to be quite applicable to Asian societies. For example, most of the strains that cause crime in Western societies also cause crime in Asian societies. At the same time, it is argued that GST should be revised somewhat in order to best explain crime in Asian societies. Researchers, for example, should take account of the greater emphasis on collectivistic values in many Asian societies, including the value placed on social harmony and self-restraint. These values influence the events and conditions that function as strains and the reaction to strains. In making these arguments, the paper draws heavily on the research that has applied GST to Asian societies, most commonly to Chinese, Taiwanese, and South Korean communities.

Keywords General strain theory · Strain · Stress · Causes · Crime · Juvenile delinquency

General strain theory (GST) states that people engage in crime because they experience certain strains or stressors (Agnew 1992, 2006, 2012). These strains involve the inability to achieve valued goals, such as monetary success and status; the experience of negative treatment, such as verbal and physical abuse; and the loss of valued possessions. Strains lead to negative emotions, such as anger, frustration, and depression. These emotions create pressure for corrective action and crime is one possible response. Crime may be used to reduce or escape from strains. For example, individuals may steal the money they need or run away from abusive parents. Crime may be used to seek revenge against the source of strain or related targets (e.g., assaulting the peers who bully you). And, crime may be used to alleviate negative emotions (e.g., taking illicit drugs to feel better). Individuals are most likely to cope with

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strains through crime when they lack the resources to engage in legal coping, their costs of crime are low, and they are disposed to criminal coping.

This paper argues that GST can help explain crime in Asian societies. The paper is organized into five sections. Each section focuses on a core argument of GST, followed by a discussion of the extent to which the argument applies to Asian societies. These arguments state that: (1) certain strains increase the likelihood of crime; (2) these strains increase crime for several reasons, most notably through their impact on negative emotions; (3) a range of variables influence or condition the likelihood of responding to these strains with crime; (4) group differences in crime are partly due to differences in the exposure to strains, in emotional reactions, and in conditioning variables; and (5) changes in crime rates are partly due to changes in these factors.

It is said that there is much overlap between Asian and Western societies in the strains that cause crime, in the reasons why strains cause crime, and in the factors that influence the effect of strains on crime. But, at the same time, it is argued that GST needs to be revised in order to best explain crime in Asian societies. Social and cultural differences between Asian and Western societies lead to *certain* differences in the events and conditions that function as strains, in the exposure to strains, in the emotional reaction to strains, and in the factors that condition the response to strains. Fortunately, GST is quite adaptable. Several revisions in GST and directions for further research are suggested.

It is important to note that this paper focuses on rather general differences between Asian and Western societies. It is recognized that there are significant differences between particular societies within Asia and within the West, but space considerations and limited research prevent discussion here. Also, it should be noted that most of the Asian research on which I draw is from China, Taiwan, and South Korea; and most of the Western research is from the USA (for overviews of certain of the comparative research on GST, see Agnew 2006; Bao and Haas 2009; Sigfusdottir et al. 2012). The broad assertions I make should therefore be treated with caution. Additional theory and research will hopefully shed light on how GST needs to be adapted to best account for the social and cultural characteristics of particular societies in Asia (see Cheung et al. 2007 for an excellent example). But, as argued below, there are certain prominent features of many Asian societies that need to be considered when applying GST. The features most often mentioned involve the strong value placed on social harmony, self-restraint, the family, and education—values with roots in the Confucian tradition. But, there are other features as well.

It is also important to note that most of the arguments in this paper have been taken from the work of scholars who have applied GST to Asian societies. I want to acknowledge the major contributions of these scholars, who include Bao and Haas (2009), Bao et al. (2004, 2007), Bao et al. (2014), Bao et al. (2012), Cheung (forthcoming), Cheung et al. (2007, 2014), Cheung and Cheung (2008, 2010), Horton et al. (2012), Lin (2011, 2012), Lin and Mieczkowski (2011), Liu and Lin (2007), Maxwell (2001), Moon et al. (2008), Moon and Morash (2004), Moon et al. (2012), Moon et al. (2009), and Morash and Moon (2007). I was limited to English language publications, but I know that certain non-English publications have also applied GST to Asian societies (see Yuma, 2008, for an example, from Japan; Lin 2011, for examples from Taiwan). I apologize to any scholars whose work I inadvertently overlooked.

Certain Strains Increase the Likelihood of Crime

Strains refer to events and conditions that are disliked by individuals (see Agnew 2006 for an overview). A distinction is made between objective and subjective strains. Objective strains are



events and conditions disliked by most people in a given group. GST recognizes that there may be certain differences in strains (i.e., disliked events and conditions) across groups, including countries, due to cultural and social differences. Subjective strains refer to events and conditions disliked by the people experiencing them. The stress research demonstrates that people sometimes differ in their subjective evaluation of the same objective strains. For example, some people view their divorce as the worst thing that ever happened to them, while others view it as a cause for celebration. GST states that subjective strains should be more strongly related to crime, although the limited research in this area has produced mixed results (Botchkovar et al., 2009; Froggio and Agnew 2007; Lin and Mieczkowski 2011).

GST also distinguishes between experienced, various, and anticipated strains (Agnew 2002). While GST focuses on strains that are personally experienced by individuals, vicarious and anticipated strains may also contribute to crime. Vicarious strains refer to the strains experienced by others around the individual, especially close others such as family and friends. Such strains are most likely to lead to crime if they are severe and seen as unjust and the individual feels some responsibility for the welfare of these others. For example, research indicates that the criminal victimization of family members and friends contributes to crime (Agnew 2002). The concept of vicarious strain may have special relevance to many Asian societies, as noted below. Anticipated strains refer to strains expected to occur in the future. For example, individuals may expect to be criminally victimized. Anticipated strains are most likely to lead to crime when individuals believe that they have a high probability of occurring in the near future and they are seen as severe and unjust (Agnew 2002).

But not all strains increase the likelihood of crime. Those "criminogenic" strains most likely to increase crime are high in magnitude, are seen as unjust, are associated with low social control, and create some pressure or incentive for criminal coping (Agnew 2001, 2006). Strains with these characteristics are especially likely to lead to those negative emotions that motivate crime. A severe and unjust strain, for example, generates much anger. Such strains also reduce the ability to legally cope. It is more difficult to legally cope with a major rather than a minor economic problem, for example. And, as described below, such strains reduce the costs of crime and increase the disposition for crime. The characteristics of criminogenic strains are briefly described below, with fuller descriptions in Agnew (2001, 2006).

Strains that are *high in magnitude* are disliked a great deal. Such strains tend to be *high in degree*. For example, they involve a serious assault versus a minor insult. They are also *recent*, *frequent*, *of long duration*, *and expected to continue into the future*. As an example, imagine a student who is currently receiving failing grades and has regularly received such grades in the past and who expects to receive such grades in the future. This student is said to be more likely to engage in crime than a student who received a single failing grade in the distant past. And, such strains are *high in centrality*. That is, they threaten the core goals, needs, values, activities, and/or identities of individuals. As discussed below, a particular event or condition may be *strongly* disliked in one society but only mildly disliked or not at all disliked in another.

Second, criminogenic strains are *seen as unjust*. Strains are more likely to be seen as unjust when they involve the voluntary and intentional violation of relevant justice norms (Agnew 2001, 2006). For example, being accidentally bumped by another person while walking down the street may be disliked, but it is unlikely to be seen as unjust since it was not intentional. But, being deliberatively bumped for no apparent reason is likely to be seen as unjust and to generate anger as a result. The justice literature discusses the major types of injustice, including distributive, procedural, and interactional injustice (Agnew 2001, 2006; Leung 2005; Rebellon et al. 2012; Scheuerman 2014). People in all societies are concerned about these types of injustice and often make similar justice evaluations. But, there are also certain differences in what is seen as unjust, including differences between Asian and Western societies (Leung 2005).



Third, criminogenic strains are associated with low social control (Agnew and Brezina 2012). Social control includes direct control, wherein others set clear rules that forbid crime, closely monitor behavior, and consistently sanction rule violations. Control also includes strong emotional bonds or attachments to conventional others, such as family, teachers, and religious figures. Individuals with such bonds are less likely to engage in crime since they do not want to hurt others they care about or jeopardize their ties to them. Further, control includes a strong actual or anticipated investment in conventional institutions, such as school, work, and community. Examples include high grades, long hours spent studying, the expectation that one will attend college, work at a prestigious and well-paid job, and a good reputation in the community. Crime may of course jeopardize these investments. And, control includes the internalized belief that crime is wrong or immoral. Certain strains are associated with high control, such as the long working hours of many professionals. Other strains are associated with low control. Parental rejection, for example, is associated with low direct control and a weak bond to parents. Individuals experiencing strains associated with low control are more likely to engage in crime because they have less to lose by doing so.

I should note that the Asian research on GST provides an excellent example of an intense strain associated with high social control—what has been called "examination strain" or "examination hell." Moon and Morash (2004) describe the intense strain associated with college entrance examinations in South Korea and others have done likewise for China (Bao and Haas 2009; Liu 2011; Liu and Lin 2007). Students preparing for college examinations spend enormous amounts of time studying and working with tutors, they give up their social lives and other pleasurable pursuits, and they are under tremendous pressure from their parents and teachers to do well. This is the case because a high score is necessary for admission to a top university, which in turn is "a precondition to success in many aspects of social life financial success, good jobs, marriage to a person with high social status, and high social status for oneself and one's progeny" (Moon and Morash 2004, p. 82). Moon and Morash (2004) measured examination strain by asking students whether their parents and teachers stress studying too much and whether they feel a lot of stress about studying. But, despite the magnitude of this strain, they found that it is weakly related to crime (also, see Moon et al. 2008, 2009; Morash and Moon 2007). This strain, however, was measured before students took the college entrance examination. This is a time when most students have a very high stake in conformity, they have spent much time preparing for the exam and are working closely with teachers and parents, and it's likely that most expect or at least hope to do well on the exam. So, while they are under much strain, they have much to lose by engaging in crime at this point. Further, they have little opportunity to engage in crime. However, those who do poorly on the exam should be more likely to engage in crime, since poor performance is a major strain associated with a low social control. Not only is their hope for future success shattered, but also poor performance weakens ties to conventional others such as parents and teachers. And, Moon and Morash (2004) indicate that certain evidence suggests that poor examination performance is associated with delinquency.

Fourth, criminogenic strains create some incentive or pressure for criminal coping. These strains are easily resolved through crime. For example, that strain involving a desperate need for money is readily resolved through crimes such as theft, drug selling, and prostitution, while that strain involving the death of a parent is not. Also, these strains are associated with exposure to others who model crime, reinforce crime, teach beliefs favorable to crime, or otherwise pressure or entice the individual into crime (see Agnew and Brezina 2015 on social learning theory). For example, individuals who experience child abuse are exposed to criminal models who foster the belief that violence is an appropriate way to deal with one's problems. And, child abuse is related to crime. But, that strain involving exclusion from adolescent peer



groups is usually unrelated or weakly related to crime. This is true in Asian studies, even though peer isolation should be a potent strain given the cultural emphasis on interconnectedness (Bao et al. 2007; Cheung and Cheung 2010; Moon et al. 2008, 2009, 2012). The weak effect of peer isolation on crime may partly stem from the fact that isolated peers are not exposed to others who model, reinforce, or otherwise encourage crime. Also, crime is not an effective way to resolve peer isolation—especially given the emphasis on social harmony in many Asian societies (Lin 2011).

Drawing on the four criteria that distinguish criminongenic strains, GST states that the following strains are especially conducive to crime:

- · Parental rejection
- Erratic, very strict, excessive, and/or harsh parental and school discipline (use of humiliation/insults, threats, screaming, and/or physical punishments)
- Child abuse and neglect
- Negative secondary school experiences (low grades, negative relations with teachers, the
 experience of school as boring and a waste of time)
- · Abusive peer relations, including verbal and physical abuse
- Work in the secondary labor market (jobs that are unpleasant and poorly paid, have little
 prestige, provide few benefits, have limited opportunities for advancement, provide little
 autonomy, employ coercive methods of control)
- Chronic unemployment blamed on others
- Marital problems (frequent conflict, verbal and physical abuse)
- Criminal victimization
- Residence in very poor communities plagued by problems such as crime and incivilities
- Economic problems (e.g., inability to pay bills, selling possessions to raise money (see Agnew et al. 2008))
- Homelessness (including lack of adequate food and shelter)
- Discrimination based on race/ethnicity, gender, age, region, and religion
- The inability to achieve certain goals (thrills/excitement, autonomy, masculine status, the desire for much money in a short period of time)

These strains are likely to be seen as high in magnitude and unjust, they are associated with low social control, and they are conducive to criminal coping. Research conducted primarily in the USA and certain other Western countries indicates that these strains increase the likelihood of crime, with strains such as parental rejection and victimization being among the most important causes of crime (Agnew 2001, 2006; Sigfusdottir et al. 2012). Such research supports the central proposition of GST that certain strains increase the likelihood of crime, and this research is responsible for establishing GST as one of the leading crime theories. But, do these strains increase crime in Asian societies? And, are there other strains with special relevance to Asian societies?

Application to Asian Societies

There is reason to believe that most of the above strains increase crime in Asian societies. These strains directly threaten universal or widely shared needs for food/shelter, security, close ties to family, and status/respect (Agnew 2011). Beyond that, many Asian societies are becoming more like the West, developing market economies, urbanizing, placing more emphasis on individualism and material success, and experiencing increased inequality. As such, many of the events and conditions that function as strains in the West should do so in



these Asian societies. Further, several studies have examined the effect of certain of these strains on crime in Asia, typically in Chinese, Taiwanese, and South Korean communities, using measures taken from or based on those used in Western studies. These studies generally find that such strains are associated with crime, although the findings vary somewhat, depending on such things as sample characteristics and the type of delinquency examined (see below and the review in Bao and Haas 2009).

In particular, the following strains are generally associated with crime in the Asian studies: physical and emotional abuse by teachers (Bao et al. 2004, 2007, 2014; Cheung, forthcoming; Cheung and Cheung 2008, 2010; Lin and Mieczkowski 2011; Moon and Morash 2004; Moon et al. 2008, 2009; Morash and Moon 2007); actual and anticipated academic problems (Bao et al. 2004; Cheung and Cheung 2010; Morash and Moon 2007); harsh parental discipline and family conflict, although the effect is often small (Bao et al. 2004, 2007, 2014; Cheung, forthcoming; Cheung et al. 2007, 2014; Cheung and Cheung 2008, 2010; Lin and Mieczkowski 2011; Maxwell 2001; Moon et al. 2008, 2009; Moon et al. 2012; Morash and Moon 2007; Pyrooz and Decker 2013; Zhang and Messner 1995); marital dissatisfaction (Cheung et al., 2014); actual and anticipated economic problems (Lin 2011; Liu and Lin, 2007; Moon et al. 2008, 2009; Morash and Moon 2007; Shek 2005a, b; although, see Cheung et al., 2014); criminal victimization (Lin 2011; Lin and Mieczkowski 2011; Moon et al. 2008, 2009; Moon et al. 2012); neighborhood problems, including crime (Cheung, forthcoming); and gender discrimination (Moon et al. 2009). In certain cases, the associations have been found in several countries; in urban, suburban, and rural communities; in more- and less-developed areas; and/or using longitudinal data. At the same time, it is important to note that certain of the criminogenic strains listed above have not been examined in the Asian studies. Also, I have not found English-language tests of GST in many Asian societies, including Japan, India, Malaysia, Pakistan, Cambodia, Sri Lanka, and Thailand (countries with entries in the *Handbook of Asian Criminology* (Liu et al. 2013)). And, while studies indicate that certain strains are associated with crime in particular Asian communities, we lack good data on whether the size of the associations is similar to that in Western societies (although, see Lin 2011).

Even though there is much overlap in criminogenic strains between Asian and Western societies, there may also be certain differences in strains or at least in the effect sizes of strains. While some events and conditions are generally disliked because they threaten universal or widely shared needs, the social environment also influences what is disliked or functions as a strain. This occurs through several processes, including direct instruction, modeling, social comparison, and the linkage of events and conditions to *intrinsic strains* (events and conditions that are intrinsically disliked because they threaten universal needs) (Agnew 2014a). In addition, the social environment influences what is viewed as unjust. A few illustrations with special reference to Asian and Western societies follow.

People in certain Asian societies are said to place much value on social harmony; the family, including respect for and obedience to parents; and education (e.g., Cheung and Cheung 2008; Lin 2011; Lin and Mieczkowski 2011; Moon et al. 2009; Zhang 2008; Zhang and Messner 1995). These values are said to be rooted in the Confucian tradition and to reflect the more collectivistic orientation of many Asian societies. And, these values likely affect what events and conditions function (and do not function) as major strains. For example, harsh and very strict parental discipline is often weakly related to delinquency in many Asian studies (Bao et al. 2004, 2014; Cheung, forthcoming; Cheung and Cheung 2008, 2009; Lin and Mieczkowski 2011; Maxwell 2001; Moon and Morash 2004; Moon et al. 2008, 2009; Moon et al. 2012; Morash and Moon 2007). This stands in contrast to the Western research, where harsh/strict parental discipline usually has a relatively strong positive relationship to



delinquency (see Agnew 2006; Agnew and Brezina 2015). This difference may stem from the fact that Asian societies place more emphasis on obedience to parents and strict discipline, while Western societies place more emphasis on autonomy and individual interests. Conversely, events and conditions that involve conflict with others, threats to family honor, and harm to close others may be more likely to function as strains in Asia societies (see Lin 2011; Moon et al. 2009). It is not clear, however, whether they function as *criminogenic* strains since crime is usually not an effective way to restore family honor or reduce conflict.

To give another example, it may be that the academic failure is more likely to function as a strain (or a strain of high magnitude) in certain Asian societies. Not only is there much emphasis on education in certain Asian societies, but also academic failure may be more strongly linked to one's relations with others and life chances. Students who fare poorly at school may damage their family honor; jeopardize their bonds to parents, teachers, and peers; suffer verbal and physical abuse; and condemn themselves to a life of economic and social hardship. These effects stem from such things as the strong dependence of parents on economic support from their children (or only child) and changes in the labor market—with educational credentials becoming especially important (e.g., Bao et al. 2014; Moon and Morash 2004; Moon et al. 2008, 2009). As such, it may be that academic failure is more strongly linked to crime in certain Asian societies. More research is needed here, including cross-national research on the extent to which various events and conditions are negatively evaluated, how such evaluations are related to value orientations and other factors, and the relative effect of these events and conditions (strains) on crime.

There may also be cross-national differences in what is viewed as unjust. The research on perceptions of justice in Asian and Western societies is complex (see Leung 2005 for an excellent overview). There are both similarities and differences in perceptions, with several factors influencing research results. So, statements about differences in justice perceptions must be made with care. Nevertheless, the research does allow us to make some general statements in this area. For example, Asian societies are more often "high power distance cultures," meaning that people are more accustomed to negative treatment by authority figures. Consequently, such treatment may be less likely to be seen as unjust (Leung 2005). Also, it has been argued that certain Asian societies are characterized by the belief that adversity is due to fate or destiny (Lin 2012). This may also reduce the view the strains are unjust, since strains are less likely to be attributed to the deliberate acts of others. More research is needed in these areas, however.

Finally, there are differences in the prevalence of certain strains between particular Asian and Western societies. Violent victimization, one of the most criminogenic strains, is less common in China than in the United States (Webb et al. 2011). Likewise, racial discrimination is less common in certain Asian societies. Further, certain Asian societies, such as South Korea, do *not* have large slum areas plagued by crime and other incivilities (Moon and Morash 2004). But, the inability to achieve educational goals may be more common in certain Asian societies, given the limited number of spaces at top universities (Moon and Morash 2004; Moon et al. 2009). Also, physical and verbal abuse by teachers appears to be more common in South Korea and China. Such abuse is often severe, frequent, and long-term (Moon and Morash 2004). And, this abuse has a relatively strong association with delinquency in both South Korea and China (Bao et al. 2014; Cheung, forthcoming; Cheung and Cheung 2008; Lin and Mieczkowski 2011; Moon et al. 2008, 2009, 2012). Other strains that may be more common in certain Asian societies include official corruption and threats to traditional values (more below; also see Bao and Haas 2009).



Strains Increase Crime for Several Reasons, Particularly Their Impact on Negative Emotions

Criminogenic strains increase the likelihood of crime for several reasons (Agnew 2006, 2012). Most notably, they lead to a range of negative emotions, such as anger, frustration, and depression. These emotions create pressure for corrective action. Individuals feel bad and want to do something about it. As indicated, crime is one method of coping. Anger is said to be especially conducive to crime, particularly other-directed crime. Anger energizes the individual for action, creates a desire for revenge, reduces concern for the consequences of one's behavior, and impedes efforts at legal coping—such as negotiation. But, other negative emotions may also result in crime. There has been some suggestion that different types of strain result in different emotions, and different emotions result in different types of crimes. For example, anger is said to be conducive to violence and depression to drug use. More research is needed here, however (see Ganem 2010).

The research on GST has examined both emotional *traits* and *states*, particularly those involving anger. Emotional traits refer to the *general tendency to* experience an emotion such as anger and are often measured by asking respondents whether they agree with questions such as "I am a hotheaded person." Research indicates that strains increase trait anger, but that trait anger only explains a modest portion of the effect of strains on crime. GST, however, focuses on emotional states, or the *actual experience of emotions* in response to particular strains. For example, do victimized individuals state that their victimization made them angry? Although there is less research here, studies suggest that strains increase negative emotional states such as anger and that these states explain a substantial portion of the effect of strains on crime (see the reviews in Agnew 2006; Horton et al. 2012). More research is needed on state emotions, however, particularly emotions other than anger.

GST states that strains also increase crime for other reasons (see Agnew 2006, 2012; Bao et al. 2014). Strains frequently reduce social control. Most strains involve negative treatment by others, including parents, teachers, and employers. For example, parents may reject or harshly sanction their children, teachers may fail students and treat them in a demeaning manner, and employers may terminate or exploit employees. Such strains reduce bonds to conventional others and investments in conventional institutions. Further, strains may reduce direct control and the belief that crime is wrong, since they weaken ties to conventional others and institutions. Several studies confirm the argument that strains reduce various types of social control and affect crime partly for that reason (see Agnew 2006).

Strains also foster the social learning of crime (see Agnew and Brezina 2015 for an overview of social learning theory). This was a core argument of classic strain theorists such as Cohen (1955) and Cloward and Ohlin (1960). Strains increase the likelihood that individuals will form or join criminal groups, including delinquent peer groups and gangs. There are several reasons for this, including the fact that criminal groups are often viewed as a solution to strains. For example, individuals frequently join gangs in an effort to achieve their economic and status goals, secure protection from others, and obtain the comfort and support they cannot get at home (Agnew and Brezina 2015). Also, strains foster the development of beliefs favorable to crime. Criminogenic strains involve negative and unjust treatment by others, and those who cannot cope in a legal manner may come to believe that crime is an acceptable, justifiable, or excusable response to their situation. Anderson (1999) makes this point in this discussion of the "code of the street," for example. Juveniles who are regularly victimized and who cannot turn to the police for protection often conclude that violence is a justifiable response to the threats they face. Several studies indicate that strains increase the likelihood of association with criminal others and beliefs favorable to crime, and these factors partly explain the effect of strains on crime (Agnew 2006; Brezina 2010).



Further, strains lead to the development of traits conducive to crime, particularly negative emotionality and low constraint (Agnew 2006, 2012). Those high in negative emotionality are easily upset, experience intense emotional reactions when upset, and have an aggressive interactional style (this trait overlaps with trait anger). Those low in constraint tend to act without thinking, enjoy risky activities, and show little concern for social norms and the welfare of others (this trait overlaps with low self-control). Individuals who regularly experience criminogenic strains tend to develop such traits because they live in a hostile world in which others frequently mistreat them. This hostile world overwhelms their ability to cope in a legal manner, such that they are more easily upset and prone to extreme emotions when upset. And, they come to believe that they should take whatever pleasure they can get when they can get it, with little concern for others or the future (see Colvin 2000). Studies suggest that strains do contribute to these traits and such traits partly explain the effect of strains on crime (Agnew 2006, 2012).

Application to Asian Societies

Asian studies have confirmed the findings described above. Such studies indicate that strains increase negative emotions, including trait and state anger (Bao et al. 2004; Lin 2011, 2012; Moon et al. 2008, 2009; Moon et al. 2012). And, although the results are somewhat mixed, these emotions—particularly state anger—partly explain the effect of strains on crime. Further, Asian studies suggest that strains reduce social control and promote association with delinquent peers (Bao et al. 2012; Bao et al. 2014; Zhang and Messner 1995; Cheung and Cheung 2008; Liu 2011; Maxwell 2001). These studies, however, need to be confirmed with research in additional Asian countries.

At the same time, Asian and Western societies may differ somewhat in the intervening mechanisms between strain and crime. Most notably, strains may be less likely to lead to anger and the hostile expression of anger in Asian societies (Bao et al. 2004; Lin 2011; Moon et al. 2012). Scholars point to the greater emphasis on social harmony, the welfare of others, and self-restraint in Asian societies and argue that anger is more strongly condemned and hostile expressions of anger are more often sanctioned as a result. Also, it is argued that Asians are more likely to blame the strains they experience on themselves, reducing the likelihood of an angry reaction—although perhaps increasing the likelihood of depression, guilt, and shame (Lin 2012). There is limited support for these arguments. A recent study examined anger among a sample of US residents and Tibetan clerics and laypeople living in India (Horton et al. 2012). Researchers found that compared to those in the USA, the Tibetans were about twice as likely to say that anger is bad, 11 times less likely to say that anger is an appropriate response to injustice, 25 times more likely to say that it is never good or acceptable to become angry, four times more likely to have expressed disapproval of displays of anger, and 17 times more likely to believe that uniformly bad consequences would result if they became angry. Certain accounts suggest that anger is also negatively viewed in other Asian communities (Lin 2011). And, in one of few cross-national studies of GST, Lin (2011) found that strain is more likely to result in anger among US than Taiwanese respondents. More research is needed here, however, especially comparative research and research that examines a range of negative emotions (for further discussion, see Bao and Haas 2009; Bao et al. 2004; Lin 2011, 2012; Moon et al. 2009; Moon et al. 2012).

There may also be other differences in intervening mechanisms between Asian and Western societies. For example, data suggest that criminal gangs are less common in certain Asian communities than in the USA (Pyrooz and Decker 2013; Webb et al. 2011). As such, strained individuals in Asia may be less likely to cope by joining gangs. Again, more research is needed



here. Additional research on intervening mechanisms may help explain why crime is lower in many Asian societies than in the USA (e.g., Lin 2011; Pyrooz and Decker 2013; Webb et al. 2011; Zhang 2008). There may not only be differences in the extent of certain criminogenic strains between Asian societies and the USA, but also Asians may be less likely to react to strains with anger, to express their anger in a hostile manner, and to cope by joining gangs.

A Range of Factors Influence the Likelihood of Responding to Strains with Crime

There are a variety of ways to cope with strains, only some of which involve crime. Criminal coping is predicted to be more likely among those with:

- Poor coping skills and resources (e.g., poor problem-solving and social skills, low socioeconomic status, low self-efficacy, traits such as negative emotionality, and low constraint)
- Criminal self-efficacy or the belief that one can successfully cope through crime
- Low levels of conventional social support, including support from family, teachers, neighbors, religious figures, and government agencies
- Low levels of social control, including direct control, bonds to conventional others, investments in conventional institutions, and amoral beliefs
- Criminal associates, including delinquent peers and gang members
- Beliefs favorable to criminal coping
- Exposure to situations where the costs of crime are low and the benefits are high (see Agnew and Brezina 2015)

Individuals with these characteristics are less able to cope with strains through legal channels, have little to lose through crime, are disposed to criminal coping, and have more to gain from such coping.

There has been a moderate amount of research on whether these factors influence or condition the response to strains. Taken as a whole, the research results are mixed (Agnew 2006, 2013). For example, some studies find that strains are more likely to lead to crime among those with delinquent peers, while other studies do not. Several reasons have been offered for these mixed results, including the difficulty of detecting interaction effects in survey research (for overviews, see Agnew 2006, 2013; Lin and Mieczkowski 2011; Mazerolle and Maahs 2000). In a recent paper, I argue that criminal coping is unlikely unless strained individuals score high on *several* of the above factors, such that they have a strong propensity for criminal coping and are in circumstances conducive to criminal coping (Agnew 2013). Most studies, however, only consider the individual's standing on one factor at a time, with the other factors held constant or controlled (but, see Lin and Mieczkowski 2011; Mazerolle and Maahs 2000).

Application to Asian Societies

Several studies of GST in Asia have examined conditioning effects, focusing on factors such as self esteem, self-efficacy, problem-solving ability, self-control, parental attachment, parental supervision, school attachment, peer support, delinquent beliefs, and association with delinquent peers (Bao et al. 2007; Cheung, forthcoming; Cheung and Cheung 2010; Cheung et al., 2014; Lin and Mieczkowski 2011; Moon and Morash 2004; Moon et al. 2009; Moon et al. 2012; Morash and Moon 2007). Like studies in the USA, they have produced mixed results.



Sometimes, the conditioning effects predicted by GST are found. For example, Moon and Morash (2004) found that abuse by teachers is more likely to lead to delinquency among those with delinquent friends. And, certain research has found that strains are more likely to lead to crime and delinquency among those low in self-control (Cheung, forthcoming; Cheung and Cheung, 2010; Cheung et al., 2014). But, sometimes, the predicted effects are not found or, occasionally, are in the opposite direction to that predicted by GST. For example, Moon et al. (2009) found that the effect of a composite strain measure on delinquency was *lower* among those with delinquent friends. So, the research in Asian communities has once again produced results similar to the Western research.

At the same time, certain conditioning variables may be of special relevance in Asian societies, including variables not considered in the Western research. Most notably, the more collectivistic orientation of Asian societies may reduce the likelihood of criminal coping. As noted, this orientation involves a desire for social harmony, positive ties to others, and self-restraint. Individuals with this orientation prefer to avoid conflict and instead deal with interpersonal problems through mechanisms such as negotiation, compromise, and avoidance (Leung 2005; also, see Lin 2011). This orientation may help explain why crime rates are generally lower in certain Asian societies than in the USA, although cross-national research is needed here. In addition, accounts suggest that there is some variation in the collectivistic orientation within Asian societies, with many individuals coming to place more emphasis on individualism—especially younger individuals (Leung 2005). Researchers, then, might explore whether the emphasis placed on collectivism versus individualism conditions the response to strain within Asian societies. Further, researchers might examine whether the related concept of social concern conditions the effect of strains on crime (Agnew 2014b).

It is also possible that certain conditioning variables operate differently in Asian societies. For example, GST predicts that strong parental attachment should reduce the effect of strains on crime. Liu (2011), however, found that status-related strain is *more* likely to increase crime when parental attachment is strong. The status strain involved the juvenile's frustration over school grades and prospects for educational and occupational success. It is possible that these strains are experienced as *more* adverse when ties to parents are strong because juveniles are more concerned about dishonoring their family and jeopardizing family bonds. These concerns may not be as strong in the West, where family honor is less salient and educational/occupational success is less strongly linked to parental bonds. But, more research is needed in this area. Moon et al. (2009), for example, found that a general strain measure is *less* likely to cause crime when parental attachment is strong. So, it is not clear if the finding of Liu (2011) is an anomaly.

Finally, there may be differences between Asian and Western communities in the standing of individuals on conditioning variables. Limited evidence suggests that juveniles in certain Asian societies have stronger bonds to family and school and are more closely supervised than those in certain Western societies (Bao and Haas 2009; Pyrooz and Decker 2013; Webb et al. 2011; Zhang and Messner 1995). For example, juveniles in certain Asian societies spend enormous amounts of time at school, studying, and working with tutors; far more than is the case in many Western societies. This suggests that they have a greater investment in education as well as fewer opportunities for delinquency. Further, informal and semi-formal control by neighbors, employers, and other groups may be stronger in certain Asian societies (Jiang et al. 2010). And, as noted, gangs are less common in certain Asian societies. In addition, Asians may be higher in self-control, given the strong emphasis placed on self-restraint in many Asian societies (Cheung and Cheung 2008, 2010; Lin and Mieczkowski 2011). Finally, levels of state support may be higher in certain Asian societies, including health, housing, and employment supports. These possible differences in standing on conditioning variables need to be verified with further research, including research that examines less-developed Asian societies.



But, taken as a whole, these differences suggest that Asians may be less likely than Westerners to cope with given strains through crime (see Lin 2011 for limited data in this area).

Groups Differences in Crime Are Partly due to Differences in Exposure to Strains, Emotional Reactions, and Conditioning Variables

GST not only focuses on why some individuals are more likely to engage in crime than others but also on why some groups have higher rates of offending than others. GST has been used to explain gender, race/ethnic, age, class, community, and societal differences in offending (e.g., Agnew 1997, 1999, 2006, 2012; Broidy and Agnew 1997; De Coster and Zito 2010; Kaufman et al. 2008; Lin 2011; Perez et al. 2008; Sigfusdottir et al. 2012). The basic argument is the same in all cases. Some groups have higher rates of offending than others because group members are more likely to experience criminogenic strains, react with anger, and/or cope through crime. Relatedly, GST has been used to explain offending in particular subgroups. For example, it has be used to explain female offending, life-course persistent and adolescence-limited offending, and deviance by the police (e.g., Agnew, 1997; Broidy and Agnew, 1997; Gibson et al. 2001; Slocum 2010). Here, the focus is on the particular criminogenic strains and conditioning variables that account for offending in the group. For example, while female offending is prompted by many of the same strains as male offending, certain strains are of special relevance to females—including sexual abuse, physical abuse by partners, and gender discrimination. (GST has also been used to explain particular types of crime, such as spousal violence, gambling, corporate crime, and terrorism (Agnew 2010; Agnew et al. 2009; Cheung, forthcoming; Cheung et al., 2014).)

Most of the GST research on group differences in offending has focused on gender (e.g., Agnew 2006, 2012; Broidy and Agnew 1997; De Coster and Zito 2010; Cheung and Cheung 2010; Morash and Moon 2007). There is some evidence that males are more likely to engage in crime because they more often experience those criminogenic strains involving harsh discipline, negative secondary school experiences, abusive peer relations, criminal victimization, homelessness, and the inability to achieve certain goals—such as masculine status. This should not be taken to mean that females have lower *overall* levels of strain, however. Males and females have similar levels of strain, but many of the strains experienced by females are not conducive to crime. These include strains involving close supervision by parents and the burdens associated with caring for others. There are also said to be gender differences in the emotional reaction to strains. Both males and females experience anger in response to strains, but the anger of females is more often accompanied by emotions such as depression, guilt, and anxiety. These emotions reduce the likelihood of other-directed crime, although they may foster inner-directed forms of deviance such as suicide attempts and eating disorders. The anger of males, however, more often takes the form of moral outrage, which is conducive to other-directed crime. Finally, it is argued that males are more likely than females to cope with strains and negative emotions through crime, especially other-directed crime. This is due to gender differences in conditioning variables. Among other things, males are lower in constraint and higher in negative emotionality, physically larger and stronger, lower in certain types of social support, lower in many types of social control, higher in delinquent peer association, more likely to hold beliefs favorable to crime, and more likely to possess identities conducive to crime.

Application to Asian Societies

GST can help explain group differences in offending in Asian communities, although there may be some variation in the particular arguments that are made. For example, studies have



used GST to explain gender differences in crime in China and South Korea (Bao et al. 2007; Bao et al. 2012; Cheung and Cheung 2010; Morash and Moon 2007). The results are somewhat mixed, although there is some evidence that males are higher in certain criminogenic strains, that there are gender differences in certain conditioning variables, and that certain strains are more likely to be associated with crime among males. For example, Morash and Moon (2007) found that teacher abuse, their strongest predictor of crime, is more often experienced by males. Further, association with delinquent peers, their most important conditioning variable, is more common among males. At the same time, it has been argued that gender roles are more traditional in certain Asian countries than in the USA. Consequently, boys are more subject to academic and status-related strains and girls to relational or interpersonal strains (Liu and Lin 2007). Liu and Lin (2007) found some support for this argument in their study of Chinese students, with strains related to educational and occupational status more strongly related to delinquency among boys, and strains related to physical appearance and well-being more strongly related to delinquency among girls. Again, more research is needed here (and findings may of course change as gender roles change).

Future research should also apply GST to the explanation of other group differences in offending in Asian communities. For example, China has experienced a sharp increase in crime in recent decades and much of this increase has been attributed to the 200 million plus rural-to-urban migrants (Lo and Jiang 2006). Research on these migrants suggests that they are higher in many criminogenic strains (Lo and Jiang 2006; Ngai and Huilin 2010; Wen and Wang 2009). Most notably, they are subject to much official and informal discrimination, which in turn leads to work, housing, educational, economic, interpersonal, police, and other strains. For example, migrants are frequently exploited by employers; they work very long hours, are paid poorly, are subject to coercive control, and are unfairly treated. In addition, migrants may be more likely to cope with strains through crime. Their transient lifestyle and residence in disorganized communities reduce their levels of social control and support. They are frequently denied government supports. And, their efforts at legal coping, such as negotiation with employers and the filing of complaints, are usually ineffective. Further, there is some evidence that levels of subjective strain may be especially high among secondgeneration migrants. The second generation has had more exposure to urban life and the media; consequently, their expectations have increased and they are more aware of the discrimination they face. This is said to result in a deep sense of injustice, anger, frustration, and resentment (see Ngai and Huilin 2010).

Changes in Crime Rates Can Be Explained by Changes in Criminogenic Strains and Conditioning Variables

Certain Asian societies have experienced major increases in crime in recent decades (Bao and Haas 2009; Zhang 2008). GST would explain such increases in terms of increases in strains and the likelihood of responding to strains with crime. Bao and Haas (2009) have written an excellent paper in this area, focusing on the increase in delinquency among Chinese urban adolescents. They describe the many social, cultural, and economic changes in China over the past few decades, changes which have increased several types of strain. While hundreds of millions of people have escaped poverty, there has been a dramatic increase in economic inequality and unemployment (also, see Lo and Jiang 2006; see Sun et al. 2011 on economic inequality, unemployment, and crime). As a result, there is now an "extreme contrast between the newly rich and those still struggling for their basic needs," which contributes to a strong sense of relative deprivation and injustice (Bao and Haas 2009, p. 289). This sense of



deprivation is exacerbated by the increased cultural emphasis on monetary success. Economic and other changes have also resulted in "rampant official corruption" (Bao and Haas 2009, pp. 289-90). Studies of GST in the West do not consider corruption as a strain, but accounts suggest that personal and vicarious experiences with corruption are a major strain for many people in China. There is an "ideological crisis," as collectivistic values are challenged by the individualistic values that characterize the West. Again, threats to traditional values are rarely considered in studies of GST in the West, but may constitute a major strain in many countries. The one-child family policy has placed on a large burden on single children, who bear much responsibility for family support and the fulfillment of parental expectations. Economic and cultural changes have also contributed to family problems, including divorce and family conflict. Several factors have increased the importance of academic success, but educational opportunities are still limited; consequently, academic competition is fierce and many fail to achieve their educational goals. Related to this, those who do poorly in school often experience much negative treatment from parents, teachers, and peers-including the loss of status and verbal and physical abuse. And, as noted above, rural-to-urban migration has increased dramatically, with migrants facing much discrimination. Finally, as Ngai and Huilin (2010) suggest, increased urbanization and media exposure have raised expectations and made people more aware of deprivations and injustices.

Further, changes in China have increased the likelihood that individuals will cope with strains through crime. These changes include the decreased importance of collectivistic values emphasizing social harmony and self-sacrifice, along with the rise of individualistic values emphasizing the unrestrained pursuit of personal gain. The one-child policy is said to have created a climate where parents frequently indulge or "spoil" their children, further reducing self-restraint or control (also, see Zhang and Messner 1995). There has been a decline in social control and support, due to such things as the decline in extended families, increased residential mobility, rapid urbanization, and the decline in many governmental supports—particularly for rural-to-urban migrants (also, see Lo and Jiang 2006; Ngai and Huilin 2010). GST, in sum, offers several explanations for the recent increase in crime in China.

Summary

GST has much to say about the causes of crime in Asian societies. Research in a range of communities in several Asian countries has found that most of the criminogenic strains identified by GST are associated with crime, this association is at least partly explained by the intervening mechanisms identified by GST, and the effect of these strains on crime is *sometimes* conditioned by variables identified by GST. Further, GST has the potential to explain group differences in offending within these countries, changes in crime over time, and cross-national differences in crime. But, at the same time, GST must take account of social and cultural differences between Asian and Western societies if it is to best explain crime in Asian societies.

There may be certain differences in the events and conditions that function as major criminogenic strains (i.e., are strongly disliked and seen as unjust). For example, strict/harsh parental discipline may be more likely to function as a strain in Western societies, while academic failure may be more consequential in Asian societies. There may be differences in the level of certain criminogenic strains. For example, violent victimization and racial discrimination are more common in the USA, but other strains may be more common in certain Asian societies—such as teacher abuse, corruption, threats to traditional values, and discrimination associated with rural-to-urban migration. There may be differences in the emotional



reaction to strains. For example, the experience and hostile expression of anger may be less common in certain Asian societies. And, there may be some differences in conditioning variables. For example, the collectivistic orientation that characterizes many Asian societies may play a major role in reducing the likelihood of criminal responses to strains. Fortunately, GST is very adaptable and can easily accommodate these revisions and extensions.

Indeed, the researchers cited throughout this paper have already begun to revise GST when applying it to Asian societies. And, their work provides an excellent foundation on which to build. Additional research should apply GST to more societies, including less-developed Asian societies and societies that have experienced serious conflict (e.g., Braithwaite 2011). I suspect that such applications will point to additional revisions and extensions in GST. Also, research needs to devote more attention to those strains, emotional reactions, and conditioning variables that may have special relevance to Asian societies—as described above. I encourage researchers to be creative here, drawing on their specialized knowledge of the societies in which they work. There is also a need for more cross-national research, so we can better compare the relative impact of particular strains, examine differences in emotional reaction, and explore differences in conditioning variables and their impact (see Lin 2011). Such research is of course quite challenging, but should become easier with the spread of data gathering efforts such as the International Self-Report Delinquency Survey, the growth of Asian criminology, and the efforts of organizations such as the Asian Criminological Society.

References

Agnew, R. (1992). Foundation for a general strain theory of crime and delinquency. *Criminology*, 30, 47–87.

Agnew, R. (1997). Stability and change in crime over the life course: a strain theory explanation. In T. P. Thornberry (Ed.), Developmental theories of crime and delinquency (pp. 101–132). New Brunswick, NJ: Transaction.

Agnew, R. (1999). A general strain theory of community differences in crime rates. *Journal of Research in Crime and Delinquency*, 36, 123–155.

Agnew, R. (2001). Building on the foundation of general strain theory: specifying the types of strain most likely to lead to crime and delinquency. *Journal of Research in Crime and Delinquency*, 38, 319–361.

Agnew, R. (2002). Experienced, vicarious, and anticipated strain: an exploratory study focusing on physical victimization and delinquency. *Justice Quarterly*, 19, 603–632.

Agnew, R. (2006). *Pressured into crime: an overview of general strain theory*. New York: Oxford University Press. Agnew, R. (2010). A general strain theory of terrorism. *Theoretical Criminology*, 14(2), 131–153.

Agnew, R. (2011). Toward a unified criminology: integrating assumptions about crime, people, and society. New York: New York University Press.

Agnew, R. (2012). General strain theory. In M. D. Krohn, A. J. Lizotte, & G. P. Hall (Eds.), Handbook on crime and deviance (pp. 169–195). New York: Springer.

Agnew, R. (2013). When criminal coping is likely: an extension of general strain theory. Deviant Behavior, 34, 653–670.

Agnew, R., & Brezina, T. (2015). Juvenile delinquency: causes and control. New York: Oxford University Press. Agnew, R., Matthews, S. K., Bucher, J., Welcher, A. N., & Keyes, C. (2008). Socioeconomic status, economic problems, and delinquency. Youth & Society, 40, 159–181.

Agnew, R., Piquero, N. L., & Cullen, F. T. (2009). General strain theory and white-collar crime. In S. S. Simpson & D. Weisburd (Eds.), *The criminology of white-collar crime* (pp. 35–60). New York: Springer.

Agnew, R. (2014). The origin of strains: why certain events and conditions are disliked. Paper presented at the annual meeting of the American Society of Criminology, San Francisco.

Agnew, R. (2014b). Social concern and crime: moving beyond the assumption of simple self-interest. *Criminology*, 52(1), 1–32.

Anderson, E. (1999). Code of the street. New York: Norton.

Bao, W., & Haas, A. (2009). Social change, life strain, and delinquency among Chinese urban adolescents. Sociological Focus, 42(3), 285–305.

Bao, W., Haas, A., Chen, X., & Pi, Y. (2014). Repeated strains, social control, social learning, and delinquency: testing an integrated model of general strain theory in China. Youth & Society, 46(3), 402–424.



- Bao, W., Haas, A., & Pi, Y. (2004). Life strain, negative emotions, and delinquency: an empirical test of general strain theory in the People's Republic of China. *International Journal of Offender Therapy and Comparative Criminology*, 48(3), 281–297.
- Bao, W., Haas, A., & Pi, Y. (2007). Life strain, coping, and delinquency in the People's Republic of China. Journal of Offender Therapy and Comparative Criminology, 51(1), 9–24.
- Bao, W., Haas, A., & Xie, Y. (2012). Life strain, social control, social learning and delinquency: the effects of gender, age, and family ses among Chinese adolescents. Paper presented at the American Society of Criminology meetings, Chicago.
- Botchkovar, E. V., Tittle, C. R., & Antonaccio, O. (2009). General strain theory: additional evidence using crosscultural data. Criminology, 47, 131–176.
- Braithwaite, J. (2011). Anomie and violence in Indonesia and Timor-Leste, 1997–2009. Asian Journal of Criminology, 6, 51–68.
- Brezina, T. (2010). Anger, attitudes and aggressive behavior: exploring the affective and cognitive foundations of angry aggression. *Journal of Contemporary Criminal Justice*, 26(2), 186–203.
- Broidy, L. M., & Agnew, R. (1997). Gender and crime: a general strain theory perspective. *Journal of Research in Crime and Delinquency*, 34(3), 275–306.
- Cheung, C., Ngai, N., & Ngai, S. S. (2007). Family strain and adolescent delinquency in two Chinese cities, Guangzhou and Hong Kong. *Journal of Children and Family Studies*, 16, 626–641.
- Cheung, N.W.T. (forthcoming). Strain, self-control, and juvenile gambling pathology: evidence from Chinese adolescents. *Youth & Society*.
- Cheung, N. W. T., & Cheung, Y. W. (2008). Self-control, social factors, and delinquency: a test of the general theory of crime among adolescents in Hong Kong. *Journal of Youth and Adolescence*, 37, 412–430.
- Cheung, N. W. T., & Cheung, Y. W. (2010). Strain, self-control, and gender differences in delinquency among Chinese adolescents: extending general strain theory. *Sociological Perspectives*, 53(3), 321–345.
- Cheung, Y. W., Choi, S. Y. P., & Cheung, A. K. L. (2014). Strain, self-control, and spousal violence: a study of husband-to-wife violence in Hong king. Violence and Victims, 29, 280–299.
- Cloward, R., & Ohlin, L. (1960). Delinquency and opportunity. Glencoe, IL: Free Press.
- Cohen, A. (1955). Delinquent boys. Glencoe, IL: Free Press.
- Colvin, M. (2000). Crime and coercion. New York: St. Martin's Press.
- De Coster, S., & Zito, R. C. (2010). Gender and general strain theory: the gendering of emotional experiences and expressions. *Journal of Contemporary Criminal Justice*, 26(2), 224–245.
- Froggio, G., & Agnew, R. (2007). The relationship between crime and "objective" versus "subjective" strains. Journal of Criminal Justice, 35, 81–87.
- Ganem, N. M. (2010). The role of negative emotion in general strain theory. *Journal of Contemporary Criminal Justice*, 26(2), 167–185.
- Gibson, C. L., Swatt, M. L., & Jolicoeur, J. R. (2001). Assessing the generality of general strain theory: the relationship among occupational stress experienced by male police officers and domestic forms of violence. *Journal of Crime and Justice*, 24, 29–57.
- Horton, R., Rice, S. K., Piquero, N. L., & Piquero, A. R. (2012). On the variability of anger cross-culturally: an assessment of general strain theory's primary mediator. *Deviant Behavior*, 33, 260–281.
- Jiang, S., Wang, J., & Lambert, E. (2010). Correlates of informal social control in Guangzhou, China neighbor-hoods. *Journal of Criminal Justice*, 38, 460–469.
- Kaufman, J. M., Rebellon, C. J., Thaxton, S., & Agnew, R. (2008). A general strain theory of racial differences in offending. The Australian and New Zealand Journal of Criminology, 41, 421–437.
- Leung, K. (2005). How generalizable are justice effects across cultures? In J. Greenberg & J. A. Colquitt (Eds.), Handbook of organizational justice (pp. 551–586). Mahwah, NJ: Lawrence Erbaum Associates.
- Lin, W. (2011). General strain theory and juvenile delinquency: a cross-cultural study. Dissertation, University of South Florida. Ann Arbor, MI: ProQuest.
- Lin, W. (2012). General strain theory in Taiwan: a latent growth curve modeling approach. Asian Criminology, 7, 37–54.
- Lin, W., & Mieczkowski, T. (2011). Subjective strains, conditioning factors, and juvenile delinquency: general strain theory in Taiwan. Asian Criminology, 6, 69–87.
- Liu, J., Jou, S., & Hebenton, B. (2013). Handbook of Asian criminology. New York: Springer.
- Liu, R. X. (2011). Strain as a moderator of the relationship between parental attachment and delinquent participation: a China study. *International Criminal Justice Review*, 21(4), 427–442.
- Liu, R. X., & Lin, W. (2007). Delinquency among Chinese adolescents: modeling sources of frustration and gender differences. *Deviant Behavior*, 28, 409–432.
- Lo, T. W., & Jiang, G. (2006). Inequality, crime and the floating population. Asian Criminology, 1, 103–118.
- Mazerolle, P., & Maahs, J. (2000). General strain theory and delinquency: an alternative examination of conditioning influences. *Justice Quarterly*, 17(2), 323–343.



- Maxwell, S. R. (2001). A focus on familial strain: antisocial behavior and delinquency in Filipino society. Sociological Inquiry, 71(3), 265–292.
- Moon, B., Blurton, D., & McCluskey, J. D. (2008). General strain theory and delinquency. Crime & Delinquency, 54(4), 582–613.
- Moon, B., & Morash, M. (2004). Adaptation of theory for alternative cultural contexts: Agnew's general strain theory in South Korea. *International Journal of Comparative and Applied Criminal Justice*, 28(2), 77–103.
- Moon, B., Morash, M., & McCluskey, J. D. (2012). General strain theory and school bullying: an empirical test in South Korea. Crime & Delinquency, 58(6), 827–855.
- Moon, B., Morash, M., McCluskey, J. D., & Hwang, H. (2009). A comprehensive test of general strain theory. Journal of Research in Crime and Delinquency, 46(2), 182–212.
- Morash, M., & Moon, B. (2007). Gender differences in the effects of strain on the delinquency of South Korean Youth. Youth & Society, 38(3), 300–321.
- Ngai, P., & Huilin, L. (2010). Unfinished proletarianization: self, anger, and class action among the second generation of peasant-workers in present-day China. *Modern China*, 36(5), 493–519.
- Perez, D. M., Jennings, W. G., & Gover, A. R. (2008). Specifying general strain theory: an ethnically relevant approach. *Deviant Behavior*, 29, 544–578.
- Pyrooz, D. C., & Decker, S. H. (2013). Delinquent behavior, violence, and gang involvement in China. *Journal of Quantitative Criminology*, 29(2), 251–272.
- Rebellon, C. J., Manasse, M. E., Van Gundy, K. T., & Cohn, E. S. (2012). Perceived injustice and delinquency: a test of general strain theory. *Journal of Criminal Justice*, 40(3), 230–237.
- Scheuerman, H. (2014). Clarifying criminological and social psychological theory: a second look at the relationship between injustice and general strain theory. Sociology Compass, 8, 203–218.
- Shek, D. T. L. (2005a). A longitudinal study of Chinese cultural beliefs about adversity, psychological well-being, delinquency and substance abuse in Chinese adolescents with economic disadvantage. Social Indicators Research, 71, 385–409.
- Shek, D. T. L. (2005b). Economic stress, emotional quality of life, and problem behavior in Chinese adolescents with and without economic disadvantage. Social Indicators Research, 71, 363–383.
- Sigfusdottir, I. D., Krisjansson, A. L., & Agnew, R. (2012). A comparative analysis of general strain theory. Journal of Criminal Justice, 40, 117–127.
- Slocum, A. A. (2010). General strain theory and continuity in offending over time: assessing and extending GST explanations of persistence. *Journal of Contemporary Criminal Justice*, 26(2), 204–223.
- Sun, I. Y., Chu, D. C., & Sung, H. (2011). A cross-national analysis of the mediating effect of economic deprivation on crime. Asian Criminology, 6, 15–32.
- Webb, V. J., Ren, L., Zhao, J. S., He, N. P., & Marshall, I. H. (2011). A comparative study of youth gangs in China and the United States: definition, offending, and victimization. *International Criminal Justice Review*, 21(3), 225–242.
- Wen, M., & Wang, G. (2009). Demographic, psychological, and social environmental factors of loneliness and satisfaction among rural-to-urban migrants in Shanghai, China. *International Journal of Comparative* Sociology, 50(2), 155–182.
- Yuma, Y. (2008). An interaction effect between strain and delinquent peers on college students' deviant behavior in a classroom. Shinrigaku Kenkya, 79(3), 224–231.
- Zhang, L. (2008). Juvenile delinquency and justice in contemporary China: a critical review of the literature over 15 years. *Crime, Law and Social Change, 50*, 149–160.
- Zhang, L., & Messner, S. F. (1995). Family deviance and delinquency in China. Criminology, 33(3), 359–387.

