

Cleveland State University EngagedScholarship@CSU

Criminology, Anthropology, & Sociology Faculty Publications

Criminology, Anthropology, & Sociology Department

2015

# A Cross-Cultural Examination of the Disjunctive Between Aspirations and Expectations/Perceived Outcomes: Strain and Academic Deviance in the United States and Japan\*

Miyuki F. Tedor *Cleveland State University*, m.fukushima@csuohio.edu

Susan F. Sharp University of Oklahoma

Emiko Kobayashi Kanzawa University

Follow this and additional works at: https://engagedscholarship.csuohio.edu/clcas\_facpub

Part of the Educational Sociology Commons How does access to this work benefit you? Let us know!

# **Recommended Citation**

Tedor, Miyuki F.; Sharp, Susan F.; and Kobayashi, Emiko, "A Cross-Cultural Examination of the Disjunctive Between Aspirations and Expectations/Perceived Outcomes: Strain and Academic Deviance in the United States and Japan\*" (2015). *Criminology, Anthropology, & Sociology Faculty Publications*. 9. https://engagedscholarship.csuohio.edu/clcas\_facpub/9

This Article is brought to you for free and open access by the Criminology, Anthropology, & Sociology Department at EngagedScholarship@CSU. It has been accepted for inclusion in Criminology, Anthropology, & Sociology Faculty Publications by an authorized administrator of EngagedScholarship@CSU. For more information, please contact library.es@csuohio.edu.

# A Cross-Cultural Examination of the Disjuncture Between Aspirations and Expectations/Perceived Outcomes: Strain and Academic Deviance in the United States and Japan\*

Miyuki Fukushima Tedor, Cleveland State University Susan F. Sharp, University of Oklahoma Emiko Kobayashi, Kanazawa University

Using comparable self-reported survey data collected among college students in the United States (n = 502) and Japan (n = 441), this study examines a paradox of higher academic deviance among otherwise more conforming Japanese youth while revisiting the debate concerning the disjuncture between aspirations and expectations/perceived outcomes in Agnew's general strain theory (GST). Confirming the paradox, our results indicate that Japanese students are significantly more deviant academically than American students. However, contrary to the expectation of GST, but in support of past empirical studies, the higher academic deviance among the Japanese, as compared to Americans, is explained by their lower aspirations, irrespective of the levels of expectations/perceived outcomes

#### Introduction

Japan is seen as an interesting contrast to Western industrialized societies in cross-national research because Japan is relatively analogous to Western industrialized societies in terms of modernization and subsequent economic, political, and structural change but differs in other respects, particularly in terms of culture and adherence to tradition (Nakane 1970; Reischauer 1988). In criminology, the relatively low crime rate in Japan, especially the low rate of serious, violent crimes, has been used to accentuate the high crime rate in the United States (e.g., Adler 1983).

Unfortunately, research comparing nationally representative self-reported data on crime and deviance between Japan and the United States is non-existent because of a lack of such data in Japan. Consistent with the official crime data, however, our prior research using comparable self-reported data found that the Japanese are overall less deviant than Americans on most indicators of general deviance popularly used in American criminological research (author date). The difference in crime as well as in general deviance between these two countries suggests a lower overall criminality among the Japanese compared to Americans. This is consistent with the popular belief that the Japanese are in general more conforming and less deviant than Americans.

Diekhoff et al. (1999), however, challenge this popular belief with their finding that Japanese youth are significantly more deviant than American youth in academic behaviors. Their finding is in striking contrast to prior research on crime and general deviance, but has not been confirmed due to the paucity of comparable data in academic misconduct. Thus, one of the objectives of this study is to follow up on Diekhoff et al.'s study using comparable self-reported data collected among students in Japan and the United States and to examine whether the paradox of higher academic deviance among the Japanese compared to Americans can be replicated using different self-reported data. The second objective of this study is to revisit and examine cross-nationally the debate concerning the disjuncture between aspirations and expectations/perceived outcomes in Agnew's general strain theory (GST). The debate began with research reporting that delinquency stems from low aspirations rather than from GST's measure of disjuncture between aspirations and expectations (Agnew 2012). Using disjuncture measures created based on expectations, aspirations, and perceived outcomes for achieving four goals, this study examines this debate across Japanese and American self-reported data on academic deviance

#### Academic Deviance in the United States and Japan

Although there are numerous studies on academic misconduct, the majority of existing empirical studies have been conducted in the United States (Lim and See 2001). These studies have found that cheating in various forms is endemic at all levels of the U.S. education system (McCabe, Butterfield, and Trevino 2006; Schab 1991; Vandehey, Diekhoff, and Emily 2007). For instance, at the higher education level where academic misconduct is more prevalent, empirical studies report that 70 to 80 percent of all students in the United States cheat at least once during their college career (Haines et al. 1986; Michaels and Miethe 1989). Moreover, using longitudinal data, McCabe and Trevino (1996) found that cheating is not only widespread but increasing over time in the U.S. higher education system (see also Sims 1993; Vandehey, Diekhoff, and Emily 2007).

Academic misconduct is not limited to the United States but an international phenomenon plaguing education systems all over the globe (Cizek 1999; Desruisseaux 1999), and in recent years, there have been an increasing number of empirical studies on academic misconduct conducted outside the United States.<sup>1</sup> Unfortunately, there are no nationally representative data on academic misconduct in Japan, and there are only a handful of small-scale self-report studies of this behavior among Japanese youth. This lack of research does not imply that cheating is not a serious problem in Japan, and there is an increased concern over "high-tech cheating" on Japanese college entrance exams (Fackler 2011).

Moreover, the limited number of empirical studies on cheating conducted in Japan points to the pervasiveness of academic misconduct among Japanese students. For instance, Fujimoto, Kawai, and Shimura (2009) found that 36 percent of a sample of 274 students at a Japanese university admitted to cheating at some point. In another study based on a sample of 228 students from two Japanese universities, 20 percent and 45 percent, respectively, admitted to having cheated in high school and in college (Burns et al. 1998). The lack of a nationally representative sample of cheating in Japan and the incompatibility of the measures of cheating and the sampling method used across studies, however, prevent us from comparing the Japanese results with those of the U.S. studies.

The study by Diekhoff et al. (1999: 343) is the notable exception. They examined comparable self-reported survey data on academic dishonesty collected among 402 American and 286 Japanese college students and found that Japanese students reported engaging in academic dishonesty at a significantly higher rate than American students. This finding is paradoxical, as it challenges the prevailing belief that the Japanese are more conforming and less deviant than Americans.

Cross-national research on academic misconduct like Diekhoff et al. is scarce, and in fact, a review by Payan, Reardon, and McCorkle (2010) found only 12 such studies, of which only Diekhoff et al. examined Japan. What is interesting is that of the five cross-national studies we reviewed that examined at least one Asian country, all but one point to a higher engagement or tolerance of academic misconduct among Asian youth compared to American youth. Unfortunately, most of these cross-national studies are not grounded in theory nor do they use a multiple-regression technique to analyze data, even though there are significant variations in socio-demographic characteristics of the samples across countries.

Diekhoff et al. (1999), for instance, relied solely on ANOVA for the analysis and did not control for socio-demographic variations across samples, even though the distributions of gender, age, and academic classification were found to be significantly different across two samples. Additionally, the main objective of Diekhoff et al. was to examine the relationships among nationality, cheating, and three types of attitude toward cheating (neutralization of cheating, perceived deterrent effects against cheating, and reactions to cheating). Thus, Diekhoff et al. did not examine these cheating attitude variables as explanations

for why Japanese students are more deviant academically than their American counterparts. Diekhoff et al. (1999: 343), overall, found that the Japanese students reported "a higher incidence rate of cheating on exams, a greater tendency to justify cheating, and a greater passivity in their reactions to the observed cheating of others" compared to American students.

The cross-national studies, including Diekhoff et al. (1999), nonetheless offer some insights for why Asian youth are more deviant academically than American youth. First, Diekhoff et al. (1999) and two studies that examined the tolerances for cheating (Payan, Reardon, and McCorkle 2010; Rawwas, Al-Khatib, and Vitell 2004) point to a greater overall tolerance of academic misconduct among Asian youth compared to American youth. Second, Payan, Reardon, and McCorkle (2010: 282) indicate that a cultural difference like the adherence toward the importance of team work could explain Asian students' higher tolerance for academic misconduct, especially that involving collaboration (e.g., obtaining exam questions from others). These two findings suggest a difference in the overall attitude toward academic misconduct that could explain the higher engagement in academic misconduct among Asian students.

## **General Strain Theory**

The lack of theory-grounded empirical research on academic misconduct is not unique to cross-national research. While the number of empirical studies of academic misconduct is growing, many are merely attempts to identify correlates of this behavior. A review of the literature, moreover, reveals that empirical studies grounded in theories of crime tend to apply some variant of the control paradigm, focusing on factors that prevent students from cheating. This includes Hirschi's social control theory (Eve and Bromley 1981; Haines et al. 1986; Author Date; Michaels and Miethe 1989), Gottfredson and Hirschi's self-control theory (Bolin 2004; Cochran et al. 1998; Jones and Quisenberr 2004; Muraven, Pogarsky, and Shmueli 2006; Stogner, Miller, and Marcum 2013; Tibbetts and Myers 1999), and various versions of deterrence and rational choice theory (Cochran et al. 1999; Michaels and Miethe 1989; Nagin and Pogarsky 2003; Tibbetts 1997; Tibbetts and Myers 1999; Tittle and Rowe 1973; Ward and Tittle 1993). Some have also drawn upon social learning theory (Lanza-Kaduce and Klug 1986; Michaels and Miethe 1989; Stogner, Miller, and Marcum 2013) as explanations for academic misconduct.

This study contributes to the theory-grounded empirical research on academic misconduct by applying Agnew's general strain theory (GST) as an explanation for the expected country gap in academic misconduct between Japanese and American students. GST has been considered one of the leading criminological theories since the culmination of Agnew (1985, 1992, 2001, 2007) revisions to Merton's strain theory. In response to mounting criticisms and empirical evidence against social class as an explanation for delinquency, Agnew (2012: 34) has expanded sources of strain beyond the inability to achieve monetary and status goals, and instead, GST focuses on the negative emotions resulting from "the inability to escape from painful or aversive conditions."

The most detrimental criticism targeted at strain theories' proposition that the disjuncture between aspirations and expectations would lead to delinquency (Agnew 2012). Contrary to this proposition, a series of empirical studies (e.g., Elliott and Voss 1974; Hirschi 1969) have found that delinquency is significantly related to low aspirations, irrespective of the level of expectations. This finding is in line with Hirschi (1969) social control theory, while it is so devastating to strain theories that some scholars called for an abandonment of strain theories altogether (see Agnew 1985 for a review).

In response to this criticism, Agnew (1985, 1992, 2012) has made revisions to shift strain theories' focus on social class. First, Agnew (1985) expanded goals beyond those related to money and status to include immediate goals that are important for adolescents. Second, instead of assuming that "goal commitment" (aspirations) is constant for all adolescents, Agnew (1985) considers "goal commitment" as varying. Finally, related to the first point, Agnew (1985) argues that goal blockage should be measured in terms of the disjuncture between aspirations and perceived outcomes rather than between aspirations and expectations.

Besides the disjuncture between aspirations and expectations/perceived outcomes, moreover, Agnew (1992) added two additional types of goal blockage. The second type of goal blockage occurs when actual outcomes fail to meet one's expectations, creating a disjuncture between expectations and perceived outcomes. The third type is between perceived just or fair outcomes and actual outcomes. Additionally, Agnew (1992: 57–58) added two additional sources of strain not directly tied to goal blockage in GST: one occurs when "positively valued stimuli are removed" (e.g., the death of loved one), and the other occurs when "negative stimuli are presented" (e.g., abuse and neglect at home).

According to Agnew (1992), these three major sources of strain increase the likelihood that individuals experience negative emotions (e.g., anger). While most people who experience some form of strain and thereby negative emotions rely on legitimate coping means to deal with such negative emotions, others resort to deviant and criminal coping because they have exhausted their resources for legitimate coping due to repeated severe strain (Agnew 2007). Like Merton's strain theory, GST considers deviance and crime a possible adaptation mechanism to cope with the negative emotion felt as a result of strain.

## The Current Research

This study contributes to the cross-national empirical research of deviance by offering a preliminary test of GST to explain the expected country gap in academic deviance. Our literature review reveals that there has not yet been an empirical study that applied GST as an explanation for the country gap in academic misconduct, and only four empirical studies exist (that we know of) that have explicitly tested GST as a possible explanation of this behavior.<sup>2</sup> In three of those studies, GST fares worst among competing theories as an explanation of academic misconduct (Bichler-Robertson, Potchak, and Tibbetts 2003; Stogner, Miller, and Marcum 2013; Vowell and Chen 2004). In the fourth, GST alone is examined, but it has a limited effect on academic misconduct (Smith et al. 2013). Before dismissing GST's ability to explain academic misconduct, however, recent refinements and revisions (Agnew 1992, 2001) need to be incorporated. While reviewing the measures of strain used in the previous studies and their implications for this study, we discuss how this study contributes to the empirical status of GST in three specific ways.

First, our study measures three types of goal blockage closely to how they are conceptualized by Agnew (1985, 1992). Vowell and Chen (2004) measures are *ad hoc*, which is not atypical in tests of GST, including some of Agnew's own empirical research (Agnew and White 1992; Agnew et al. 1996, 2002). Vowell and Chen (2004: 246-7) include a scale measuring "blocked opportunity" that includes items such as "laws are passed to keep people like me from succeeding" and a scale of "respondents' lack of confidence in their ability." Bichler-Robertson, Potchak, and Tibbetts (2003) include only a measure of perceived unfairness of grading. Stogner, Miller, and Marcum (2013: 183) include a scale called "the educational aspiration and expectation gap," which is a composite of five items (e.g., whether respondents thought "their grades were as high as they would like them to be") that does not measure disjuncture directly. Smith et al. (2013: 94) include a scale measuring "blockage of positively valued goals" based on five items, which are, however, measures of respondents' inability to achieve goals (e.g., whether respondents thought they are poor test takers) rather than of disjunctures. Although the measures used by the previous four studies might implicitly capture the concept of goal blockage, none of them measure disjuncture as it was conceptualized by Agnew.

Second, by following closely as possible how the measures of disjuncture are conceptualized by Agnew, we can examine cross-nationally the debate concerning the disjuncture between aspirations and expectations/perceived outcomes. According to GST, a high level of aspiration can be detrimental if it accompanies a low level of expectations or perceived outcomes, because such pairings would produce disjunctures or goal blockages and thus strain. On the other hand, according to social control theory (Hirschi 1969), a high level of aspirations toward conventional goals would imply a high level of commitment to conventional society. Thus, a high level of aspirations would be beneficial in preventing deviance, irrespective of the levels of expectations and perceived outcomes. In this study, interaction terms between aspirations and expectations as well as between aspirations and perceived outcomes are examined to test whether high aspirations, irrespective of the level of expectations/perceived outcomes, decrease deviance, supporting social control theory, or whether expectations/perceived outcomes moderate the effect of aspirations on academic deviance, supporting GST.

Third, GST considers that criminal behavior is not the only deviant mechanism of coping with strain. Agnew (2007) suggests that the blockage of specific goals may lead to specific forms of deviance; thus, measures of failures to achieve positively valued goals should be goal and offense specific rather than general. Moreover, Agnew (2007) argues that goal blockage in the realm of educational goals should not lead to crime but that criminal behavior could actually undermine the likelihood of achieving educational goals. Indeed, while crime could undermine the likelihood of success in educational goals, academic misconduct could potentially enhance educational success. Thus, according to Agnew, different types of deviance, including academic deviance, allow the individual to cope with negative emotions resulting from strain, and the type of deviance one chooses depends on the type of strain one is experiencing. In addition to exploring a general measure of strain, therefore, our analyses also examine the relative effect of a specific measure of academic strain relevant to students' engagement in two types of academic deviance.

The lack of theory-grounded cross-national research on academic misconduct and the research of academic misconduct that applied GST make it difficult to hypothesize how GST might explain the gap in academic deviance between Japanese and American students. Some scholars suggest the highly competitive and selective nature of the Japanese education system and its ensuing effects on one's career, strong pressure to earn good grades, and greater stress resulting from longer study hours, characterized by the prevalence of cram schools (e.g., Minamikata 1994; Mok 2006; Rohlen 1983). If the Japanese experience stronger academic strain than Americans, as suggested by these scholars, then the country differences in academic strain might explain why the Japanese are more likely to engage in academic deviance than Americans, as postulated by GST.

On the other hand, other scholars suggest that the possible difference in academic strain between Japanese and American students at the middle school level cannot be assumed at the higher education level, as the stress resulting from the competitive nature of the education system does not carry over to the higher education system once students are accepted into a university in Japan (Kerbo 1994; Kerbo and McKinstry 1998; McKinstry and Kerbo 2011; Mizoue 2005). These scholars indicate that education, grades, and cheating are often not taken seriously in the Japanese higher education system, as it is usually difficult to flunk out of a university in Japan. Indeed, Burton (2013) notes that even faculty and administration do not consider cheating among students a serious issue in Japanese universities. If the differences in the higher education systems of Japan and the United States noted by these scholars are correct, we should find support for social control theory, rather than for GST, when the disjuncture measures are examined. In other words, we should expect that the higher academic deviance among the Japanese is explained by their lack of aspirations toward education rather than by their experience with a greater academic strain compared to Americans.

Taking into account the refinements and theoretical questions of GST, our study examines cross-nationally the debate concerning the disjuncture between aspirations and expectations/perceived outcomes and applies GST as an explanation for the expected country difference in academic deviance between American and Japanese students.

#### **Data and Measures**

The data used for this study were collected based on a comparable selfreported survey conducted in the United States and Japan by two of the authors (see author date for details of the sampling). The American sample consists of 505 students at a state university in the United States, while the Japanese sample consists of 442 students at a national university in Japan. We achieved the comparability of data across samples by selecting two universities that are comparable in size and prestige that are located in cities comparable in terms of the relative size and urbanization in each country. After eliminating one Japanese and three American students with missing gender, we conducted the analyses on 502 American and 441 Japanese respondents (Americans = 1 for the variable *Country*). All other missing values were imputed with either the mode or the mean of the respective sample.

## **Control Variables**

Our analyses include five control variables that capture socio-demographic variations between the two countries. *Gender* is a dummy variable (males = 1). *Age* is an interval–ratio variable. *Race* is a dummy variable (whites = 1 or Japanese = 1). *SES* is a dummy variable based on parents' highest education levels (at least one parent with a college degree or higher = 1). *Religiosity* is an ordinal variable based on the frequency of participation in religious activities (ranging from "never" = 0 to "more than one time per week" = 4). Overall, the

American sample consists of a significantly higher proportion of females and racial/ethnic minorities and is significantly older and more religious than the Japanese sample. The differences, however, reflect the overall differences in the two populations (author date).

In addition, this study controls one cheating attitude variable and two education-related variables that might affect both academic strain and academic deviance. Attitude toward cheating is an ordinal variable based on the answers to the question "If you knew someone your age was engaged in cheating in school to get a better grade, how would you react?" (ranging from "strongly approve" = 0 to "strongly disapprove" = 4). Hours spent studying per week is an ordinal variable (ranging from "no time" = 0 to "12 or more hours a week" = 5). Parents' expectation of students' grades is an ordinal variable based on the answer to the question "How important is it to your parents that you make good grades?" (ranging from "completely unimportant" = 0 to "very important" = 3). Contrary to the expectation from past cross-national studies, there was no significant country difference in attitude toward cheating after controlling for gender, age, race, SES, and religiosity. On the other hand, there were significant country variations in both hours spent studying and parents' expectation after controlling for gender, age, race, SES, and religiosity; Japanese students reported significantly fewer hours per week studying and lower parental expectation of their grades than American students.

## **Dependent Variables**

A question "How often have you engaged in behavior X in the past year?" was asked regarding eleven academic deviant behaviors (ranging from "never" = 0 to "almost always" = 4). Appendix 1 shows separately by country the frequency and percentage of respondents who have ever engaged in each of the behaviors. A principal components analysis for the eleven items indicates two factors (the first four eigenvalues are 3.86, 1.74, .93, and .85; see Appendix 1 for the variable communalities and factor loadings based on the Varimax rotation method). Two scales were created by summing the z-score transformations of items loading to each factor, *academic misconduct* ( $\alpha = .786$ ) and unmotivated behavior ( $\alpha = .752$ ). Although six behaviors that constitute the academic misconduct scale are similar to those that are commonly examined in the academic misconduct research (see Haines et al. 1986), many of the seven behaviors that constitute the unmotivated behavior might not be considered "academic misconduct" (e.g., fell asleep in class). Nonetheless, we decided to keep the unmotivated behavior scale for two theoretical reasons. First, GST posits that various types of deviant behaviors, and not just crime/delinquency, result from a particular strain (Agnew 2007). Second, the unmotivated behavior scale with its possible relationship to aspirations/expectations may offer important insight in understanding the debate concerning the disjuncture between aspirations and expectations/perceived outcomes.

## **Theoretical Variables**

According to GST, strain originates from three major sources: goal blockage, removal of positively valued stimuli, and presentation of negative stimuli. To capture the various aspects of goal blockage, a series of measures of goal blockage were developed at two levels of generality in relation to the dependent variables. Our survey contains measures of aspirations, expectations, perceived outcomes, and perceived unfairness of outcomes for a goal pertinent to academic endeavor. In addition, three additional goals concerning monetary achievement, social achievement, and physical appearance are used for the purpose of creating a more general measure of goal blockage.<sup>3</sup>

With measures of aspirations, expectations, and outcomes, three types of "disjuncture" measures were created for each of four goals. The expectation (E) score was subtracted from the aspiration (A) score, creating the disjuncture between aspiration and expectation (A–E). A similar procedure was used to create the disjuncture measures between aspirations and outcomes (A–O) and expectations and outcomes (E–O) for each of four goals. The overall *grade goal blockage* scale was created by summing the *z*-score transformations of A-E grade, A-O grade, E-O grade, and unfairness grade measures. In a similar manner, four additional goal blockage scales were created for each of three remaining goals, and these three scales were further combined to form a general goal blockage scale.

We measure removal of positively valued stimuli and presentation of negative stimuli similar to those used by previous studies (e.g., Hoffmann and Cerbone 1999), creating measures based on respondents' exposure to twelve negative and stressful life events. Respondents indicated how much they had been "bothered" by each of the twelve life events (ranging from "did not occur" = 0 to "bothered quite a lot" = 4). Appendix 1 shows separately by country the frequency and percentage of respondents who have ever experienced each of the twelve life events. A principal component analysis of the twelve life events indicates four factors (The first five eigenvalues are 2.922, 1.508, 1.171, 1.025, and .964; see Appendix 1 for variable communalities and the factor loadings based on the Varimax rotation method), and the reliability analysis shows that the reliability of these four factors are moderate ( $\alpha$ 's = .737, .602, .463, and .418, respectively).<sup>4</sup> Four scales were created by summing the z-score transformation of items loading to each factor and are called *strict parenting*, *separation*, *violence*, and *death*, respectively.

#### **Analysis Results**

This study utilizes the multivariate general linear model (MGLM) because the two academic deviance scales are significantly correlated with each other. Findings from separate analyses of the general linear model (GLM) are therefore redundant, and an independent variable that is found to be significant on a dependent variable may in fact be significant because of the significant relationship between the other dependent variable and the independent variable as well as the overlap in variations between the two dependent variables. MGLM instead accounts for the correlation between the dependent variables, and relationships between independent and dependent variables can be separated. In addition, MGLM controls the family-wise error rates, or the increased odds of finding an independent variable significant just because of the repeated use of the same sample of data. Although the tables do not show the full models, all multivariate models reported in this study are fully specified, include all five control variables (gender, age, race, SES, and religiosity), attitude toward cheating, and two education-related variables, and are significant at the .05 significance level. Multivariate normality can be assumed in this study due to the normality assumption being valid for each of the independent variables. When a model was run separately by country and an identical variable was significant in both countries, the equality of parameter estimates was examined (see Paternoster et al. 1998; for the discussion of this statistical test). The tests for the equality of parameter estimates indicate that none of the significant effects vary significantly across countries.

First, the country gap in academic deviance is examined by regressing academic deviance on *country* (see Table 1). As expected, the Japanese are significantly more likely than Americans, and males are significantly more likely than females to engage in both types of academic deviance. Additionally, a significant interaction term between *country* and *gender* indicates that the gender gap in *unmotivated behavior* is greater among the Japanese compared to Americans. As expected, *attitude toward cheating* and *hours spent studying* are significantly and negatively related to both types of academic deviance, while *parents' expectation* has no effect on either types of academic deviance. The significant effect of *attitude toward cheating* on *unmotivated behavior* and that of *hours spent studying* on *academic misconduct*, however, reflect solely of their significant effects among the Japanese. Among Americans, moreover, *attitude toward cheating* explains away the gender gap in *academic misconduct*, as the inclusion of this variable makes *gender* insignificant for Americans.

Second, the country difference in academic strain is examined by regressing *grade goal blockage* on *country* (see Table 1), which shows that the Japanese are significantly more likely than Americans and males are significantly

Multivariate genera	l linear model	Regressing	Academic	Deviance	and Goa	l Blockage	on Country	and Five	Control
	Variables, At	ttitude toward	d Cheating	, and Two	Educatio	on-Related	Variables		

		Cor	nbine	ed (n =	943)	Ame	erican	s (n =	502)	Japa	inese	( <i>n</i> = 4	41)
		b	р	SE	t	b	р	SE	t	b	р	SE	t
Academic misconduct	Intercept Country (United States = 1)	5.614 -2.028	***	2.236 .352	2.511 -5.763	.197		1.952	.101	13.327		6.872	1.939
	Gender (Males $= 1$ )	.515	*	.253	2.039	.261		.251	1.039	.978	*	.471	2.075
	Attitude toward cheating	-1.653	***	.146	-11.314	-1.289	***	.147	-8.790	-2.140	***	.265	-8.068
	Parents' expectation	.028		.177	.159	.233		.208	1.118	033		.279	118
	Hours spent studying $R^2$	316 .246	**	.103	-3.071	190 .162		.106	-1.803	439 .168	*	.185	-2.372
Unmotivated	Intercept	.752		1.985	.379	1.936		2.162	.895	-12.273		5.214	-2.354
behavior	Country (United States $= 1$ )	904	*	.409	-2.209								
	Gender (Males $= 1$ )	1.565	***	.334	4.690	.668	*	.278	2.399	1.407	* * *	.358	3.935
	Attitude toward cheating	622	***	.128	-4.850	287		.162	-1.765	960	***	.201	-4.772
	Parents' expectation	.182		.155	1.171	.184		.230	.798	.251		.212	1.187
	Hours spent studying	586	***	.091	-6.468	572	***	.117	-4.897	619	* * *	.140	-4.408
	Country × Gender	-1.066	*	.442	-2.409								
	$R^2$	.195				.096				.159			

# Table 1

		Cor	nbine	ed (n =	943)	Ame	ricar	ns ( $n =$	502)	Japanese $(n = 441)$				
		b	р	SE	t	b	р	SE	t	b	р	SE	t	
Grade goal	Intercept	-1.088		1.518	717	.369		1.431	.258	-7.485		4.378	-1.710	
blockage	Country (United States = 1)	-1.593	***	.313	-5.092									
	Gender (Males $= 1$ )	.595	*	.255	2.332	070		.184	381	.605	*	.300	2.014	
	Attitude toward cheating	.048		.098	.493	105		.107	977	.250		.169	1.478	
	Parents' expectation	.745	***	.119	6.282	.234		.152	1.538	1.066	***	.178	5.996	
	Hours spent studying	185	**	.069	-2.666	082		.077	-1.063	364	**	.118	-3.092	
	Country × Gender	678	*	.338	-2.006									
	$R^2$	.110				.019				.106				

Table 1(continued)

*Notes*: p < .05, p < .001, p < .001; All significance tests are one-tailed significance tests, and all analyses control for *gender*, *age*, *race*, *SES*, and *religiosity*.

more likely than females to have experienced grade goal blockage. The interaction term country  $\times$  gender is significant (see Table 1), indicating that the gender gap in grade goal blockage is significantly wider in Japan than in the United States, which might explain the significant interaction term found earlier between country and gender on unmotivated behavior. Indeed, models run separately by country show that while there is no gender difference in perceived grade goal blockage among Americans, Japanese males are significantly more likely than Japanese females to have perceived grade goal blockage (see Table 1). Among other variables, parents' expectation significantly increases while hours spent studying decreases grade goal blockage; however, these effects come solely from their effects among the Japanese. Moreover, the Japanese are significantly more likely than Americans to have experienced all other blockages resulting from the inability to achieve monetary, social, and physical appearance goals (results not shown).

Third, the country variation in the removal of positively valued stimuli and presentation of negative stimuli are examined by regressing each of the four stressful life events scales on *country* (results not shown), which show that except for *violence* (which has no significant country difference), Americans are overall significantly more likely than the Japanese to have experienced stressful life events. As we do not expect one's gender to affect the likelihood of experiencing most of the stressful life events examined in this study, it is not surprising to find that except for *violence* (which includes sexual abuse), *gender* has no significant effect on any of the stressful life events measures. As expected, *parents' expectation* is positively related to *strict parenting*.

Fourth, GST's applicability as an explanation for the country gap in academic deviance is examined next by regressing academic deviance on country and various strain measures. The two goal blockage measures are examined first, and then, all strain measures are examined next in the final model. First, academic deviance is regressed on *country*, grade goal blockage, and general goal blockage (see Table 2). Although the Japanese perceive significantly stronger grade goal blockage than Americans, the academic strain fails to explain the country gap in either types of academic deviance. This finding is understandable for academic misconduct as grade goal blockage has a significant positive effect on this behavior among only Americans prior to the inclusion of attitude toward cheating (results not shown), and no significant effect on this behavior among either of the samples after the attitude variable is controlled (see Table 2). Similarly, although grade goal blockage has a significant positive effect on unmotivated behavior among both samples, country remains significant. As grade goal blockage overall has a stronger effect than does general goal blockage on unmotivated behavior, this provides some evidence to support Agnew's contention that the blockage of specific goals may lead to

Multivariate General Linear Model Regressing Academic	Deviance on Country,	Five Control	Variables,	Attitude toward	Cheating, Tw	o Education-Related
	Variables, and Go	al Blockages				

			Combined $(n = 943)$				An	nericar	n = 5	02)	Japanese $(n = 441)$			
			b	р	SE	t	b	р	SE	t	b	р	SE	t
Academic	Model 1	Intercept	5.236		2.240	2.337	.076		1.939	.039	13.021		6.928	1.879
misconduct		Country (United States = 1)	-1.655	***	.379	-4.369								
		Gender (Males $= 1$ )	.552	*	.254	2.175	.318		.251	1.267	.988	*	.475	2.077
		Attitude toward cheating	-1.655	***	.146	-11.357	-1.269	***	.146	-8.706	-2.161	***	.266	-8.132
		Parents' expectation	031		.180	173	.189		.207	.911	109		.290	375
		Hours spent studying	292	**	.103	-2.832	175		.105	-1.663	394	*	.187	-2.104
		Grade goal blockage	.051		.051	1.011	.120		.064	1.885	.049		.079	.621
		General goal blockage	.044	*	.022	2.037	.038		.023	1.683	.046		.038	1.228
		$R^2$	.250				.174				.169			
	Model 2	Intercept	5.900		2.239	2.635	.493		1.924	.257	13.682		6.919	1.977
		Country (United States $= 1$ )	-1.827	***	.409	-4.473								
		Gender (Males $= 1$ )	.630	*	.253	2.487	.391		.250	1.566	1.068	*	.476	2.244
		Attitude toward cheating	-1.646	***	.145	-11.340	-1.278	***	.145	-8.844	-2.133	***	.266	-8.027
		Parents' expectation	039		.179	220	.197		.206	.955	114		.290	393
		Hours spent studying	300	**	.103	-2.921	180		.104	-1.735	388	*	.187	-2.070
		Grade goal blockage	.043		.051	.851	.093		.064	1.469	.053		.079	.667

# Table 2

			C	ombine	ed $(n = 9)$	43)	Ar	nericar	n = 5	02)	Ja	panese	( <i>n</i> = 44	1)
			b	р	SE	t	b	р	SE	ť	b	р	SE	t
		General goal blockage	.041		.022	1.899	.032		.023	1.391	.046		.038	1.220
		Strict parenting	.031		.055	.572	.035		.048	.740	.015		.134	.112
		Separation	.005		.049	.107	038		.042	905	.182		.122	1.489
		Violence	.162	**	.062	2.622	.146	*	.059	2.466	.170		.121	1.399
		Death	.121		.085	1.420	.159	*	.077	2.061	009		.186	048
		$R^2$	.257				.191				.174			
Unmotivated	Model 1	Intercept	1.517		1.955	.776	1.781		2.126	.838	-10.838		5.224	-2.075
behavior		Country (United States = 1)	-1.106	**	.331	3.347								
		Gender (Males $= 1$ )	.932	***	.221	4.211	.724	**	.276	2.628	1.295	***	.358	3.614
		Attitude toward cheating	631	***	.127	4.964	254		.160	-1.589	999	***	.200	-4.986
		Parents' expectation	.034		.157	.216	.111		.227	.490	.081		.219	.371
		Hours spent studying	530	***	.090	-5.896	547	***	.115	-4.751	566	***	.141	-4.005
		Grade goal blockage	.195	***	.044	4.416	.257	***	.070	3.678	.166	**	.059	2.795
		General goal blockage	.009		.019	.450	.030		.025	1.194	013		.029	467
		$R^2$	.209				.127				.170			
	Model 2	Intercept	2.284		1.934	1.181	2.140		2.103	1.018	-9.598		5.119	-1.875
		Country (United States = 1)	-1.559	***	.353	4.419								
		Gender (Males $= 1$ )	1.017	***	.219	4.648	.768	**	.273	2.814	1.399	***	.352	3.975

Table 2
(continued)

	Combined $(n = 943)$				An	nerican	s(n = 5)	02)	Japanese $(n = 441)$				
	b	р	SE	t	b	р	SE	t	b	р	SE	t	
Attitude toward cheating	619	***	.125	-4.938	280		.158	-1.771	955	***	.197	-4.857	
Parents' expectation	.010		.155	.062	.086		.226	.381	.109		.215	.506	
Hours spent studying	540	***	.089	-6.095	548	***	.114	-4.820	558	***	.139	-4.026	
Grade goal blockage	.176	** **	.044	4.013	.234	**	.070	3.371	.138	*	.059	2.346	
General goal blockage	003		.019	159	.013		.025	.528	020		.028	704	
Strict parenting	.180	***	.047	3.796	.127	*	.052	2.433	.281	**	.099	2.841	
Separation	.102	*	.043	2.396	.053		.046	1.151	.257	**	.090	2.851	
Violence	.062		.054	1.153	.131	*	.065	2.021	067		.090	749	
Death	.048		.074	.648	022		.084	262	.089		.137	.650	
$R^2$	.232				.150				.207				

Table 2(continued)

Notes: \*p < .05, \*\*p < .001, \*\*\*p < .001; All significance tests are one-tailed significance tests, and all analyses control for *gender*, *age*, *race*, *SES*, and *religiosity*.

specific forms of deviance. In fact, general goal blockage has no significant effect on either of the two types of academic deviance. Second, stressful life events scales are added to the model, regressing academic deviance on *country* and both goal blockage measures at once (see Table 2), which show that stressful life events measures affect academic deviance differently by country. While none of the stressful life events are significant in explaining academic misconduct among the Japanese, the experience with violence and death significantly increases this behavior among Americans. On the other hand, while strict parenting significantly increases unmotivated behavior among both samples, separation has a significant positive effect on this behavior only among the Japanese and violence has a significant positive effect on this behavior only among the strain measures included in this study fail to explain the country gap in academic deviance and explain a small portion of the variance of academic deviance.

Finally, the debate concerning GST's disjuncture measures is examined. First, country differences in aspirations, expectations, and perceived outcomes on grades goal are examined by regressing these grade measures on *country* (results not shown). Contrary to the expectation based on the higher overall *grade goal blockage* found among the Japanese compared to Americans, the Japanese show significantly lower levels of *grade aspirations*, *grade expectations*, and *perceived grade outcomes* than Americans.

Then, academic deviance is regressed on all four types of grade measures (grade aspirations, grade expectations, grade outcomes, and grade unfairness) first without controlling for attitude toward cheating (results not shown) and then with the control of the attitude variable (see Table 3). The results prior to controlling for attitude toward cheating show that grade aspirations and grade outcomes have significant negative effects on both types of academic deviance among the Japanese, while grade unfairness has a significant positive effect on academic misconduct and grade aspirations and grade outcomes have significant negative effects on unmotivated behavior among Americans. After controlling for attitude toward cheating, the negative effects of grade aspirations and grade outcomes on academic misconduct among the Japanese disappear. Interestingly when four grade measures, rather than the disjuncture measures among them, are entered into the model, the country gap in unmotivated behavior disappears, indicating overall that the greater engagement in *unmotivated behavior* among the Japanese is explained by the lower aspirations for grades and lower perceived outcomes of grades among the Japanese compared to Americans.

Next, the disjuncture between aspirations and expectations is examined by entering an interaction term between *grade aspirations*  $\times$  *grade expectations* to the model that regresses academic deviance on *country*, *grade aspirations*, and *grade expectations* (results not shown). Then, the disjuncture between

Type of		C	ombin	ed (n = 9	943)	Aı	mericar	ns (n = 5	02)	Ja	apanes	e (n = 44	-1)	Ja	apanes	e (n = 44	1)
Academic Deviance		b	р	SE	t	b	р	SE	t	b	р	SE	t	b	р	SE	t
Academic misconduct	Intercept Country (United States = 1)	6.182 -1.519	***	2.295 .394	2.693 3.856	254		2.104	121	16.234		7.101	2.286	15.706		6.992	2.246
	Gender (Males = 1)	.415		.255	1.623	.281		.251	1.118	.799		.484	1.652	.784		.475	1.651
	Attitude toward cheating	-1.603	***	.148	-10.848	-1.269	***	.146	-8.680	-2.069	***	.272	-7.610	-2.088	***	.264	-7.895
	Parents' expectation	.108		.190	.572	.277		.214	1.294	.040		.309	.128	131		.280	467
	Hours spent studying	276	**	.105	-2.638	175		.107	-1.637	372		.192	-1.935	378	*	.190	-1.987
	Grade aspirations	129		.168	768	.304		.245	1.241	182		.248	735				
	Grade expectations (GE)	077		.181	428	363		.223	-1.623	.038		.281	.134	399		.315	-1.265
	Grade outcomes (GO)	184		.136	-1.35	012		.161	077	345		.219	-1.576	-1.248	*	.492	-2.538
	Grade unfairness GE × GO	.168		.123	1.370	.418	*	.171	2.450	.058		.179	.323	.422	*	.204	2.067
	$R^2$	.250				.178				.168				.177			

Multivariate general linear model Regressing Academic Deviance on Five Control Variables, Attitude toward Cheating, Two Education-Related Variables, Grade Aspirations, Grade Expectations, Grade Outcomes, and Interaction Term GE × EO

# Table 3

Table 3	
(continued)	

Type of		С	ombin	ed $(n = 9)$	43)	Aı	mericai	ns (n = 5)	02)	Ja	ipanese	e (n = 44	-1)	Ja	apanese	e (n = 44	-1)
Academic Deviance		b	р	SE	t	b	р	SE	t	b	р	SE	t	b	р	SE	t
Unmotivated behavior	Intercept Country (United States = 1)	5.112 .022		1.901 .326	2.689 .067	5.913		2.248	2.631	-3.103		5.057	614	-5.029		5.023	-1.001
	Gender (Males = 1)	.695	**	.212	3.285	.557	*	.268	2.078	.985	**	.344	2.860	1.015	**	.341	2.977
	Attitude toward cheating	440	***	.122	3.593	168		.156	-1.079	760	***	.194	-3.925	865	***	.190	-4.552
	Parents' expectation	.448	**	.157	2.857	.405		.229	1.770	.475	*	.220	2.159	.121		.201	.601
	Hours spent studying	389	***	.087	4.484	410	***	.114	-3.582	402	**	.137	-2.936	400	**	.137	-2.929
	Grade aspirations	642	***	.139	4.605	573	*	.262	-2.187	574	**	.177	-3.245				
	Grades expectations (GE)	096		.150	643	092		.239	384	138		.200	691	642	**	.227	-2.836
	Grades outcomes (GO)	855	***	.113	7.588	772	***	.172	-4.492	859	***	.156	-5.514	-1.652	***	.353	-4.674
	Grade unfairness GE × GO	028		.102	273	.000		.182	.000	043		.128	340	.380	*	.147	2.587
	$R^2$	.287				.175				.259				.254			

Notes: \*p < .05, \*\*p < .001, \*\*\*p < .001; All significance tests are one-tailed significance tests, and all analyses control for gender, age, race, SES, and religiosity.

aspirations and perceived outcomes is examined by entering an interaction term between grade aspirations  $\times$  grade outcomes to the model that regresses academic deviance on country, grade aspirations, and grade outcomes (results not shown). Neither of the interaction terms is significant on either types of academic deviance. Furthermore, these two interaction terms are not significant when the models are analyzed separately by country or when models are run without attitude toward cheating. Contrary to the expectation of GST, therefore irrespective of the level of expectations/perceived outcomes for grades, aspirations toward getting good grades significantly decrease the engagement in academic misconduct among the Japanese and unmotivated behavior among both the Japanese and Americans.

Though not part of the debate, the disjuncture between grade expectations and grade outcomes is also examined by entering the interaction term grade expectations and grade outcomes to the model that regresses academic deviance on country, grade expectations, and grade outcomes (results not shown). The interaction term is once again not significant when the model is analyzed with the combined sample. When analyzed separately by country, however, the interaction term is significant on both types of academic deviance among the Japanese (see Table 3). The significant interaction terms both support and oppose the importance of the disjuncture between expectations and perceived outcomes in explaining academic deviance. Overall, the Japanese with low expectations and low perceived outcomes are more likely to engage in academic deviance than the Japanese who are experiencing the disjuncture between expectations and perceived outcomes, providing some support for social control theory. In addition, the Japanese with high expectations and high perceived outcomes are least likely to engage in academic deviance. On the other hand, the Japanese who have a high level of expectations but a low level of perceived outcomes are more deviant academically than the Japanese who have a low level of expectations but a high level of perceived outcomes, providing some support to GST. However, neither groups of Japanese students are more deviant than the Japanese who have low expectations and low perceived outcomes.

#### Discussion

The literature we have reviewed and our own results generate six major implications. First, the Japanese are more deviant academically than Americans. Second, the Japanese experience stronger academic strain than Americans. Third, the greater academic deviance of the Japanese cannot be attributed to a stronger burden of academic strain. Fourth, specific strains explain specific deviance better than general strain. Fifth, aspirations, expectations, and perceived outcomes have direct effects on academic deviance. Finally, the higher unmotivated behavior among the Japanese is explained by their lower aspirations toward academic endeavors compared to Americans. Each of these six implications are discussed in more detail below, followed by limitations of this study and suggestions for future studies.

First, confirming the paradoxical finding of Diekhoff et al. (1999), our self-reported data indicate that the Japanese are more deviant academically than Americans in terms of both academic misconduct and unmotivated behavior. Our finding contradicts the belief that the Japanese are less deviant and more conforming than Americans. The finding that a group, which is otherwise more conforming and less deviant, is more deviant when it comes to certain behaviors raises an interesting theoretical question regarding "criminality" and "generality of deviance."

Second, our results indicate that the Japanese experience stronger academic strain than do Americans. Moreover, in addition to the higher academic strain, the Japanese also experience stronger general strain than Americans resulting from the blockage in achieving monetary, social, and physical appearance goals.

Third, contrary to the expectation of GST, the stronger academic strain experienced among the Japanese cannot fully account for their greater academic deviance, because the country difference in academic deviance remains significant after controlling for academic strain and other measures of GST. Insofar as the measures of strain examined in our study are concerned, GST therefore fails to account for the country gap in academic deviance between the Japanese and Americans. This finding is not surprising given that our strain measures overall explain a small portion of variance of academic deviance. The strain measures, however, appear to have similar effects on academic deviance among the Japanese and Americans, providing some support for the generalizability of GST to a non-Western culture, or at least to the Japanese. In particular, while general goal blockage has no effect on either types of academic deviance, both grade goal blockage and strict parenting have a significant positive effect on unmotivated behavior among both Americans and the Japanese.

Fourth, our results provide some evidence to support Agnew's contention that specific strains result in specific deviances. Indeed, general goal blockage has no significant effect on either types of the academic deviance. The significant effect of grade goal blockage on unmotivated behavior among both the Japanese and Americans, in the face of the insignificant effect of general goal blockage on both types of academic deviance, suggests the importance of measuring strain specific to the behavior for the future studies.

Fifth, grade aspirations have a direct negative effect on *unmotivated behavior*, and the effect is not moderated by grade expectations or grade perceived outcomes. This finding contradicts GST's proposition that the

disjuncture between aspirations and expectations/perceived outcomes would produce strain that makes deviance more likely. Our finding, however, could explain why our disjuncture/strain measures overall fail to explain the country gap in academic deviance, especially as the Japanese show significantly lower levels of grade aspirations, grade expectations, and perceived grade outcomes than Americans. Our results also indicate that grade perceived outcomes have a significant moderating effect on the effect of grade expectations on both types of academic deviance among the Japanese. Contrary to GST, however, the Japanese with low-grade aspirations and low-grade perceived outcomes are more likely to engage in academic deviance than the Japanese who experience the disjuncture between grade aspirations and grade perceived outcomes.

Finally, our results overall indicate that the prediction that stronger pressure to do well in school produces a stronger academic strain among the Japanese compared to Americans cannot be supported, at least at the higher education level. Our results instead support the argument that education, grades, and academic misconduct are not taken as seriously in Japanese colleges compared to American colleges. Contrary to the expectation from past studies, however, our study did not find a country difference in attitude toward cheating. Our results overall reveal that the greater academic deviance among Japanese college students is explained not by their greater academic "strain," but by their lack of aspirations toward getting good grades, represented by both lower aspirations and lower perceived outcomes for grades among the Japanese compared to Americans.

There are several limitations of the study that might account for the failure of GST in explaining the country gap in academic deviance, and these limitations offer suggestions for future studies. First, our study does not include measures of negative emotions that result from strain or of other possible coping mechanisms besides academic deviance that might alleviate the negative emotions. Agnew (1992) argues that deviance is only one potential response to strain that produces negative emotions which then "create[s] pressure for corrective action" (Agnew 2007: 13). While some individuals who experience strain engage in deviance, others might not, and Agnew (1992: 66) presents a typology of "the major cognitive, emotional, and behavioral adaptations to strain" to explain the individual differences in the response to strain. Agnew (2007) argues that individuals have varied levels of coping resources, including self-efficacy, self-esteem, and social support, and these may ameliorate the relationship between strain and deviance (Broidy and Agnew 1997). By examining the direct effect of strain on deviance, therefore, our study omits the important mediating effects of both negative emotions and other possible coping mechanisms, which could explain the small overall variance of the dependent variable explained by our strain measures. Thus, instead of dismissing GST as an explanation of academic deviance, or the country

gap in academic deviance, the next step would be to test a more fully specified model of GST and examine the country variations in the causal models among strain, mediating variables, and deviance. Second, when creating GST's goal blockage measures, we made an assumption in terms of four goals that are important for our samples of college students. It is possible, however, that there are other goals that are also important among college students. Third, the generalizability of the findings of this study might be limited because our study utilizes non-random samples of college students from a university in two countries. Our main objective is the cross-national comparison of how theoretical measures affect deviance. Nevertheless, the cross-national empirical research based on nationally representative data or random samples to test theories of crime would be of immense value to the field of criminology. Fourth, our cross-sectional data pose a limitation in explicating the causal order of the measures examined in this study. It is possible that our dependent variable, especially the unmotivated behaviors, could affect the strain, rather than the other way around. To explicate the causal model among theoretical variables and deviance, it is therefore important to utilize longitudinal data that include measures of strain experienced by the respondents that temporarily precede their engagement in deviance. Finally, our analysis does not control for the theoretical variables found to be significantly related to academic misconduct, including those in Diekhoff et al. (1999), except for the attitude toward cheating. It is possible therefore that our results suffer from a model specification error and are biased due to the omission of some of the key theoretical variables.

### Conclusions

This study contributes to the cross-national research of academic deviance and confirms the paradoxical finding by Diekhoff et al. (1999) that the Japanese are more deviant academically than Americans. This study, moreover, goes a step further than Diekhoff et al. by applying GST as a framework to understand the country gap in academic deviance, thus also contributing to the theory-grounded research on academic misconduct. By focusing on GST's theoretical concept of goal blockage and the debate surrounding the concept, this study offers a preliminary attempt to explore whether GST has the potential to explain a country gap in academic deviance. This study offers added support to the previous findings in the United States concerning the debate and finds that irrespective of the levels of expectations and perceived outcomes of grade, a lack of aspirations toward getting good grades significantly increases academic deviance among both the Japanese and Americans. Moreover, this study finds that the greater academic deviance among the Japanese compared to Americans is explained by their lower aspirations and not by their greater strains resulting from academic endeavors.

#### **ENDNOTES**

\*Please direct correspondence to Miyuki Fukushima Tedor, Department of Sociology and Criminology, Cleveland State University, Rhodes Tower 1733, 2121 Euclid Ave., Cleveland, OH 44115, USA; Tel.: 216-687-4550; Fax: 216-687-9314; e-mail: m.fukushima@csuohio.edu. Funding for the surveys reported was provided by the College of Arts and Sciences, University of Oklahoma (Susan F. Sharp, investigator) and by Grant-in-Aid for Scientific Research #16730274 from the Japanese Ministry of Education, Culture, Sports, Science and Technology (Emiko Kobayashi, investigator). We are most grateful to Dr. Harold G. Grasmick for his contributions to collecting the U.S. data and his invaluable inputs into the manuscript.

<sup>1</sup>For instance, in Australia (Davis and Wayne Ludvigson 1994), Belarus, Croatia, Kyrgyzstan, Lithuania, Russia, Ukraine (Grimes and Rezek 2005), Bulgaria, Croatia, Spain, the United Kingdom (Pupovac, Bilic-Zulle, and Petrovecki 2008), Chile (Koljatic and Silva 2002), China (Cheung and Wu 2012), Croatia (Hrabak et al. 2004), England (Newstead, Franklyn-Stokes, and Armstead 1991), Ethiopia (Teferra 2001), Hong Kong (Li and Casanave 2012), Lebanon (McCabe, Feghali, and Abdallah 2008), Malaysia (Iberahim et al. 2013), Portugal (Teixeira and Rocha 2010), and Turkey (Asli, Yazici, and Erdem 2011), to list just a few.

<sup>2</sup>There are studies that have found correlates of academic misconduct relevant to GST, including stress/pressure for good grades (Franklyn-Stokes and Newstead 1995), fear of failure (Schab 1991), importance of the test (Houston 1977), and past failure (Millham 1974). Additionally, in a previous study considering only Japanese data, we utilized GST to examine academic misconduct (author year).

<sup>3</sup>For each of these four goals, respondents were asked "How important is it to you to achieve the following goals?" (aspirations); "How successful do you believe you will be in achieving the following goals?" (expectations); "How successful have you been in achieving the following goals?" (outcomes); and "How fair do you believe your opportunities are to achieve the following goals?" (unfairness). Items for aspirations, expectations, and outcomes were measured with a four-point Likert scale (ranging from "not very important" or "not at all successful" = 0 to "very important" or "very successful" = 4).

<sup>4</sup>Low alphas are expected because these events are more or less discrete events, and many of them do not necessarily share an underlying cause.

#### REFERENCES

Adler, Freda. 1983. *Nations Not Obsessed with Crime*. Littleton, Colorado: Fred B. Rothman. Agnew, Robert. 1985. "A Revised Strain Theory of Delinquency." *Social Forces* 64(1):151–67.

—. 1992. "Foundation for a General Strain Theory of Crime and Delinquency." *Criminology* 30(1):47–87.

—. 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* 38:319–61.

—. 2007. Pressured into Crime: An Overview of General Strain Theory. Los Angeles: Roxbury Publishing Company.

Agnew, Robert and Helene Raskin White. 1992. "An Empirical Test of General Strain Theory." Criminology 30(4):475-99.

- Agnew, Robert, Francis Cullen, Velmer Burton Jr., David T. Evans, and Gregory R. Dunaway. 1996. "A New Test of Classic Strain Theory." Justice Quarterly 13(4):681–704.
- Agnew, Robert, Timothy Brezina, John Wright, and Francis Cullen. 2002. "Strain, Personality Traits, and Delinquency: Extending General Strain Theory." *Criminology* 40(1):43–72.
- Asli, Yazici, Sedat Yazici, and Mexiyet Sema Erdem. 2011. "Faculty and Student Perceptions on College Cheating: Evidence from Turkey." *Educational Studies* 37(2):221–31.
- Bichler-Robertson, Gisela, Marissa C. Potchak, and Stephen Tibbetts. 2003. "Low Self-Control, Opportunity, and Strain in Students' Reported Cheating Behavior." *Journal of Crime and Justice* 26(1):23–53.
- Bolin, Aaron U. 2004. "Self-Control, Perceived Opportunity, and Attitudes as Predictors of Academic Dishonesty." *The Journal of Psychology* 138(2):101–14.
- Broidy, Lisa and Robert Agnew. 1997. "Gender and Crime: A General Strain Theory Perspective." Journal of Research in Crime and Delinquency 34(3):275–306.
- Burns, Susan R., Stephen F. Davis, Janice Hoshino, and Richard L. Miller. 1998. "Academic Dishonesty: A Delineation of Cross-Cultural Patterns." *College Student Journal* 32(4):590–7.
- Burton, Susan. 2013. "Stick to the Master Plan." Times Higher Education 2106:19-19.
- Cheung, Hoi Yan and Joseph Wu. 2012. "The Prediction of Cheating by University Students' Risk-Taking Personality." *The Asia-Pacific Education Research* 21(3):454–63.
- Cizek, Gregory J. 1999. "Cheating in Other Countries and Cultures." Pp. 74-89 in *Cheating on Tests: How to Do it, Detect It, and Prevent It.* New Jersey: Lawrence Erlbaum.
- Cochran, John K., Peter B. Wood, Christine S. Sellers, Wendy Wilkerson, and Mitchell B. Chamlin. 1998. "Academic Dishonesty and Low Self-Control: An Empirical Test of a General Theory of Crime." *Deviant Behavior* 19:227–55.
- Cochran, John K., Mitchell B. Chamlin, Peter B. Wood, and Christine S. Sellers. 1999. "Shame, Embarrassment, and Formal Sanction Threats: Extending the Deterrence/Rational Choice Model to Academic Dishonesty." Sociological Inquiry 69(1):91–105.
- Davis, Stephen F. and H. Wayne Ludvigson. 1994. "A Comparison of Cheating and Learning/ Grade Orientation in American and Australian College Students." *College Student Journal* 28:353–6.
- Desruisseaux, Paul. 1999. "Cheating is Reaching Epidemic Proportions Worldwide, Researchers Say." *The Chronicle of Higher Education* 45(34):1–2.
- Diekhoff, George M., Emily E. LaBeff, Kohei Shinohara, and Hajime Yasukawa. 1999. "College Cheating in Japan and the United States." *Research in Higher Education* 40(3):343–53.
- Elliott, Delbert S. and Harwin L. Voss. 1974. *Delinquency and Dropout*. Lexington, MA: Lexington Books.
- Eve, Raymond and David Bromley. 1981. "Scholastic Dishonesty among College Undergraduates: Parallel Tests of Two Sociological Explanations." *Youth and Society* 13(1):20–5.
- Fackler, Martin. 2011. "High-Tech Cheating on Entrance Exams Alarms Japan." *The New York Times* March 2, pp. Ao, Foreign Desk 7.
- Franklyn-Stokes, Arlene and Stephen E. Newstead. 1995. "Undergraduate Cheating: Who Does What and Why?" *Studies in Higher Education* 20(2):159–72.
- Fujimoto, Takayuki, Hiroshi Kawai, and Atsushi Shimura. 2009. "A Trend Analysis of a Dishonest Act in a University and a Proposal of a Dishonest Act Prevention System." *Information Processing Society of Japan SIG Notes* 32:17–22.
- Grimes, Paul W. and Jon P. Rezek. 2005. "The Determinants of Cheating by High School Economics Students: A Comparative Study of Academic Dishonesty in the Transitional Economies." *International Review of Economic Education* 4(2):23–45.

Haines, Valerie J., George M. Diekhoff, Emily E. LaBeff, and Robert E. Clark. 1986. "College Cheating: Immaturity, Lack of Commitment, and the Neutralizing Attitude." *Research in Higher Education* 25(4):342–54.

Hirschi, Travis. 1969. Causes of Delinquency. California: University of California.

- Hoffmann, John P. and Felicia Gray Cerbone. 1999. "Stressful Life Events and Delinquency Escalation in Early Adolescence." *Criminology* 37(2):343–73.
- Houston, John P. 1977. "Four Components of Rotter's Internal-External Scale and Cheating Behavior." Contemporary Educational Psychology 2:275–83.
- Hrabak, Maja, Ana Vujaklija, Ivana Vodopivec, Darko Hren, Matko Marusic, and Ana Marusic. 2004. "Academic Misconduct among Medical Students in a Post-Communist Country." *Medical Education* 38:276–85.
- Iberahim, Hadijah, Norashikin Hussein, Nusrah Samat, Fauziah Noordin, and Normala Daud. 2013. "Academic Dishonesty: Why Business Students participate in These Practices?" Procedia – Social and Behavioral Sciences 90:152–6.
- Jones, Shayne and Neil Quisenberr. 2004. "The General Theory of Crime: How General is it?" Deviant Behavior 25(5):401–26.
- Kerbo, Harold R. 1994. "A Society of Higher Education: Japanese University in the Context of Japanese Culture, Social Organization, and Social Stratification." Sociological View Points 10:66–78.
- Kerbo, Harold R. and John A. McKinstry. 1998. Modern Japan. New York, NY: McGraw-Hill.
- Koljatic, Mladen and Monjaca Silva. 2002. "Comparison of Students' and Faculty's Perceptions of Occurrence of Dishonest Academic Behaviors." *Psychological Reports* 90:883–8.
- Lanza-Kaduce, Lonn and Mary Klug. 1986. "Learning to Cheat: The Interaction of Moral-Development and Social Learning Theories." Deviant Behavior 7:243–59.
- Li, Yongyan and Christine Pearson Casanave. 2012. "Two First-Year Students' Strategies for Writing from Sources: Patchwriting or Plagiarism?" Journal of Second Language Writing 21:165–80.
- Lim, Vivien K. G. and Sean K. B. See. 2001. "Attitudes Toward, and Intentions to Report, Academic Cheating Among Students in Singapore." *Ethics and Behavior* 11(3):261–74.
- McCabe, Donald. L, Butterfield, K. D., and Trevino L. K. 2006. "Academic Dishonesty in Graduate Business Programs: Prevalence, Causes and Proposed Action." Academy of Management Learning and Education 5:294–306.
- McCabe, Donald L., Tony Feghali, and Hanin Abdallah. 2008. "Academic Dishonesty in the Middle East: Individual and Contextual Factors." *Research in Higher Education* 49:451–67.
- McCabe, Donald L. and Linda K. Trevino. 1996. "What We Know about Cheating in College: Longitudinal Trends and Developments." *Change* 28:28–33.
- McKinstry, John A. and Harold R. Kerbo. 2011. Japanese Society and History. San Diego, CA: Cognella Press.
- Michaels, James W. and Terance D. Miethe. 1989. "Applying Theories of Deviance to Academic Cheating." Social Science Quarterly 70:870–85.
- Millham, Jim. 1974. "Two Components of Need of Approval Score and their Relationship to Cheating Following Success and Failure." *Journal of Research in Personality* 8:378–92.
- Minamikata, Satoshi. 1994. "The Best Interests of Children and Children's School Experience in Japan: The Parents' Perspective." *International Journal of Law and Family* 8(2):281–91.
- Mizoue, Norifumi. 2005. Neo School-Record Society. Tokyo, Japan: Koubun Publisher.
- Mok, Ka Ho. 2006. Education Reform and Education Policy in East Asia. New York, NY: Routledge.
- Muraven, Mark, Greg Pogarsky, and Dikla Shmueli. 2006. "Self-Control Depletion and the General Theory of Crime." *Journal of Quantitative Criminology* 22(3):263–77.

- Nagin, Daniel S. and Greg Pogarsky. 2003. "An Experimental Investigation of Deterrence: Cheating, Self-Serving Bias, and Impulsivity." *Criminology* 41(1):167–93.
- Nakane, Chie. 1970. Japanese Society. Berkley, CA: University of California Press.
- Newstead, Stephen E., Arlene Franklyn-Stokes, and Penny Armstead. 1991. "Individual Differences in Student Cheating." *Journal of Educational Psychology* 88:229–41.
- Paternoster, Raymond, Robert Brame, Paul Mazerolle, and Alex Piquero. 1998. "Using the Correct Statistical Test for the Equality of Regression Coefficients." *Criminology* 36(4):859–66.
- Payan, Janice, James Reardon, and Denny E. McCorkle. 2010. "The Effect of Culture on the Academic Honesty of Marketing and Business Students." *Journal of Marketing Education* 32 (3):275–91.
- Pupovac, Vanja, Lidija Bilic-Zulle, and Mladen Petrovecki. 2008. "On Academic Plagiarism in Europe: An Analytical Approach Based on Four Studies." *Digithumn* 10:14–17.
- Rawwas, Mohammed Y., Jamal A. Al-Khatib, and Scott J. Vitell. 2004. "Academic Dishonesty: A Cross-Cultural Comparison of U.S. and Chinese Marketing Students." *Journal of Marketing Education* 26(1):89–100.
- Reischauer, Edwin O. 1988. The Japanese. Cambridge, MA: Harvard University Press.
- Rohlen, Thomas P. 1983. Japan's High Schools. Los Angels, CA: University of California Press.
- Schab, Fred. 1991. "Schooling Without Learning: Thirty Years of Cheating in High School." Adolescence 26(104):839–48.
- Sims, Randi I. 1993. "The Relationship Between Academic Dishonesty and Unethical Business Practices." Journal of Education for Business 68:207-11.
- Smith, Tony R., Michael Langenbacher, Christopher Kudlac, and Adam G. Fera. 2013. "Deviant Reactions to the College Pressure Cooker: A Test of General Strain Theory on Undergraduate Students in the United States." *International Journal of Criminal Justice Sciences* 8(2):88– 104.
- Stogner, John M., Bryan Lee Miller, and Catherine D. Marcum. 2013. "Learning to E-Cheat: A Criminological Test of Internet Facilitated Academic Cheating." *Journal of Criminal Justice Education* 24(2):175–99.
- Teferra, Damtew. 2001. "Academic Dishonesty in African Universities Trends, Challenges, and Repercussions: An Ethiopian Case Study." *International Journal of Educational Development* 21:163–78.
- Teixeira, Aurora A. C. and Maria de Fatima Oliveita Rocha. 2010. "Academic Misconduct in Portugal: Results from a Large Scale Survey to University Economics/Business Students." *Journal of Academic Ethics* 8:21–41.
- Tibbetts, Stephen G. 1997. "Gender Differences in Students' Rational Decisions to Cheat." *Deviant Behavior* 18:393–414.
- Tibbetts, Stephen G. and David L. Myers. 1999. "Low Self-Control, Rational Choice, and Student Test Cheating." *American Journal of Criminal Justice* 23(2):179–200.
- Tittle, Charles R. and Alan R. Rowe. 1973. "Moral Appeal, Sanction Threat, and Deviance: An Experimental Test." Social Problems 20(4):488–98.
- Vandehey, Michael A., George M. Diekhoff, and Emily E. LaBeff. 2007. "College Cheating: A Twenty-Year Follow-Up and the Addition of an Honor Code." *Journal of College Student Development* 48(4):468–80.
- Vowell, Paul R. and Jieming Chen. 2004. "Predicting Academic Misconduct: A Comparative Test of Four Sociological Explanations." *Sociological Inquiry* 74(2):226–49.
- Ward, David A. and Charles R. Tittle. 1993. "Deterrence or Labeling: The Effect of Informal Sanctions." Deviant Behavior 14:43–64.

# Appendix 1 Frequency and Percentage Distributions of Respondents Who Have Ever Engaged in Each of the 11 Academic Deviant Behaviors and Respondents Who Have Ever Experienced Each of the 12 Stressful Life Events Separately by Country

					Factor	Loading	
Items	Americans $(n = 502)$	Japanese $(n = 441)$	Variable Communalities	Factor 1	Factor 2	Factor 3	Factor 4
Academic Deviance	(1) Copied or looked at the answers from someone else during a quiz or test.	288 (57.4%)	206 (46.7%)	.457	.668		
	(2) Bought or used a paper you obtained over the Internet from someone else and turned it in as your own.	57 (11.4%)	163 (37.0%)	.531	.721		
	(3) Copied someone else's work and turned it in as your own.	157 (31.3%)	273 (61.9%)	.608	.768		
	(4) Used cheat notes, etc., when taking an exam.	83 (16.5%)	151 (34.2%)	.579	.753		
	(5) Plagiarized a paper for a class.	90 (17.9%)	212 (48.1%)	.478	.672		
	(6) Received an illicit copy of an exam prior to taking the test.	49 (9.8%)	52 (11.8%)	.239	.488		
	(7) Skipped a class.	465 (92.6%)	395 (89.6%)	.538		.709	
	(8) Came to class late.	406 (80.9%)	387 (87.8%)	.601		.742	
	(9) Didn't finish an assignment on time.	320 (63.7%)	242 (54.9%)	.627		.789	
	(10) Forgot to study for an exam.	293 (58.4%)	236 (53.5%)	.544		.738	
	(11) Fell asleep in class.	269 (53.6%)	430 (97.5%)	.390	.476	.405	

# Appendix 1

(continued)

Items	Americans $(n = 502)$	Japanese $(n = 441)$	Variable Communalities	Factor Loading			
				Factor 1	Factor 2	Factor 3	Factor 4
Stressful Life Events	(1) Loss of family member through death.	374 (74.5%)	149 (33.8%)	.521			.673
	(2) Loss of friend(s) through death.	228 (45.4%)	129 (29.3%)	.701			.830
	(3) Parents divorced.	148 (29.5%)	44 (10.0%)	.453		.616	
	(4) Family member moved away.	184 (36.7%)	97 (22.0%)	.623		.771	
	(5) I was physically abused.	35 (7.0%)	62 (14.1%)	.540			.698
	(6) I was sexually abused.	37 (7.4%)	20 (4.5%)	.556			.703
	(7) I moved away from friends and family.	263 (52.4%)	147 (33.3%)	.501		.676	
	(8) Close friend(s) moved away.	295 (58.8%)	254 (57.6%)	.405		.537	
	(9) My parents were very strict.	320 (63.7%)	177 (40.1%)	.706	.828		
	(10) I was not allowed to express my opinions at home.	147 (29.3%)	108 (24.5%)	.627	.763		
	(11) I was not allowed to go out with some of my friends.	206 (41.0%)	55 (12.5%)	.627	.751		
	(12) Crime and criminal behavior were a common occurrence in my neighborhood.	111 (22.1%)	88 (20.0%)	.364			.579

Copyright of Sociological Inquiry is the property of Wiley-Blackwell and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.