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# Self-Control and Chinese Deviance: A Look Behind the Bamboo Curtain

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## Abstract

*While self-control theory continues to generate debate, one shortcoming of the literature is that the perspective has only rarely been tested utilizing international data. Of the studies that have, the theory receives support for its claim that it can explain crime cross-nationally. An additional gap in the research is that scholars have largely ignored the fact that Hirschi (2004) revised the conceptualization of low self-control to reflect a one-dimensional, social bond type measure. As far as we know, this is the only test of the specific items that Hirschi stated make up the revised scale. In this study, which relies on data collected in a large Chinese university, both the traditional Grasmick et al. (1993) scale and Hirschi's revised measure of self-control are tested. Results indicate that the revision may be an important explanation of Chinese deviance. The implications of these findings are discussed in terms of how the theory has been tested in both the U.S. and international settings.*

Key Words: Self-Control Theory, Hirchi, Chinese Deviance.

## Introduction

Self-control theory has been one of the most empirically scrutinized theories in criminology (Cheung & Cheung, 2008). In fact, scholars are now also beginning to test a revision of the theory (Cretacci, 2009; Piquero & Bouffard, 2007) that Hirschi recently authored (Hirschi, 2004). Low self-control and criminal opportunity are the two main components of the perspective, which it relatively easy to test (Gottfredson & Hirschi, 1990). That is, fluctuations in offense rates are due to changes in the number and degree

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of opportunities that people have to commit crimes (Grasmick, Tittle, Bursick, & Arneklev, 1993). What has also generated controversy is the claim by the theory that it can explain all types of crime, across all time periods, within all demographic categories, and across all cultures (Özbay & Köksoy, 2009).

Another claim of the perspective is that low self-control is permanent and invariant (Kerley, Xu, & Sirisunyaluck, 2008). As a result, the individual that acquires the trait is predisposed to a life of psychological misfortune (Longshore, Chang, Hsieh, & Messina, 2004; Winfree Jr., Taylor, He, & Esbensen, 2006). Specifically, investigators have found that those who suffer from low self-control are driven by a need for immediate gratification (Cheung & Cheung, 2008; Muraven, Pogarsky, & Shmueli, 2006), and are generally unmotivated (Morris, Wood, & Dunaway, 2006) and insensitive. It is also the case that both Gottfredson and Hirschi (1990) and others have argued that this trait is fully developed by around age 8 (Teasdale & Silver, 2009). However, recent scholarship has asserted that low self-control may vary as time progresses (Burt, Simons, & Simons, 2006; Mitchell & Layton-MacKenzie, 2006).

Interestingly, while the theory has been tested well over 50 times, the vast majority of those studies have been conducted primarily with data collected in the United States. Despite this, the perspective continues to generate robust interest (Beaver, Wright, & Maume, 2008; Miller, Jennings, Alvarez-Rivera, & Lanza-Kaduce, 2009; Vazsonyi & Huang, 2010). Therefore, the ultimate purpose of this study is to address this “cross-cultural” gap in the literature. This study contributes to the emerging cross-cultural literature on self-control theory in a number of important ways. First, this study seeks to determine if the impacts of self-control reported by Cheung and Cheung (2008) can be replicated in an additional large, Chinese educational setting. In doing so, the import of the Grasmick et al. (1993) scale, can be ascertained based on a sample of Chinese students from a large university, in a large Chinese city. Second, and more importantly, this study also seeks to determine the impact, if any, of Hirschi’s revised measure of self-control (Hirschi, 2004) on Chinese deviance. In fact, this study is the only one that tests the impact of the specific items that Hirschi articulated for the revised scale. Therefore, it is also the only study that attempts to address the relative impact on deviance of the two types of self-control measures on an international sample.

## **Literature Review**

Self-control theory is now 20 years old and scholarly interest in the perspective continues (Özbay & Köksoy, 2009; Teasdale & Silver, 2009; Vazsonyi, & Huang, 2010) with many interesting new topics being subjected to possible explanation by the theory. Recently, investigators have expanded the scope of the theory from the explanation of crime to administrative decision making in the criminal justice system (Delisi & Berg, 2006). Further, researchers have also advanced the notion that the perspective could be useful in explaining parole failure (Langton, 2006) and general recidivism (Krauss, Sales, Becker, & Figueredo, 2000). In another interesting line of inquiry, Piquero, Gomez-Smith, and Langton (2004) found that individuals with low self-control were more likely to perceive penal sanctions as unfair. An additional path of investigation has asserted that the amount of self-control possessed by an adolescent's mother influences the amount of self-control in her children (Nofziger, 2008). While scholars continue to push the envelope in terms of what the theory can explain, other important debates have taken place in the literature and deserve mention as well.

One of those debates involves the role of parenting in the development of low self-control. Recall that Gottfredson and Hirschi (1990) asserted that the formation of the trait was especially dependent upon the bond that the child formed with, and the level of care provided by, his or her mother. However, investigators have also found that the development of low self-control may be predicated on things other than the quality of care provided by the mother (Latimore, Tittle, & Grasmick, 2006; Perrone, Sullivan, Pratt, & Margaryan, 2004). While such results might be counterintuitive to what most would think would produce low self-control, others have found that different variables, such as genetics, play an important role and that parenting effects are weak and inconsistent (Wright & Beaver, 2005). On the other hand, Unnever, Cullen, and Pratt (2003) found that not only did parental monitoring have its own direct impact on delinquency but that it also had an important influence on the development of self-control. Moreover, Chapple (2005) and Gibbs, Geiver, and Martin (1998) also found support for the notion that self-control mediates the effects of parental behavior.

An additional matter that has been discussed is probably one of the perspective's more important criticisms: that the self-control concept itself has been measured improperly (Arneklev, Grasmick, & Bursik, 1999; Marcus, 2004). More specifically, some have utilized items to measure self-control that are cognitive in nature, when the authors of the theory called for behavioral ones (Tittle, Ward, & Grasmick, 2003). Further complicating matters is that investigators have also asserted that neither type of item makes any difference in terms of the predictive power of the self-control measure (Tittle et al., 2003, p. 333). Additionally, scholarship has also determined that some of the current measures of self-control have low reliability (Turner & Piquero, 2002) and other specification problems (Schultz, 2004). Although, some have found that the Grasmick et al. (1993) scale, a popular measure utilized to measure self-control, to be stable, reliable, and multi-dimensional, which is in line with theoretical expectations (Williams, Fletcher, & Ronan, 2007). Given that the debate about how the theory has been specified has generated widespread concern, it may be that it has also influenced Hirschi's thinking on the concept, since he has revised what self-control is (Hirschi, 2004).

In his 2004 book chapter detailing his revision of self-control, Hirschi asserted that he and Gottfredson made several mistakes when explicating the original theory and that these issues are what drove him to revise how self-control should be measured. First, the list of traits that supposedly characterized those with low self-control (that they are impulsive, insensitive, physical, risk-seeking, short-sighted, and nonverbal) was not meant as a guide for constructing the self-control measure, and as a result, it has created confusion. In a related note, Hirschi argues that the traditional measures derived from the list contradict the assertion made by Gottfredson and Hirschi (1990) that personality traits contribute little to explaining crime. Third, Hirschi now believes that the list distracted researchers from the point that offenders calculate the benefits and costs of crime (p. 542). In the end, Hirschi now feels that the only way that these matters can be reconciled is to assume that the bond and self-control are the same (p. 543).

As a result, Hirschi (2004, pp. 543-544) now defines self-control as “the set of inhibitions that one carries with one wherever one happens to go. Their character may be initially described as going to the elements of the bond identified by social control theory: attachments, commitments, involvements, and beliefs.” He then creates a scale by counting the self-control responses to nine items: “Do you like or dislike school?”, “How important is getting good grades to you personally?”, “Do you finish your homework?”,

“Do you care what teachers think of you?”, “It is none of the school’s business if a student smokes outside of the classroom?”, “Does your mother know where you are when you are away from home?”, “Does your mother know whom you are with when you are away from home?”, “Do you share your thoughts and feelings with your mother?”, and “Would you like to be the kind of person your mother is?” (Hirschi, p. 545).

Of the two published papers that have tested the revision, one has found that the revised measure outperforms the traditional one (Piquero & Bouffard, 2007) for various crimes, while the other found that the revision attained significance in predicting violent and general crime but not property offending (Cretacci, 2009). The implications presented by these findings seem to be that either the revised measure is a better indicator of self-control or that the revised measure may explain certain types of crime better than others. Most importantly for the current study, no matter how self-control is conceptualized, the fact remains that only a small number of the tests to date have involved data collected on international samples.

Given that the theory makes such bold assertions about its ability to explain crime, it is surprising that scholars have only just begun to examine its impact in foreign contexts. However, it is no doubt the case that the unique problems associated with conducting international research (Harkness, 1999; Sekaran, 1983; Sivakumar & Nakata, 2001) prevent frequent tests of self-control in international settings. Adding to those concerns is recent scholarship that identifies a problem called “equivalence of concepts,” where scholars have difficulty determining if what is being asked on a survey in English means the same thing in a foreign language (Jiang, Lambert, & Wang, 2006). Even with these specific issues hampering international testing of self-control, it is still unfortunate that only about 10 such studies exist (Cheung & Cheung, 2008; Kerley, Xu, & Sirisunyaluck, 2008; Özbay & Köksoy, 2009; Teevan & Dryburgh, 2000; Tittle & Botchkovar, 2005a; Tittle & Botchkovar, 2005b; Vazsonyi, Clifford-Wittekind, Belliston & Van Loh, 2004; Vazsonyi, Pickering, Junger, & Hessing, 2001). Moreover, of the cross-national studies that have been conducted, some are qualitative essays that argue why the theory is or is not a suitable explanation of that nation’s unique criminal milieu (Marenin & Reisig, 1995; Moss, 1997).

Of the quantitative studies that test self-control theory internationally, countries such as Japan (Vazsonyi et al., 2004), Russia (Tittle & Botchkovar, 2005a; Tittle & Botchkovar, 2005b), and Canada (Teevan & Dryburgh, 2000) are represented. For example, one study found that the common Grasmick et al. (1993) measure was a reliable, multi-dimensional measure of low self-control among Japanese university students (Vazsonyi et al., 2004). The same study also reported that low self-control was significantly related to various forms of deviance that included school misconduct and assault (Vazsonyi et al., 2004, p. 189). In their European study, Vazsonyi et al. (2001) found that the Grasmick et al. measure of self-control was multi-dimensional and reliable for four different age groups from four different countries, and was a significant explanation of drug and alcohol use and assault across all four countries. The Russian tests also provide some support for the contention that self-control theory can explain traditional violence (Tittle & Botchkovar, 2005a; Tittle & Botchkovar, 2005b). Although, one study noted that criminal opportunity and delinquent peers were also significantly related to deviance at the same or greater levels than self-control (Tittle & Botchkovar, 2005a). Additionally, the Canadian study found that self-control best explained why the sample of 56 boys engaged in vandalism (Teevan & Dryburgh). Unfortunately, less than ideal samples were collected for these

studies so the findings should be accepted with caution. However, the results provide insight and also serve as a justification to conduct future research.

Among the international qualitative investigations of self-control, Marenin and Reisig (1995) point out that the theory is not particularly well-suited to explaining Nigerian crime because much of it requires planning and self-control focuses on impulsivity. Further, Moss (1997) argues that while self-control seems well-suited to explaining the low levels of violence among the Semai of Malaysia, the existence of low rates among this people group may be due to a conditioned fear response to violence and not an ability to control behavior. If this is true, then more deterrence based, classical theories might better explain violence among this people group than self-control. While these findings are important for the purpose of exploratory analysis, no study has of yet examined self-control in a way that is attempted here. It is therefore the purpose of this investigation to provide preliminary results on the impact of the two measures of Gottfredson and Hirschi's theory, the traditional Grasmick et al. (1993) scale and the revision that Hirschi (2004) proposed, on deviance among a sample of Chinese university students.

## **Methodology**

### ***Data Collection and Sample***

In the fall of 2007, the authors obtained a convenience sample by administering a survey to students in a well-regarded university in the city of Beijing. The institution is one of many universities that exist in that location and is well-respected for its teaching faculty and its access to modern resources. With an enrollment of approximately 17,000, the institution provides opportunities for students to specialize in many of the traditional academic fields, which include the liberal arts, the hard sciences, engineering, management, law, education, art, and foreign languages. The institution also offers a range of degrees from the traditional baccalaureate to the Ph.D. The university also offers the baccalaureate and master degrees in law.

A professor at the host university agreed to provide assistance with the project by announcing the opportunity to participate in the study to his law and social work classes several days prior to the administration of the survey. On the day the survey was implemented, the opportunity was announced again and both male and female students who wished to participate were allowed to take a survey and complete it at their leisure and anonymously return it to the professor's office via campus mail or under the door. An informed consent sheet, that the respondents were not required to sign, was provided with the surveys. The document provided information on the length of the survey (70 questions) and how respondents could terminate their participation at any time by simply discarding it. Approximately 150 surveys were collected, with each survey including several control variables, the Grasmick et al. (1993) scale, Hirschi (2004)'s revision of self-control, and a number of items detailing involvement in crime.

The English version of the survey was administered after it had been translated into Chinese and then back into English by one of the co-authors. The English survey was utilized for a number of reasons. First, one of the international authors had extensive lecture experience and interaction in English with both the potential respondents and with lecturing in China at other locations, including a well-known police college. These experiences in addition to the required English studies of the respondents and the English lecturing of the host professor, convinced us that the pool of potential respondents would understand the survey. Moreover, during the translation phase of the instrument, the

authors took pains to ensure that no complicated terms were included. Where such concepts were encountered, items were revised so as to more adequately reflect commonly understood Chinese equivalents. Finally, the English survey was utilized so as to facilitate data entry back in the U.S., where the data were analyzed and stored.

### **Measures**

#### *Self-control*

Since no one had actually tested the commonly used Grasmick et al. (1993) self-control scale or Hirschi's (2004) revision in China, the current investigation employed both of these measures. In the current study, the Grasmick et al. (1993) self-control scale was measured with the common list of 24 statements to which the subjects were asked to indicate their level of agreement or disagreement ( $\alpha = .78$ ). Examples of the statements include "I often act on the spur of the moment without thinking", "Sometimes I will take a risk just for the fun of it", "Excitement and adventure are more important to me than security", and "When I have a serious disagreement with someone, it's usually hard for me to talk calmly about it." The appendix contains a complete list of all twenty four items and their response set. Scores for the items were then averaged together to arrive at an overall score for the scale, with higher scores indicating lower levels of self-control. Thus, it is predicted that the Grasmick et al. (1993) measure will be positively associated with deviance.

The revised measure, as exemplified in Hirschi (2004), consisted of the nine questions that he has now insisted make up self-control. For the current study, a measure consisting of eight out of Hirschi's nine questions was constructed ( $\alpha = .73$ ).<sup>4</sup> Some examples of the items and their response sets are "How much do you like school? (1 = not at all, 2 = very little, 3 = somewhat, 4 = quite a bit, 5 = very much)," "Do you care what teachers think of you? (1 = not at all, 2 = very little, 3 = somewhat, 4 = quite a bit, 5 = very much)," and "You would like to be the kind of person your mother is (1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, 5 = strongly agree)." The appendix contains a complete list of all eight items and their response sets. Since the response sets were not identical (i.e., one item ranged from 1 to 4 and the rest from 1 to 5), responses to the eight items were standardized before being averaged together to arrive at an overall score for the scale. Also, a constant of 1.56 was added to each standardized score so the new scale minimum would equal zero. Higher scores indicate higher levels of self-control, and thus, it is predicted that Hirschi's revised measure will be inversely associated with deviance.

#### *Deviance*

Deviant behavior was measured with 14 items that were summed into a measure of general deviance ( $\alpha = .90$ ). Each of the items asked how often in the past twelve months the respondent had engaged in a particular behavior, with the response set including 0 = never, 1 = 1 or 2 times, 2 = 3 or 4 times, 3 = 5 or more times. The items covered a variety of both property and violent offenses ranging from less serious offenses such as painting graffiti or engaging in vandalism, to more serious offenses such as robbery,

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<sup>4</sup> The item "It is not the school's business if students want to smoke outside of class" was left out of the scale as the alpha increased from .68 to .73 when the item was excluded. In an attempt to determine if the results would be altered if the item was included in the measure, the analyses discussed were repeated with this item included in the Hirschi revised scale and the results were substantively identical to those reported here.

burglary, and assault. The appendix contains a complete list of the fourteen items included in the deviance measure. Due to the skewed distribution of this variable, it was decided that the measure should be dichotomized into one which reflected whether or not the respondent engaged in any deviance (0 = no; 1 = yes). As a result, in all analyses, logistic regression was utilized to predict the prevalence, as opposed to the frequency, of deviant behavior.

*Control Variables*

Controls for age (numerical), gender (0 = male, 1 = female), and geographic area where each respondent is from (1 = rural, 2 = suburban, 3 = urban) were also included. For purposes of the analysis, the type of area variable was split into three separate dichotomous measures – rural, suburban, and urban, with each coded as (0 = no, 1 = yes). “Urban” served as the comparison group in each of the models.

Table 1 contains a list of each of the measures used in the analysis as well as basic descriptives for each one. Briefly, results indicate that the respondents possess sufficient amounts of both low and high self-control that warrant further analysis. The mean for gender (.78) indicates that the number of males in the sample is smaller than what one might find in the overall society but not so problematic so as to preclude its inclusion in the analysis. The means for the geographic areas: rural (.17), suburban (.19) and urban (.63) reveal that most of the sample is from an urban setting, hardly a surprise given that the university under study is located in a large city. The average age of the respondents is approximately twenty years old. Finally, enough deviance is present in the sample so as to allow for further analysis.

Table 1  
*Descriptive Statistics for Variables Included in the Analyses*

Variable	Mean	SD	Min.; Max.	N
Grasmick et al. Self-Control Scale	2.52	.40	1.0; 3.54	150
Hirschi Revised Self-Control Scale	1.56	.58	0; 2.78	150
Prevalence of General Deviance	.09	.29	0; 1	149
Age	19.76	.89	18; 24	149
Gender (1=female)	.78	.41	0; 1	148
Rural	.17	.38	0; 1	149
Suburban	.19	.40	0; 1	149
Urban	.63	.48	0; 1	149

**Results**

Logistic regression was used to examine the relationship between the self-control and whether or not the respondent engaged in deviance. Three models were estimated: one with the revised scale, one with the Grasmick et al. (1993) scale, and one with both scales. All models included controls for age, gender, and the type of area the subject is from. Multi-collinearity was not an issue as no variance inflation factor (V.I.F.) was greater than 1.2 in any model. Table 2 contains the odds ratios and statistical significance for the variables in each model.

Table 2  
*Multivariate Logistic Regression Models Predicting Prevalence of Deviance<sup>a</sup>*

Variable	Model 1 (n=147)	Model 2 (n=147)	Model 3 (n=147)
Hirschi Revised Scale	0.19***	--	0.19***
Grasmick et al. Scale	--	0.57	0.53
Age	1.56	1.50	1.51
Gender (female=1)	0.55	0.49	0.56
Rural	1.40	1.59	1.48
Suburban	1.11	1.47	1.20
Constant	0.00	0.00	0.00
Model $\chi^2$	15.247***	5.957	16.016**
Nagelkerke R <sup>2</sup>	.219	.088	.229

\*\* p<.05; \*\*\* p<.01

<sup>a</sup>Dependent variable is whether or not the respondent reported any delinquent acts (0 = no, 1 = yes). Odds ratios are presented.

In Model 1, the association between Hirschi's (2004) revised measure of self-control and involvement in deviance was statistically significant. Specifically, each one-unit increase in the measure of self-control (high = more self-control) led to an approximately 81% reduction in the odds of engaging in deviance, controlling for age, gender, and type of area. None of the controls attained statistical significance. In Model 2, on the other hand, the Grasmick et al. (1993) measure was not significantly associated with involvement in deviance. As with Model 1, none of the controls attained statistical significance.

For Model 3, when both measures of self-control and the controls were included, only Hirschi's (2004) revised measure was significantly related to involvement in deviant behavior. As in the first model, each one-unit increase in the measure of self-control led to an approximately 81% reduction in the odds of engaging in deviance. Thus, the addition of the Grasmick et al. (1993) measure did not alter the coefficient for Hirschi's



revised scale. Neither the Grasmick et al. (1993) measure nor any of the controls attained statistical significance.

### **Discussion and Conclusion**

Based on results presented here, it would appear that some type of self-control theory may have an impact on some form of deviant behavior in China. Although, the effect could depend on what is meant by self-control and also the influence of unique cultural ties in Chinese society. Put another way, strong traditional cultural ties in China might manifest themselves in a bond-type measure of self-control than one that measures impulsivity. Similarly, if the Grasmick et al. (1993) scale turns out to be the accepted measure of self-control, then the possibility exists that the theory may not significantly explain crime in China. On the other hand, if further investigation determines that the revised measure is the better scale, it may be that the theory is relevant to explaining Chinese deviance.

Hirschi's revision could be particularly relevant in the current sample because Chinese families are traditionally thought of as more cohesive than Western ones (Silverstein, Cong, & Li, 2006). As a result, one could assert that members of Chinese society belong to groups that are heavily influenced by family, school, and peer bonds. In other words, if Chinese families are more traditional, then the possibility exists that the parent-child relationships, school bonds, and conventional beliefs that permeate Chinese society might exhibit a great deal of control over individual behavior (Waters, 2002). If these assertions are true, then these informal social controls likely serve to tie individuals to conventional society. Put more simply, Chinese deviance may be predicated on deteriorating social bonds than impulsivity. If the informal social controls mentioned above are more important to Chinese behavior problems, then the revised measure may be an important indicator in modeling crime in Chinese society.

If, on the other hand, the Grasmick et al. (1993) scale is determined to be the better measure of self-control, over time the current results suggest that the theory simply is not an important contributor to Chinese deviance models. While these results are only a small piece of the overall puzzle in explaining Chinese deviance, it may be that impulsivity has less to do with deviance among some Chinese college students than does deteriorating social bonds. At this point, it is hard to ascertain why that might be the case. Although, preliminarily one might be able to say that crime among some college students is more a function of planning than impulsivity. If planning is an issue, than those who do so may have the type of weak bonds to society that Hirschi (2004) argued are central to self-control. As a result, it would make sense that the bond-type, revised measure would be a better explanation of deviance than would the cognitive Grasmick et al. (1993) scale that measures impulsivity.

While these findings are important, a few additional points regarding future research need to be made. First, Hirschi (2004) now claims that a one-dimensional bond-type measure is what he and Gottfredson meant when they originally defined self-control. If criminologists accept his revision, then studies utilizing this new measure will have to be done in the United States to determine if this type of measure has an impact on crime. Interestingly, Hirschi may have a point in arguing that the cognitive measures currently being used to test self-control and the current revision are not the same and that those investigators that used the cognitive measures perhaps did so improperly. In a preliminary attempt to determine if the cognitive and revised measures of self-control were the same,

it was found that in the current sample the correlation between the two measures was only  $-.136$ , which was not statistically significant at the  $.05$  level. This is initial evidence that the two variables are measuring two different things. If that is the case, then one is measuring self-control and one is not. According to Hirschi, the latter is how self-control should be measured, and therefore, the implication is clear that future studies should seek to ascertain what self-control is and the impact that it has, if any, on deviant behavior.

One way to do that is to determine how the items in the measure load on the overall scale. That is, which items are most important, not only for explaining the scale but also for their impact on deviance. Future research should therefore focus on what types of items make up the best measure of the revised self-control scale and test those measures. In fact, Hirschi (2004) has already provided direction for future scholars in that he claimed that adding items to the revised scale will increase its explanatory power. As a result, investigators should be able to determine which bond items make up the best measure and whether or not adding items to it will enhance its explanatory power. This is an important exercise as others have made attempts at determining the makeup of the scale when using cognitive and behavioral items (Arneklev, Grasmick, & Bursik, 1999; Marcus, 2004; Williams, Fletcher, & Ronan, 2007). This is an especially worthy exercise for the revised scale, given that no one has yet attempted it.

While these results are to some extent unexpected in the sense that the Grasmick et al. (1993) scale completely failed to attain significance in this sample, they are still interesting because they are part of a study that had not been attempted previously. These findings to some extent also replicate the findings of Piquero and Bouffard (2007) in that they also found that the revised measure outperformed the more traditional scale. On the other hand, several limitations of this study hamper its overall impact. Specifically, the sample is small and the data came from only several classes in a single university. As a result, the generalizability of these results is limited. In conclusion, interpretation of these results should be made with caution.

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