Treating Different Delinquent Teens Differently: An Empirical Study on China's Zhuanmen Schools

ABSTRACT

Research aim and background: The discourse surrounding the grading and categorization (GC) system of China's Zhuanmen Schools, which serve as correctional institutions, has been notably deficient in empirical evidence. Social Control Theory (SCT), a prominent theoretical framework in criminology, elucidates the interplay between levels of social control and correctional strategies. This study aims to apply SCT to systematically examine the rationality of existing proposals with teens' data in China.

Research method: Utilizing a localized social control scale in Chinese, we conducted a questionnaire survey encompassing 111 student participants from three Zhuanmen Schools. In alignment with recent legislative reforms and academic recommendations, students were categorized into three distinct groups: those engaging in "general delinquent behavior" (GDB), those committing "serious delinquent behavior (without infringing criminal law)" (SDB), and those involved in "criminal acts" (CA). We used mediation analysis to assess the mechanisms of attachment, commitment and involvement which represent core elements of SCT, and applied one-way ANOVA coupled with LSD tests to determine the appropriateness of various GC plans within the Chinese context.

Findings: (1) Attachment has a significant negative effect on the severity of individual deviant behaviors, mediated through the constructs of commitment and involvement. Lower SCT level has an effect on more serious behavior. (2) Individuals categorized under GDB exhibit a markedly higher overall level of social control in comparison to their counterparts in the SDB and CA groups, with no statistically significant difference observed between the latter two. In light of these findings, this study advocates for differentiated intervention strategies for deviant juveniles, tailored according to the distinctions between general and serious misbehavior.

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Introduction

In 2021, China implemented its new *Law on the Prevention of Juvenile Delinquency*. In this new law China's official declared that they are going to treating different delinquent teenagers differently in Zhuanmen Schools (schools which aim to correct teenagers who have delinquent behavior). However, until now China still has no specific plan for it. Experts in China has already proposed some suggestions on it, and Hainan Province put forward a pilot system in 2022 (Guo, 2023; Zhang, 2020; Chen, & Wu, 2020). But no one has conducted any empirical studies to estimate which one is better. This paper will use Social Control Theory (SCT) to discover how this theory works among China's teenagers and find the most suitable way for treating different teenagers in Zhuanmen Schools differently. Before started we need to declare that in this paper, teenagers and minors are same concepts, meaning teens under 18 years old according to China's law.

1. Literature Review

1.1. Social Control Theory

Social Control Theory is first proposed by Hirshi (1969). This theory supposes that any individual is a potential offender. The connection between the individual and society can prevent the individual from engaging in delinquent behaviors. When connections become weak, the individual will commit criminal acts without restraint. Therefore, from the perspective of SCT, crime is the result of a weak or broken connection between the individual and society. The reason why people do not

commit crimes is due to the control of attachment, commitment, involvement, and belief. When adolescents have good relationships with parents, friends, and schools, often take actions to achieve positive goals, and actively participate in traditional activities, and identify with mainstream social values, they are less likely to commit crimes. SCT is often use by scholars with different concepts and measurement methods. This would Therefore, this study must clarify the definition, connotation, and measurement methods of social control theory in advance.

Attachment is the degree to which adolescents are connected with others. In the original theory, it can be divided into 3 parts: attachment to parents, attachment to school, and attachment to peers. All three factors are proved by researches that there is some correlation between attachment and deviant behavior (Wiatrowski, Griswold and Roberts, 1981; Liu and Liu, 2016; Tan, Dong, & Zhang, 2015). Some studies have also found that the effect of peer attachment in inhibiting deviant behavior is not significant, while school attachment is more pronounced. Based on this, some scholars believe that children who study harder are less likely to commit crimes (Peterson, B. E., Lee, D., Henninger, A. M., Cubellis, M. A, 2016). However, their measurement methods and conclusions have confused the definitions of attachment and commitment. In China's research, attachment to parents or family members is a most often discussed factor and has been verified by some studies as the most influential (Wu, Liu, Boateng, Cui, & Shuai, 2021). Some scholars even only consider or mainly consider attachment to the family (for adolescents, mainly parents) in their design of research (Gao, & Li, 2017; Qiu, 1987). This kind of measurement is theoretically supported. Asian countries often value collectivism,

and in China, where there is a traditional value of emphasizing family relationships, the attachment to family is much more important (Komiya, 1999; Anderson, & Gil, 1998). Therefore, taking into account the above considerations, this study only focuses on the impact of attachment to parents on adolescent delinquent behavior.

Involvement refers to the regular involvement of adolescents in traditional activities. Due to the vast array of traditional activities, there is often a variety of measurement methods. However, mainstream researches typically measure traditional activities through extracurricular involvement and participation in household chores. Additionally, Involvement is often found to lack inhibitory effects on delinquent behavior, and researches in Hong Kong even show a slight tendency that involvement can promote deviance (Gao, & Li, 2017; Qiu, 1987; Conger, 1976; Özbay, & Ozcan, 2008; Costello, & Laub, 2020). This may be because some Western measurement methods for extracurricular activities are not applicable to Chinese children. China's students spend more time in their study so they do not have enough time to participate in other activities. Some scholars advocate not measuring involvement, arguing that measuring involvement in non-traditional activities is very close to measuring juvenile delinquency (Hou, 2000). However, this is because previous researches mainly focused on general adolescents, whereas the subjects of this study are students from Zhuanmen Schools, who have more illegal and even criminal behavior instead of just some general delinquent behaviors. Participation in non-traditional activities (in this paper it means involvement in minor deviant activities) does not lead to overlapping measurements with illegal and criminal behavior. And this can avoid the lack of extracurricular time for Chinese

students leading to inaccurate measurements. In consideration of the above, to prevent the diversity of measurement methods and the influence of cultural environments from leading to inaccuracies in measuring involvement, this study measures it by involvement in non-traditional activities (meaning involvement in minor deviant activities).

The commitment refers to the teenagers' dedication to entering prestigious universities or securing desirable jobs, embodying the concept of "having something to strive for." Classic research has identified a significant negative correlation between commitment and deviant behaviors (Agnew, 1991). Additionally, the measurement of GPA is another method to estimate this factor which has been proved to be even a more significant issue (Peterson, B. E., Lee, D., Henninger, A. M., Cubellis, M. A, 2016). However, in some studies, involvement is measured by asking "Do you frequently participate in study activities after school?" while commitment is gauged through involvement in a range of extracurricular activities, resulting in severe conceptual confusion (Zhang, & Wang, 2023; Gao, Li, 2017). Yet, these measurements have strayed from the original theoretical definitions. To prevent such conceptual confusion, this paper adheres to Hirsch's definition, measuring commitment through "the degree of dedication to a good education and job."

Belief is the level of acceptance of social morals and laws. Given that specialized schools place a high emphasis on moral and legal education, such as regular legal education sessions and omnipresent notices advocating compliance with laws and regulations throughout the campus, these educational interventions

have significantly interfered with the measurement of students' beliefs, leading to suboptimal actual measurement outcomes. Therefore, we are not intended to discuss this factor further.

Initially, Hirschi noted that there is a positive correlation between the four factors of SCT, yet did not elaborate on how these relationships influence deviant behavior. Further research has explored the interrelationships between the factors, often concluding that attachment impacts other variables and, in turn, affects juvenile delinquency (Wiatrowski, Griswold, & Roberts, 1981; Aslan, Rosinaite, & Khojanashvili, 2019; Qiu, 1987; Tan, Dong, & Zhang, 2015; Tan, 2019). These studies, however, have several shortcomings: First, they primarily focus on adolescents in Europe, America, and Hong Kong, Macao, and Taiwan, which raises concerns about their applicability to Mainland China due to cultural differences. Second, most criminological empirical studies on Mainland Chinese adolescents target junior high schools or vocational schools rather than Zhuanmen Schools. The students in these institutions generally exhibit less severe misconduct compared to those in Zhuanmen Schools. Studens there often act some illegal deviance. So it remains unclear how SCT explains "illegal and criminal behavior". Third, while the conclusions of different studies vary, attachment is consistently the most utilized variable in these assessments. This inconsistency has left the localized application of social control theory in Mainland China undetermined.

Criminology researches in Mainland China seldom deeply examine SCT and rarely employs a standardized method for measuring the severity of behavior, resulting in measurement discrepancies such as frequency-based or quantity-based

assessments. In reality, China's legal system's punishment framework (we will discuss later) offers a solid theoretical foundation for assessing the severity of delinquent behavior and facilitates the standardization of both the definition and measurement methods for deviance. Consequently, this study will focus on students in Zhuanmen Schools to evaluate whether social control theory has an equivalent impact on adolescents with more severe behavior, using China's Law on the Prevention of Juvenile Delinquency, Public Security Administration Punishments Law, and Criminal Law to gauge the severity of behavior. In summary, with the higher social control level, teenagers are less likely to commit more severe illegal behaviors, and commitment and involvement factors would play a mediation role between attachment factor and behavior. Based on materials above, we put forward 2 hypotheses:

H1.1: Involvement mediates the relationship between attachment and the severity of teenagers' delinquent behavior.

H1.2: Commitment mediates the relationship between attachment and the severity of teenagers' delinquent behavior.

1.2. China's Principle of Proportionality between Crime and Punishment

The Principle of Proportionality between Crime and Punishment (PPCP) was first proposed by Beccaria (1872) in *"On Crimes and Punishments"* with the fundamental idea that "if different crimes are punished equally, it would not deter people from committing more serious crimes with greater benefits. Therefore, there

should be a certain proportion between crime and punishment." The initial concept of proportionality between crime and punishment led to two divergent theories due to disagreements on the purpose of punishment—retributivism and preventionism. Retributivist theory of proportionality reflects the instinctive restraint of crime on punishment, while the preventive theory reflects the active restraint of crime on punishment (Chen, 1996). The current consensus is that the principle of proportionality should combine both retributive and preventive ideas, known as "retributive-preventive theory." Furthermore, the principle of proportionality has developed a theory of the unity of subjectivity and objectivity—the relationship between crime and punishment is not solely dependent on the severity of the crime but is highly related to various subjective factors of the subject of the punishment, such as motive, cause, purpose, cognition, skillful means, process, and profit-driven motives (Bai, 2020). So, we can say China's criminal law has achieved the unity of the examination of actions and the evaluation of the person within the scope of crime and punishment. Today, the principle of proportionality plays a greater role in sentencing, but it still has an important role in setting the intensity of statutory penalties in criminal law. Chinese punishment is a "combination of qualitative and quantitative," (Chu, & He, 2019) which is actually an evaluation made by the code on the severity of criminal behavior, similar to an "operational" process in social science. And the embodiment of PPCP in China's criminal law is precisely a gradient design of crimes within the code (Huang, 2001).

By "gradient design of crimes" means that, the China's criminal law's evaluation of the severity of criminal behavior is a comprehensive assessment that takes into

account the objective severity of the crime, subjective malice, the possibility of re-offense, and subjective factors. For example, in the criminal law, the statutory penalty for intentional homicide is heavier than that for involuntary manslaughter because the subjective malice of intention is higher than that of negligence, not just the severity of the objective act (Zhang, 2021).

As a result, the statutory penalties provided by China's criminal law are configured based on the judgment of the severity of the act under the guidance of PPCP. PPCP is also reflected in China’s Public Security Administration Punishments Law, which also punishes illegal acts. That is, the more serious the illegal act, the more severe the punishment, which is reflected in the Public Security Administration Punishments Law as different statutory penalty intensities for different behaviors.

This principle in the legal system means that in China, any illegal and criminal behavior corresponds to a certain "gradient" of punishment. Generally speaking, acts that violate the criminal law are more serious than those violate the Public Security Administration Punishments Law. Furthermore, within the criminal law itself, one can roughly judge whether one act is more serious than another based on the strength of the statutory penalties, such as robbery being considered a more serious crime than theft. The same is true within the Public Security Administration Punishments Law. Based on PPCP and specific legal provisions, we can judge the severity of behavior among students in Zhuanmen schools. Similar measurement methods have also been adopted by other scholars: for example, Xu and et al. (2021) measures the severity of sexual crimes by the lenght of prison term, and its

theoretical basis is precisely the principle of proportionality between crime and punishment.

1.3. Zhuanmen Schools and New Requirement in China

For a long time, China has implemented a graded approach to dealing with juveniles with deviant behavior, which is reflected in the criminal responsibility age settings in China's Criminal Law (the differences in criminal responsibility at ages 12, 14, and 16), and the corrective measurements for juveniles with different deviant behavior (parental supervision, community and public security cooperation for correction, Zhuanmen Schools correction, and juvenile prison). China's new Law on the Prevention of Juvenile Delinquency which came into effect in 2021, has proposed further requirements for differential treatment for different teenagers in Zhuanmen School. In the new law, Article 45, Paragraph 2 stipulates: "The people's government at the provincial level shall, in combination with the actual conditions of the locality, determine at least one Zhuanmen School to set up specialized places according to the division of campuses, classes, and other methods to carry out specialized corrective education for minors as stipulated in the preceding paragraph." Article 47, Paragraph 1 stipulates: "Zhuanmen Schools should carry out graded and categorized education and correction for minors receiving specialized education, carry out moral education, legal education, and psychological health education in a targeted manner, and carry out vocational education according to the actual situation; for minors who have not completed compulsory education, they should ensure that they continue to receive compulsory education." This indicates

that the scholars' call for "designing corresponding educational correction courses for students' problematic behaviors and carrying out categorized and graded educational correction" (which refers to building a grading and categorization system in Zhuanmen Schools) has been officially written into the law (Lu, Guo, Liu, & Zhang, 2018).

So-called grading and categorization (GC) system refers to building a system that schools can treat different students differently so as to achieve targeted education and prevent cross-infection in correction: for example, those students in Zhuanmen Schools who commit a murder should be treated differently from those only fight with other teenagers. The former one should be treated in a more serious way. Hainan Province in China promote its GC system, that is some schools should admit only minors with serious misbehavior and provide specialized education, while others need to admit only minors who have violated criminal law but are not subject to criminal punishment due to their age and do not reach the standard of criminal responsibility, and provide specialized correctional education. This system is supported by Kaiyuan Guo (2023) theoretically. That is to say: the law stipulates that minor with serious misconduct need to enter Zhuanmen Schools for correction, and serious misconduct is divided into serious misconduct listed by Public Security Administration Punishments Law and misconduct that violates the criminal law. These two types of students are admitted to the school in a GC manner. Although the existing legal provisions stipulate that only minors with serious misconduct can enter specialized schools for correction, after the field investigation of this study, a large number of Zhuanmen Schools still accept students with only some general

misconduct listed by Law on the Prevention of Juvenile Delinquency. Therefore, some scholars also advocate that GC system should be designed to distinguish between serious misconduct and general misconduct (Zhou, 2021). We integrate the two propositions, proposing to categorize behavior into three groups: "committing general delinquent behavior"(GDB), "committing serious delinquent(without violating the criminal law)" (SDB) and "committing criminal acts" (CA), and teenagers with different behaviors should be treated differently. And we are going to use SCT to find whether this GC system is designed well and if not, how can we improve it. The logic for this is illustrated below:

In the field of correctional education, guided by SCT, researchers often believe that the key to correction lies in the recovery of social control factors, whether for teenagers or adults (Guo, 2014; Wu, Zhong, 2012; Rocque, Bierie, Posick, & MacKenzie, 2013). Such a view is supported by some empirical researches: Laud and Sampson (1993) found that if offenders can have a higher level of social control, they can effectively prevent re-offending; Wu, et al. (2021) also found that if the social control level is higher (such as the higher attachment to family members, the more in line with the mainstream social values, and etc.), the confidence, motivation, and effect of drug correction are better. That is to say, a relatively higher level of social control in the correctional institution means easier correction and less investment in correctional costs, so it is possible to categorize and grade the correction according to the level of social control. Although it is possible to classify students by measuring with the social control questionnaire before they are sent to Zhuanmen Schools, the cost is too high and there are too many problems e.g., lack

of training for questionnaire operators, a large number of printings, time cost, etc. The behavior GC systems proposed by the law, scholars, and local governments, if there is a significant difference in the level of social control, using such a method is undoubtedly low cost and highly efficient. So, the essence of GC system is to take different correctional measures for adolescents with different levels of social control for recovery, which means that there should be significant differences in the overall level of social control among adolescents of different groups we put forward before. And if one group of youth has significant differences in the level of social control with other groups, we are intended to think that this GC method is more reasonable. Based on the above argument, we propose the following hypothesis:

H2.1: The overall level of social control among GDB, SDB and CA students is different at the average level.

H2.2: The GDB group has a higher level of social control than SDB group, and SDB group has a higher level than CA group.

2. Methodology

2.1. Participants

Based on the principle of equal-interval sampling, we selected one Zhuanmen School in a province of North China, another in a province of the Southeast coastal area of China, and a third in a province of the Western region of China. Questionnaires were distributed to students within these schools. A total of 111 questionnaires were distributed, with 110 valid questionnaires returned. The age

range of the samples was 12-18 years old, with an average age of 14.61 (±1.181) years old, and among the respondents, there were 100 males, accounting for 90%. There were a few items left unanswered in the survey. We use complete.cases function in R to exclude cases with missing data.

2.2. Measurements

Attachment. This research utilizes the Inventory of Parent and Peer Attachment (IPPA) developed by Armsden and Greenberg (1987), which has been adapted for this research. In this study, the terms "father" and "mother" in the items have been combined into "parents." The questionnaire includes items such as "1. My parents really care about my feelings, 2. I think my parents are competent and good parents, 3. I wish my parents were someone else, 4. My parents are willing to accept me, 5. I am happy to accept my parents' opinions on issues that I care about," and a total of 25 questions. The corresponding options are: "Never = 1; Not often = 2; Sometimes = 3; Often = 4; Almost always = 5." In this study, the Cronbach's alpha coefficient of the scale is 0.880, the Bartlett's test of significance is < 0.001, the KMO value is 0.855, indicating good reliability and validity.

Commitment. We use the commitment section of the Social Control Scale revised by Tan, et al. (2015), including items such as "1. I hope to have a high social status in the future, 2. I wish to be better than others in all aspects, 3. To secure my future, I will overcome any difficulties, 4. I hope to achieve good grades in school, 5. I hope to complete higher education (college/university education)," with a

total of five questions. The corresponding options are: "Very Inconsistent = 1; Inconsistent = 2; Consistent = 3; Very Consistent = 4." In this study, the scale's Cronbach's alpha coefficient is 0.697, Bartlett's test of significance is < 0.001, the KMO value is 0.694, and the reliability and validity are acceptable.

Involvement. We employed method proposed in previous literature to measure "involvement in non-traditional activities (risk behaviors)," followed by overall reverse scoring to obtain the involvement variable. The Adolescent Risk-Taking Behavior Scale developed by Gullone, et al. (2000) was utilized, with the removal of items not suitable for the Chinese context (such as sitting in the passenger seat in a car) and the addition of "I have stayed out all night," which is a common risk behavior among Chinese adolescents. The scale includes "1. I have been late or skipped class, 2. I have smoked, 3. I have been in a fight, 4. I have consumed alcohol, 5. I have been or am addicted to online games, 6. I have stayed out all night," totaling 6 items, with corresponding options of "Never = 1, Rarely = 2, Sometimes = 3, Often = 4." In this study, the scale's Cronbach's alpha coefficient is 0.794, Bartlett's test of significance is less than 0.001, the KMO value is 0.800, indicating good reliability and validity.

Overall social control level. We add all 3 variables above to calculate this variable.

Severity of delinquent behavior. We measure various behaviors and assign values to them to obtain an ordinal variable indicating the severity of behavior through two survey questions: "1. Why did you come to this school? (Check the behaviors you have done and describe the specific circumstances), 2. Is there a circumstance where the prosecutor does not prosecute? (Answer 'Yes' or 'No')". At

the same time, the survey lists the general delinquent behaviors and serious delinquent behaviors stipulated in the Law on the Prevention of Juvenile Delinquency for them to choose from, and they can also select "Other" and fill in by themselves. There are various circumstances for non-prosecution under the Criminal Procedure Law, and all non-prosecution cases in the specialized schools studied in this research are "conditional non-prosecution" stipulated in Article 282 of the Criminal Procedure Law (for crimes committed by minors in Chapters 4, 5, and 6 of the criminal law, thus their behavior must constitute a crime), which means that all minors with non-prosecution circumstances in the study must have criminal behavior. Therefore, if the circumstance of "prosecutor does not prosecute" is selected, it will be determined that they have violated the criminal law and further determine what crime they have committed; for juvenile offenders who are not of the age to bear criminal responsibility, according to Article 163 of the Criminal Procedure Law, if it is found during the investigation process that the criminal suspect should not be held criminally responsible, the case should be revoked. According to the first paragraph of Article 177, if the prosecutor has intervened, a non-prosecution decision should be made. Therefore, there are still some students who have violated the criminal law but selected 'No' for the second question. In order to make the results comply with the provisions of "behaviors violate criminal law, not subject to criminal punishment due to not reaching the statutory age of criminal responsibility", we require that when selecting "serious bad behavior", it is necessary to describe the specific circumstances for specific matters, such as the crime of theft requiring a description of the amount, and then determine whether it constitutes a crime according to the criminal law and its judicial interpretation. Based on PPCP, we assign values to all

general delinquent behaviors as 1; serious delinquent behaviors (not violating the criminal law) all violate the "Public Security Administration Punishments Law", and according to the number of days of punishment, punishments of less than 5 days are assigned a value of 2, punishments of 5 to 10 days are assigned a value of 3, and punishments of 10 to 15 days are assigned a value of 4; criminal behaviors include the following types (listed by crime name): theft, robbery, intentional injury, and provoking trouble. Their statutory basic penalties are: up to 3 years, more than 3 years up to 10 years, up to 3 years, and up to 5 years respectively. According to the common rule of comparing the severity of crimes in the criminal law "first compare the maximum penalty, then compare the minimum penalty" (Zhang, 2021), theft and intentional injury are assigned a value of 5, provoking trouble is assigned a value of 6, and robbery is assigned a value of 7.

Groups division. We code based on the items set in the severity of behavior. Those who only check general misbehavior are classified as GDB group; those who answer "No" to "Is there a circumstance where the prosecutor does not prosecute?" and check serious misbehavior that is judged not to violate the criminal law based on the circumstances (such as theft but the amount is less than the crime threshold of their area) are classified as SDB group; those who answer "No" to "Is there a circumstance where the prosecutor does not prosecute?" but check serious misbehavior that is judged to violate the criminal law based on the circumstances (such as theft that reaches the amount threshold for crime in their area) and those who answer "Yes" to "Is there a circumstance where the prosecutor does not prosecute?" are classified as CA group.

2.3. Analytical Strategy

We used the Harman single-factor method to test for common method bias in all measurement items to determine the reliability of our data. The test results show that there is a total of 25 factors with eigenvalues greater than 1, and the first factor explained 24.658% of the variance, which is less than the critical standard of 40%. This indicates that the measurement method is reliable. For H1.1 and H1.2, we decide to conduct a mediation analysis. Before that, we conduct a Pearson correlation test to select control variables. For H2.1 and H2.2, we conduct a one-way ANOVA and LSD test. Before these we use qqplot to test the normality of our data and it is good (see figure A1 in appendix A). We conduct Homogeneity of Variance Test with p value 0.46. In order to ensure the reliability of the model, Bonferroni p test is conducted with a $p>0.05$ (see table A1 in appendix A). Below are summaries of all variables.

[Table 1 – 3 are about here]

3. Findings

3.1. Mediation Analysis

The correlation heatmap above we created using R will not display the insignificant correlations. The results indicate that attachment is significantly positively correlated with commitment and involvement. Both commitment and involvement are significantly negatively correlated with the severity of behavior, while the relationship between attachment and the severity of behavior is statistically

insignificant. Age is significantly positively correlated with involvement and the severity of behavior. Gender and other variables do not show significant correlations.

[Figure 1 is about here]

In this study, due to the restrictions on the measurement of some variables by the specialized school (the originally planned measurement of whether parents have bad behaviors was not allowed) and the high homogeneity among students (an education level question was set, but all children have exactly the same level of education), there are fewer control variables set, with only age included. Gender was not included as a control variable in the mediation model because there is a significant bias in the proportion of the sample (90% are male), and it also does not have a significant correlation with other variables. Age and the dependent and independent variables are significantly correlated, so we use it as a control variable. The variables used for analysis are: attachment, involvement, and commitment as independent variables, the severity of behavior as the dependent variable, and age as the control variable for mediation analysis. Below is the result of mediation analysis.

[Table 4 is about here]

In the indirect effects, the confidence intervals for both commitment and involvement do not include 0, and the confidence interval for the total indirect effect also does not include 0, indicating that the indirect effects are significant. This result implies that there is indeed a pathway through which attachment affects deviant behavior via commitment and involvement. Further examination shows that the total

effect is not significant. Therefore, this study concludes that commitment and involvement have a full mediating effect on the relationship between attachment and the severity of behavior. This means that attachment fully affects adolescents' deviant behavior through involvement and commitment. However, the sample size of this study is small, which makes it very likely to obtain a full mediating effect result, so a more appropriate approach is to report it as "main mediation," that is, partial mediation effect (Preacher, & Hayes, 2008; Zhao, Lynch, & Chen, 2010). This indicates that an individual's level of attachment, which in this study refers to the quality of parent-child relationships among adolescents, affects the severity of delinquent behavior by influencing the individual's commitment and involvement. Results show that H1.1 and H1.2 are both accepted.

3.2. One-way ANOVA and LSD test

The model's p-value is 0.00534, which is less than 0.01, indicating that the model as a whole is statistically significant. Therefore, we can be more than 99% confident that the differences between the groups are due to the implementation of different behaviors within the groups. This result implies that there are significant differences in the overall level of social control among the three groups of students. Further analysis is needed to determine the specifics of these differences. The AC group have a mean level of social control at 97.5, and SDB group is 101.6818, GDB group is 110.275 (see table A2 in appendix A). This is the same as our hypothesis.

[Table 5 is about here]

The LSD results, after visualization, are shown in Figure 2. We use R to directly generate a bar chart of the LSD analysis results and add error bars and significance markers to create Figure 3. The letters 'a' and 'b' serve as significance markers; groups with the same letter do not have significant differences, while groups with different letters indicate significant differences. For example, if you take groups 1 and 3, you find that their markers are inconsistent, and since group 1 is higher than group 3, group 1's overall level of social control is significantly higher than that of group 3. Looking at the error bars, they are a visual expression of the error in a set of data. If the error bars are short and the lengths between groups are comparable, it indicates that the results are more reliable; if the error bars are particularly long, even exceeding the height of the bars, then the data for that group is very unstable. In this study, the error bars are short and the lengths between groups are comparable, indicating that the study results are more reliable. According to this figure, H2.2 is partly supported. GDB group’s social control level is higher than other 2 groups while SDB and AC have no significant difference.

[Figure 2 is about here]

4. Discussion

This research includes 2 parts. The first part is to test how factors of SCT affects Chinese teenagers’ severity of delinquent behavior. The second part of this research focuses on the GC system for China’s Zhuanmen Schools, aiming to find a suitable GC plan. We find that:

First, the impact path of attachment, involvement, and commitment in social control theory on the severity of behavior among students in Zhuanmen Schools is found. The results show that attachment affects the severity of minors' delinquent behavior through involvement and commitment. The lower the levels of attachment, involvement, and commitment, the more likely they are to engage in more serious misconduct. The study suggests that attachment to parents has also been proven to effectively prevent children from engaging in minor deviant behaviors and more readily participate in traditional activities (Tan, 2009; Choon, Hasbullah, Ahmad, & Wu, 2013); the closer the attachment to the family, the more likely they are to conform to their parents' expectations and aspirations for good jobs and social status (Qiu, 1987). The essence of improving involvement and commitment is actually the integration with mainstream social values, which is the process of socialization. This is consistent with the mainstream view of social control theory in criminology, which holds that the essence of social control is a socialization theory (Cao, 2007). The connection between individuals and society must initially be based on attachment, and then other types of social bonds will develop based on this. This also match the theory in Chinese context (Anderson, & Gil, 1998).

Many legal systems in China currently point out that minors should implement the principle of "education, inspiration, and rescue", adhering to the principle of "education first, punishment as a supplement," such as Article 277, Paragraph 1 of the Criminal Procedure Law, and Article 113, Paragraph 1 of the Minor Protection Law, and so on. However, the main focus of education is still on the belief factor, which is about the moral and legal education, while other factors such as

involvement are not valued. For example, some of the schools surveyed in this study even have a closed environment, not allowing students to socialize with others and even cannot go out of school. This is undoubtedly not conducive to the improvement of the socialization process (especially the involvement factor). According to the path of action found in this study, the lack of commitment and involvement is very likely to lead to poor correctional effects. In combination with this study, attachment to parents affects behavior through involvement and commitment, but involvement and commitment can still be provided by the campus according to researches. The intervention of parental attachment is more difficult, and the effect is indirect, while involvement and commitment are more direct and effective. Therefore, we advocate that the construction of Zhuanmen Schools in the future should focus on improving levels of involvement and commitment, by breaking the closed environment, allowing adolescents to participate in community volunteer activities or learning from good role models to make up for the low involvement and commitment caused by low attachment.

In addition, this research clears the definition of concept and choose anti-involvement as a measurement for involvement, which is often confused due to cross-cultural factors (Hou, 2000). We discover that if it is measured in reverse, involvement factor indeed plays a role in the model, denying the practice of eliminating involvement from SCT (Qiu, 1987). The previous non-significant results of involvement may very well be due to the different content of traditional activities in different cultural backgrounds, and previous studies often measure behaviors such

as club activities that are less common in Chinese junior and senior high schools, leading to non-significant results.

Second, the overall level of social control among adolescents of GDB group is significantly higher than that of SDB and CA groups. There is no significant difference in social control levels between SDB and CA groups, possibly because many behaviors in SDB and CA are only increased in amount or situation, such as theft becoming a crime when the amount is large, and intentional injury becoming a crime when it is above a minor injury according to China's Criminal Law. But in fact, it is the same behavior, especially for minors who find it difficult to control themselves, the boundary is inherently vague.

The practice of Hainan Province to distinguish between serious misconduct and criminal behavior is negated under the test of social control theory. The debate on how to grade juvenile deviant behavior has been ongoing before the revision of the China's Prevention of Juvenile Delinquency Law. In addition to the several GC methods mentioned earlier, there are also advocates for a four-category method of "pre-criminal behavior," "violation of police behavior," "touching the law behavior," and "criminal behavior" (Yao, 2019). Our results support the new revision of the Prevention of Juvenile Delinquency Law, which only classifies students into 2 groups, one is GDB, and another one includes SDB and CA.

To conclude, the current feasible strategy is to strictly follow the legal distinction method, and divide GDB group students and other students into separate classes or campuses. In provinces with only one Zhuanmen School (such as Fujian Province, which has long had only one in Xiamen, and only recently has a new one being

built), after enrollment, students should be classified into 2 types for treatment, that is GDB type and SBD-CA-mixed type. In provinces with multiple schools (such as Hainan Province, Guangdong Province, etc.), they can be distinguished by campus. In summary, when accepting students, if a student only commits general delinquent behavior, they should be sent to Campus A or Class A, and if a student commits serious misconduct including SDB and CA, they should be sent to Campus B or Class B, and the distinction of whether to violate criminal law proposed by scholars can be abandoned.

5. Limitation

This study still has the following limitations: First, belief, as an important factor in social control, due to the management education system of specialized schools, makes the measurement meaningless. Future research can continue to explore the position of belief among the four factors. Second, the complete mediation effect itself is more likely to occur when the sample size is small. Compared with other empirical studies, the sample size of this study is relatively small, which is also limited by the specificity of Zhuanmen Schools. The number of students there is much less than that in general schools. Despite sampling from three schools, there are still only 110 samples. This has led to the emergence of the complete mediation effect. Theoretically, it is believed that attachment should have a certain impact, and it is a direct impact, especially in China, where family shame, collective honor, and so on will hinder crime (Liu, 2017). Such an effect needs further testing with an expanded sample size. Third, the measurement of the dependent variable uses the

method of ordinal variables, and the results are not precise enough. What is more, children's descriptions for their behaviors may be biased, which will affect the researcher's judgment and scoring. Therefore, future research that wants to conduct a more detailed test of SCT can collect data through prison institutions with sentencing results, and measure the severity of behavior through the amount of sentencing. Fourth, as a socialization theory, if parents themselves do not follow mainstream values, there may be differences in the socialization process. Limited by the management regulations of schools, the study preset to test the moderating effect of "parents' bad behavior" in attachment. We preset that attachment only shows a significant negative correlation when parents have no bad behavior. Although we have found that the correlation between attachment and the severity of behavior is significant in the group without parental bad behavior, and not significant in the group with parental bad behavior, the number of related quantities is too small (less than 30 people in one group after grouping, see figure A2 and A3 in appendix A). Therefore, future research can test the relationship between these variables in general adolescents by expanding the sample size.

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Related Policy

Hainan Provincial Department of Education, Hainan Provincial Committee of the Communist Party of China, and the Office of the Leading Group for Institutional Reform of the Communist Party of China in Hainan Province. (2022, March 22). Opinions on Strengthening the Construction of Special Schools and the Work of Special Education.

The policy's website page

Figures

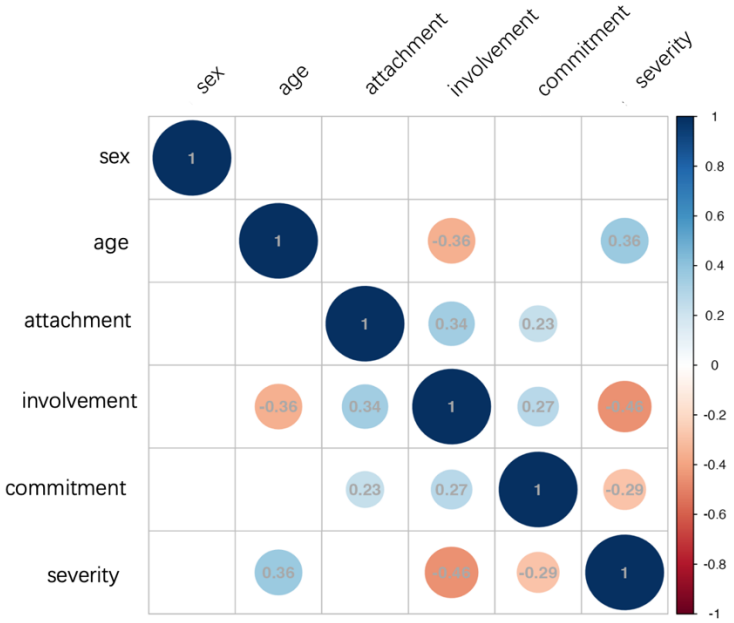

Figure 1. correlation heatmap

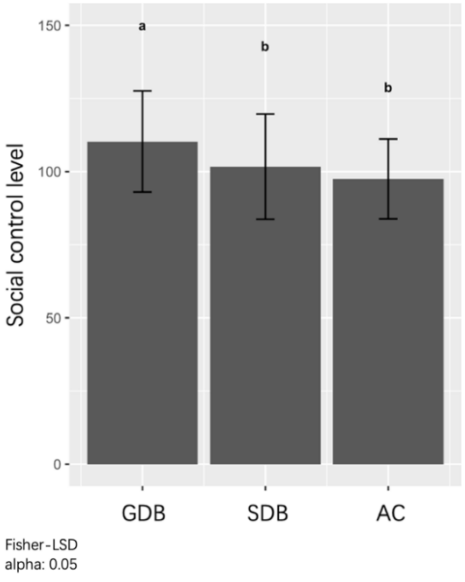

Figure 2. LSD test

Tables

Table 1: statistics of social control variables

	Num.	Min	Max	Means	SE
Attachment	102	36	112	77.32	14.496
Commitment	110	8	20	14.34	2.624
Involvement	110	6	24	12.72	4.72
Overall social control	102	52	146	104.45	17.503

Table 2: statistics of behavior variables

	Value	Freq	Per
Valid	1	40	36.0
	2	1	0.9
	3	39	35.1
	4	8	7.2
	5	13	11.7
	6	4	3.6
	7	1	0.9
	Total	106	95.5
Missing		5	4.5
Total		111	100.0

Table 3: statistics of groups

	Value	Freq	Per
Valid	GDB	40	36.36
	SDB	49	44.55
	CA	18	16.36
	Total	107	97.28
Missing		3	2.72
Total		110	100.0

Table 4: mediation analysis

	Effect	SE	LLCI	ULCI
Total Effect	-0.0096	0.0107	-0.0310	0.0117
Total Indirect Effect	-0.1478	0.0607	-0.2814	-0.0444
Commitment	-0.0563	0.0343	-0.1385	-0.0035
Involvement	-0.0915	0.0490	-0.2059	-0.0184

Bootstrap: 5000

Table 5: one-way ANOVA

	df	Sum Sq	Mean Sq	F value	Pr(>F)
Groups	1	2358	2358.2	8.118	0.00534 **
Residuals	98	28469	290.5		

0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

APPENDIX A

Other Figures

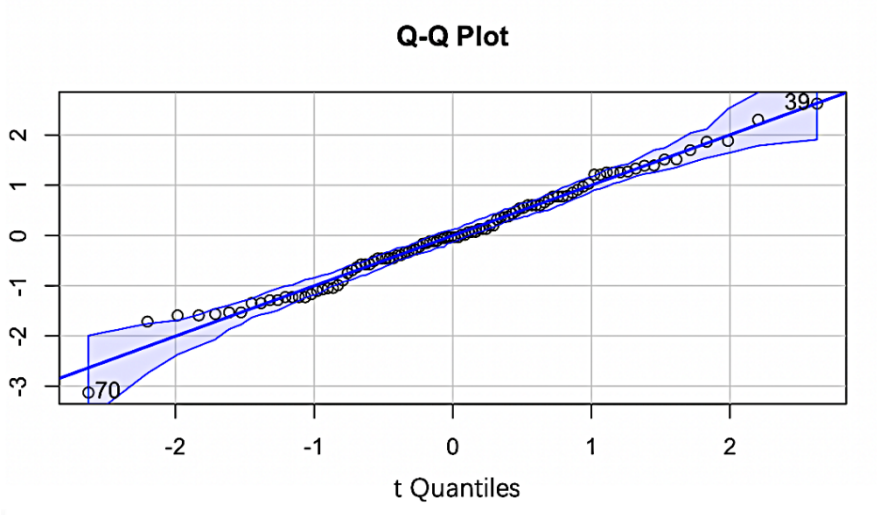

Figure A1. Normality

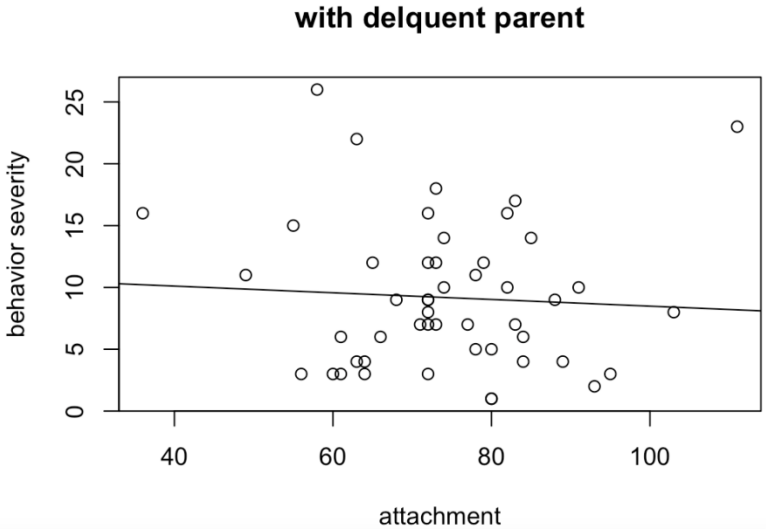

Figure A2. Result of children with delinquent parents

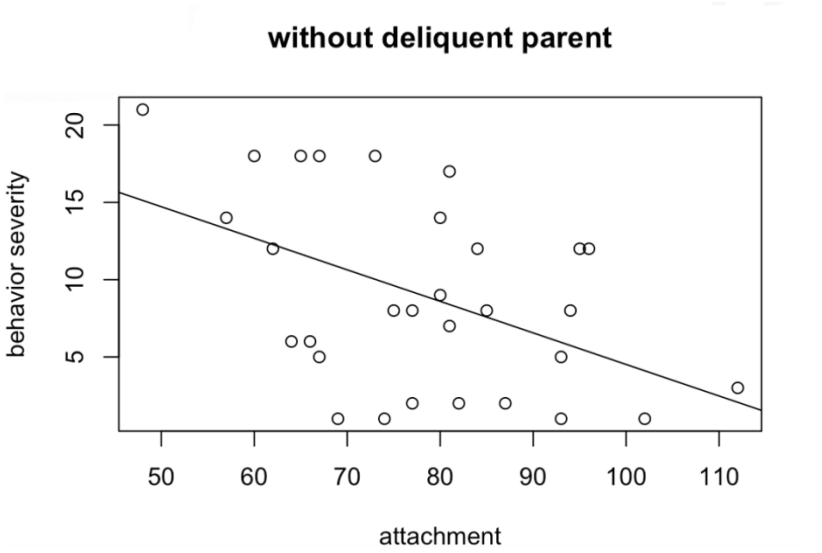

Figure A3. Result of children with law-abiding parents

Other Tables

Table A1. Homogeneity of Variance Test

Bartlett's K-squared	df	p-value
1.5216	2	0.4673

Table A2. Statistics of Social Control Level by Groups

Group	Means	Std	r	se	LCL	UCL	Min	Max
GDB	110.275	17.297	40	2.695	104.927	115.623	83	141
SDB	101.682	17.976	44	2.569	96.583	106.781	52	146
CA	97.5000	13.653	16	4.261	89.044	105.956	70	121