

Exploring the Competing or Integrating Influences of Self-control and Social Control Theories on Chinese Adolescents' Cyber Dating Abuse

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Abstract

Cyber dating abuse (CDA) refers to direct digital aggression (DDA) and indirect digital monitoring/control (DM/C) against an intimate partner via technology. The culture context of Chinese and the limited examination of CDA overlap permit the application of self-control and social control frameworks in a new cultural context. This study aims to examine the competing or integrating influences of self-control and social control theories (e.g. parents attachment, peer attachment, commitment to educational goals, involvement in traditional activities, belief in conventional values) on an individual's risk of CDA perpetration. Adolescents ($N = 851$) were recruited via convenient sampling and completed a self-report questionnaire. Results supported the hypotheses that being males, low self-control, low peer attachment, and low belief are significant predictors of CDA perpetration. We also found that social control (i.e. belief in conventional values) mediated the link between self-control and perpetration of DDA and DM/C, and males with low self-control and belief are more likely to perpetrate CDA behaviors to their intimate partner than females. These results suggest that it is the combination of self-control and social control contribute to the CDA, and the implications of both control theories to prevention and intervention of CDA perpetration merit closer attention.

Keywords

Cyber dating abuse, Gender, Self-control theory, Social control theory.

1. Introduction

Adolescents start dating and exploring sexuality, which is a normal part of growing up [61]. Healthy relationships can help adolescents develop their sense of self and sexual identity [3]. But this age group also often experiences coercive and abusive behaviors [1]. With more adolescents using social media and phones, dating abuse through digital technology has become more common [10]. Cyber dating abuse (CDA) means using technology (like the internet, social media, email, and phone apps) to control or harass a partner [5]. CDA includes direct digital aggression (like insulting someone on social media) and digital monitoring/control (like using someone's passwords without permission) [5].

Studies show that 36.4% to 58.3% of young adults have experienced some form of digital dating aggression (DDA), and 6% to 91% have engaged in it [7][24]. Research suggests possible gender differences in CDA, but results vary. Some studies found no gender difference in DDA or digital monitoring/control (DM/C) [19][77], while others showed females report more online abuse [81]. Boys are more likely to engage in digital sexual coercion and direct aggression [58][64]. Overall, girls tend to do more DM/C, while boys do more DDA [58]. This might be due to cultural gender roles: boys are taught to be assertive, while girls are taught to care for relationships [31].

Experiencing CDA can lead to many problems, like low self-esteem, suicidal thoughts, depression, anxiety, risky behaviors (like drinking, drug use, and unsafe sex), and delinquency [4][35][54][78][82]. Given how common CDA is and its serious effects, it's important to study what

causes it to prevent abuse in relationships among adolescents. While many western scholars have studied CDA [9][8][60], there is not much research on it in China. Additionally, current studies lack a clear understanding of the situations that lead to CDA. To fill these gaps, this study aims to look into CDA among Chinese adolescents from self-control and social control perspectives.

1.1. Theoretical Frameworks of CDA

Recently, scholars have employed various theoretical frameworks, such as gender stereotypes, social learning, attachment theory, routine activities theory, the general aggression model, and general strain theory, to explore the factors influencing cyber abuse in intimate relationships [6][18]. However, few studies have applied criminological theories to this growing issue. Therefore, the present study delves deeper into CDA perpetration from a control perspective, incorporating social control theory and self-control theory [17]. We propose that these theories may provide a suitable foundation for explaining CDA perpetration.

CDA, an online form of dating violence, has emerged as a prevalent criminological concern [18][49]. Drawing from The General Theory of Crime [34], also known as Self-control Theory in Criminology, we posit that CDA perpetration can be explained by low self-control. Individuals with low self-control exhibit traits such as impulsivity, aloofness, adventurousness, short-sightedness, and poor communication. These traits often coexist, forming a stable concept that predicts criminal behavior [25][34]. Empirical studies and systematic reviews have consistently linked low self-control to crime and deviance, including online misconduct [39][72]. Similarly, research has shown an association between low self-control and increased offline and online dating abuse in intimate relationships [14][18][49].

Hirschi's (1969) social control theory suggests that social bonds with conventional society deter individuals from criminal or deviant behavior [37]. We propose that this framework can also explain CDA perpetration. According to the theory, stronger social bonds enable individuals to resist criminal temptation and display compliant behavior, whereas weakened or broken social bonds fail to suppress criminal motivations. In essence, social bonds act as a constraint on illegal desires, ensuring compliance, much like a dam controlling flooding. Recently, scholars have increasingly focused on the impact of various social bonds on offline and online deviance, including bullying, cyber delinquency, and sexting behavior [2][11][16][43].

However, it is worth noting that the above assertions about self-control theory and social control theory are mainly come from the western cultural background. The lack of research in this vein does not allow us to see the applicability of self-control and social control theory to the CDA perpetration of adolescents in China, a country with a culture distinct from Western countries [79]. Thus, the validity of these theories in Chinese background needs to be investigated.

1.2. Self-Control and CDA Perpetration among Chinese Adolescents

A recent research has investigated the relationship between self-control and CDA perpetration among college students of U.S.-Mexico border, and reported that low self-control is significantly related to increased CDA perpetration, but after controlling for the effects of general strain and social learning measures, the prediction of self-control on CDA became nonsignificant [18]. However, the applicability of Curry and Zavala's finding in adolescents and non-western context is unclear. In the current study, we aim to replicate and extend CDA research by exploring the utility of self-control to predict the behavior among Chinese adolescents.

The relationship between self-control and CDA should be understood in a specific cultural context, given potential cultural variations in self-control constructs. In contrast to individualistic Western societies, collectivist Chinese society emphasizes self-control more prominently. Specifically, "keji" (self-restraint) is a pivotal trait in Confucian ideal personality ("junzi") [32][33], similar to Western psychology's concept of self-control, which entails impulse

regulation to withstand temptation and safeguard cherished goals. Chinese upbringing emphasizes obedience and discipline [44], potentially fostering higher self-control among Chinese youth compared to their Western counterparts, who are often granted greater individualistic status. This assertion aligns with empirical evidence suggesting Chinese youth are more reserved, introverted, considerate, and inclined towards self-restraint than Western youth [65].

1.3. Social Control and CDA Perpetration among Chinese Adolescents

Social control theory posits that criminal behavior and aggression are inherent in humans, with social ties serving as constraints that prevent their manifestation [37]. In the context of CDA perpetration, adolescents are considered potential perpetrators, whose non-perpetration is attributed to strong social connections with parents, teachers, peers, schools, and society, which effectively suppress CDA behaviors. Hirschi (1969) outlined four key elements of social control: attachment, commitment, involvement, and belief [37].

Attachment refers to the emotional connection between an individual and their traditional society or significant others, with parents and peers being the most influential attachment figures for adolescents [51]. A secure parents-child attachment predicts stronger peer relationships in childhood and adolescence, and such secure bonds also foster secure and positive romantic relationships, while insecure attachment predict lower levels of romantic trust and intimacy [23]. Consequently, individuals with insecure attachment may exhibit controlling, intrusive, and clingy behaviors in romantic relationships.

Commitment involves the dedication of energy, effort, and time to traditional activities aimed at achieving both immediate and future goals. For students, pursuing educational objectives is paramount. Hirschi (1969) suggested that students who are highly focused on improving their academic performance and personal goals are less likely to engage in criminal or deviant behavior [37].

Belief encompasses students' acceptance and adherence to social norms, reflecting their approval and recognition of values and moral concepts. An individual who believes in the moral validity and importance of societal rules is less inclined to engage in criminal or deviant behavior.

Social control theory has been extensively employed to elucidate deviant and criminal behaviors, including bullying perpetration and victimization [11][12]. Research indicates that various social control measures predict offline delinquency [15], sexting behavior [43], and cyber delinquency [2], even when self-control is considered. Empirical evidence also supports the predictive role of social bonds in traditional dating abuse, with stronger beliefs in social rules negatively correlating with male adolescent dating violence [28]. Higher levels of social bonds and prosocial beliefs serve as significant protective factors against peer and dating violence [29][30]. Although direct empirical evidence linking social bonds to CDA perpetration is lacking, a strong correlation exists between offline dating violence, bullying, delinquency, risk behaviors, and CDA [10][71]. Hence, social bonds may be a crucial factor in explaining CDA perpetration.

Additionally, social bonds and harmonious interpersonal relationships are highly valued in Chinese culture. Given China's collectivist context, social forces may exert a more direct and potent influence on juvenile delinquency compared to individual characteristics [15]. Consequently, it is expected that social control theory will exhibit greater explanatory power in understanding CDA perpetration than self-control theory in the current study.

1.4. Social Control as a Mediator and Gender as a moderator

Scholars have proposed that social control may mediate the relationship between self-control and deviant or delinquent behaviors [46][47]. The two versions of control theory proposed by Hirschi are interconnected [37]. Previous study examined the predictive power of self-control

and social control in explaining adolescents' criminal records or self-reported deviant behaviors and found a significant positive correlation between the two concepts, as anticipated. Longshore et al. (2005) re-examined the potential for competition or integration between self-control and social control theories, finding that the direct effect of self-control on juvenile delinquency became insignificant when social control components (belief and attachment) were included^[47]. Consistent with these findings, it is hypothesized that social control variables may mediate the relationship between self-control and CDA perpetration in the present study. This study also focuses on the moderating role of gender in the relationship between self-control/social control variables and CDA perpetration. Gender is a key factor in this analysis, as previous studies suggest boys receive less parental monitoring, recognition, and correction of misconduct compared to girls^[73]. Consequently, girls develop higher self-control and engage in fewer deviant behaviors, with this gender gap remaining stable throughout life^[34]. Gender socialization theories posit that girls are taught nurturance, caring, and obedience, emphasizing interpersonal relationships. Research indicates girls exhibit stronger prosocial tendencies than boys^[22]. During adolescence, gender-specific socialization pressures intensify, leading boys and girls to increasingly conform to gender stereotypes [1], which may influence social bond development. Therefore, it is hypothesized that males may have lower levels of self-control and social control than females, potentially increasing their involvement in CDA perpetration in romantic relationships.

1.5. The current study

This study contributes to the literature in several ways. First, our study carried out in a non-Western context, and try to understand CDA perpetration within a integrated control theoretical framework, so as to establish a clearer picture of the proposed self-control—social control—CDA perpetration model. Second, we examined whether or not relationships exist between gender, self-control/social control and CDA perpetration in Chinese background. In particular, this study compare the effect of self control theory and social control theory on CDA perpetration. Third, we constructed a moderated mediating model to examine whether or not social control mediate the relationship between self-control and CDA perpetration, and whether or not gender moderate the mediating role of social control. To our knowledge, these relationships are tested for the first time in Chinese culture context. The specific hypotheses are as follows:

Hypothesis 1: Gender is a significant predictor for CDA perpetration. Specifically, higher rates of DDA perpetration for males, while DM/C behaviors for females.

Hypothesis 2: Self-control negatively predict CDA perpetration.

Hypothesis 3: Social control negatively predict CDA perpetration.

Hypothesis 4: Social control partially mediated the relationship between self-control and CDA perpetration.

Hypothesis 5: Gender moderated the relationship between self-control and CDA perpetration, such that males with low self-control are more likely to engage in CDA perpetration.

Hypothesis 6: Gender moderated the relationship between social control and CDA perpetration, such that males with low social control are more likely to engage in CDA perpetration.

2. Method

2.1. Procedure and Participants

The Ethics Committee of the author's school approved the present study. Informed consent was obtained from all participants and involved in the study prior to participation. Participants were informed that the survey was voluntary and the results was kept confidential. Using convenience sampling recruited 1325 high school students from seven public high schools, of

which four were from North China, two from South China, and one from Northwest China. Experienced research assistants carried out the data collection. Self-report questionnaires regarding demographic information, self-control, social control, and CDA were conducted to students in their classrooms. In the absence of teachers, all students in each class filled out questionnaires during a regularly scheduled class period of about 40 minutes.

After 474 data were discarded due to students' not being serious enough in answering questions or leaving blanks for most of the questions or did not meet the inclusion criteria of have been in a romantic relationship, the final student sample consisted of 851 high school students. Among them, 464 were males (54.52%) and 387 were females (45.48%), with an mean age of 17.54 ± 1.54 years.

2.2. Measures

2.2.1. Dependent Variable

CDA perpetration was assessed with Cyber Dating Abuse Questionnaire (CDAQ)^[5], which consists of 20 items and contains two dimensions: 11 items about DDA behaviors (e.g. "I sent insulting and/or humiliating messages to my partner or former partner using new technologies."), and 9 items about DM/C behaviors (e.g. "I have used new technologies to control where my partner or ex-partner has been and with whom."). In current study, the translation and back-translation method was used to revise CDAQ. Each item was rated on a 6-point Likert-type scale, measuring the frequency of the behaviour over the past 12 months, ranging from 1 (Never. This has never happened in our relationship) to 6 (Usually. It has happened more than 20 times). The higher the score, the more frequent the individuals perpetrate CDA. In the current study, Cronbach's α coefficients of DDA items, DM/C items and total CDA scale were 0.84, 0.82, 0.90 respectively. Previous research has demonstrated that the scale has good internal consistency^[6].

2.2.2. Self-control

Individual self-control was assessed with the self-control scale. The scale is comprised of 4 items (e.g. "I often act impulsively."), and participants respond to items on a 7-point Likert-type scale (1 = strongly disagree, 7 = strongly agree). After all items were scored in reverse, with high scores indicating higher self-control. In this study, Cronbach's α coefficient of the questionnaire was 0.79.

2.2.3. Social Control Variables

Social control variables reflected four dimensions: attachment, commitment, involvement, and belief. We operated all the elements of social control variables according to the previous work^{[15][16][45]}, including measures of attachment to parents, attachment to peers, commitment to educational goals, involvement in conventional activities, and belief in conventional values.

Attachment. Attachment to parents and peers was assessed with a short version of the Inventory of Parent and Peer Attachment (IPPA)^[55]. The scale is comprised of 24 items, 12 items for each of the parent and peer scales. The communication, trust, and alienation subscales contain 4 items within each subscale, for parents and peers separately. These items were rated on a 4-point Likert scale (1 = never, 4 = always). High average score indicating more attachment to parents/peers. In the current study, Cronbach's α coefficients of parents attachment items, peer attachment items were 0.81, 0.69, respectively. Previous research has demonstrated that the scale has good internal consistency in Chinese samples^[80].

Commitment. The commitment was assessed by the Chinese version of the Utrecht Work Engagement Scale-Student (UWES-S), which was revised by Fang et al. (2008)^[26], according to the student edition of the UWES of Schaufeli and Bakker (2004)^[62]. The scale consists of 17 items and contains three dimensions: vigor (e.g. "I feel energetic when I study"), dedication (e.g. "I am passionate about learning"), and absorption (e.g. "When I was studying, I felt the time pass

quickly”). These items are rated on a 7-point Likert scale (1 = never before, 7 = always). High average score indicating stronger learning engagement. In this study, Cronbach's α coefficient of the questionnaire is 0.80, which was demonstrated good internal consistency in Chinese samples in previous research ($\alpha = 0.96$)^[27].

Involvement. We derived the scale for involvement from the work of Cheung and Cheung ^[15]. Participants were asked to respond 4 items about how often they took part in extracurricular activities organized by school, the Leisure and Cultural Services Department of the government, other government agencies, and non-government voluntary agencies. Each item is rated on a 4-point Likert scale (1 = never, 2 = once a month or less, 3 = twice to three times a month, and 4 = once a week or more). High average score indicating more conventional activities engagement. In this study, Cronbach's α coefficient of the questionnaire is 0.71, which was consistent with previous indices ($\alpha = 0.68$)^[15].

Belief. In current study, belief in conventional values was assessed by externalized behavior of adolescents ^[45]. Participants were asked to respond 5 items: “When I see old, sick or disabled passenger on a bus, I will offer my seat to them”, “I usually obey the traffic rules”, “I won't read others' letters or diaries without permission”, “I won't do anything against the law”, “I usually pay back the money or things I borrowed on time”. Each item is rated on a 4-point Likert scale (1 = strongly disagree; 4 = strongly agree). High average score indicating stronger belief in conventional values. The Cronbach's α coefficient of the questionnaire is acceptable in this study ($\alpha = 0.66$). Previous research has demonstrated that the scale has good internal consistency in Chinese samples ($\alpha = 0.88$)^[45].

2.3. Statistical Analysis

All statistical analyses were performed with the statistics software SPSS version 23.0. Mean values, standard deviations, t-tests, correlation, linear regression, and moderated mediating analyses were calculated. Dependent variables were DDA and DM/C. As independent variables in the regressions, gender, self-control as well as the five facets of social control (attachment to parents, attachment to peers, commitment to educational goals, involvement in conventional activities, and belief in conventional values) were used. In the conducted multivariable linear regression analyses (separately for DDA and DM/C), all independent variables were included into the model simultaneously each. Additionally, based on the proposed model framework, process_v3.3 plug-in in SPSS was used to test the moderating role of gender in the relationship between self-control and CDA through the social control variables. Bootstrapping method was used to test the mediating effect. Specifically, the bootstrap method generates a 95% confidence interval for the indirect effect of resampling 5000 data sets. If the confidence interval did not include zero, the mediating effect was considered statistically significant.

3. Results

3.1. Bivariate Correlations

As shown in Table 1, the results of bivariate correlations indicated that gender, self-control, and all social control variables with the exception of commitment were significantly, negatively correlated with CDA measures (DDA scores, DM/C scores, and total CDA scores), commitment was only significantly, negatively correlated with total CDA scores. There was no significant relationship between age and any other variables, and it was therefore omitted from regression analyses as a control. Additionally, self-control was significantly, positively correlated with peer attachment and belief in conventional values.

Table 1 Bivariate correlations for gender, age, self-control, social control variables (parents attachment, peer attachment, commitment, involvement, and belief), and CDA measures (DDA score, DM/C score, and total CDA score).

Variables	1	2	3	4	5	6	7	8	9	10
1. Gender	-									
2. Age	0.43	-								
3. Self-control	0.03	-0.03	-							
4. Parents attachment	0.09*	0.01	0.07	-						
5. Peer attachment	0.06	-0.02	0.09*	0.72***	-					
6. Commitment	-0.02	0.03	0.03	0.05	0.07*	-				
7. Involvement	0.08*	0.00	-0.04	0.51***	0.39***	0.00	-			
8. Belief	0.06	0.06	0.16***	0.21***	0.22***	0.06	0.06	-		
9. DDA	-0.20***	-0.01	-0.15***	-0.18***	-0.20***	-0.05	-0.10**	-0.25***	-	
10. DM/C	-0.16***	-0.01	-0.16***	-0.18***	-0.22***	-0.03	-0.10**	-0.23***	0.75***	-
11. CDA	-0.21***	-0.02	-0.16***	-0.37***	-0.40***	-0.11*	-0.21***	-0.29***	0.81***	0.79***

3.2. Multivariate Analyses

Table 2 showed estimates of the direct effects of gender, self-control and five social control variables on two types of CDA perpetration, that is DDA and DM/C. Model 1 in Table 3 showed the results of logistic regression analyses estimating the direct effect of gender, this results provide strong support for the first hypothesis, with gender being negatively and significantly associated with DDA ($\beta = -0.20$, $p < 0.001$) and DM/C ($\beta = -0.16$, $p < 0.001$) perpetration among Chinese adolescents. Model 2 in Table 3 presented the results from logistic regression models estimating the effects of self-control variable. The results indicated that self-control was significantly and negatively associated with DDA ($\beta = -0.15$, $p < 0.001$) and DM/C ($\beta = -0.16$, $p < 0.001$) perpetration, which supported the second hypothesis. Model 3 in Table 3 presented the results from logistic regression models estimating the effects of social control variables. The results demonstrated that some social control elements were significantly and negatively associated with DDA and DM/C perpetration, which partially supported the third hypothesis. In particular, higher levels of peer attachment predicted lower levels of involvement in DDA ($\beta = -0.11$, $p < 0.05$) and DM/C perpetration ($\beta = -0.15$, $p < 0.01$), and belief in conventional values predicted reduced levels of DDA ($\beta = -0.22$, $p < 0.001$) and DM/C ($\beta = -0.19$, $p < 0.001$). Finally, Model 4 in Table 3 showed the effects of gender, self-control and five kinds of social control variables are all included. Overall, we observed slight decreases in coefficients of gender, self-control, peer attachment and belief in conventional values. Nonetheless, all relationships between these variables and two types of CDA perpetration retained statistical significance.

Table 2. Logistic regression models predicting DDA and DM/C.

Variables	DDA				DM/C			
	Model1	Model2	Model3	Model4	Model1	Model2	Model3	Model4
Gender	-0.20***	-	-	-0.18***	-0.16***	-	-	-0.14***
Self-control	-	-0.15***	-	-0.10**	-	-0.16***	-	-0.12***
Parents attachment	-	-	-0.05	-0.03	-	-	-0.01	-0.01
Peer attachment	-	-	-0.11*	-0.10*	-	-	-0.15**	-0.15**
Commitment	-	-	-0.03	-0.03	-	-	-0.00	-0.00
Involvement	-	-	-0.03	-0.03	-	-	-0.02	-0.03
Belief	-	-	-0.22***	-0.19***	-	-	-0.19***	-0.17***
R^2	0.04	0.02	0.09	0.13	0.03	0.03	0.08	0.12
F	35.23***	19.48***	16.44***	18.02***	22.04***	23.03***	15.33	15.77***

Note. DDA = Direct digital aggression; DM/C = Digital monitoring/control;

* $p < .05$, ** $p < .01$, *** $p < .001$. Model 1, Model with gender only; Model 2, Model with self-control variable only; Model 3, Model with social control variables only; and Model 4, Full model.

3.3. Moderated Mediating Model Test

To evaluate the mediation hypothesis, the associations between self-control and peer attachment and belief in conventional values were estimated. We run a multiple mediation model 2 times, with social control variables mediating the relationship between self-control and DDA and DM/C. As can be seen in Table 4, only belief in conventional values mediated the relationship between self-control and two types of CDA perpetration (due to the Boot CI of peer attachment Contained 0, it's mediating role was not supported), hypothesis 4 was partially supported. Then the moderated mediating hypothesis was evaluated, compared to females, males with low level of self-control are more inclined to engage in DDA perpetration. Additionally, low level of belief in conventional values among males rather than females are closely related to high level of DDA and DM/C perpetration (see Table 4), hypothesis 5 and 6 was partially supported.

Table 4. The predicting effects of self-control on social control variables and the moderating role of gender in mediation model.

Variables	Peer attachment		Belief		DDA		DM/C	
	β	<i>t</i>	β	<i>t</i>	β	<i>t</i>	β	<i>t</i>
Self-control	0.09	2.49*	0.15	4.57***	-	-	-	-
Gender	0.12	1.75	0.11	1.60	-	-	-	-
R^2	0.01		0.03		-		-	
95% Boot CI	[-0.028, 0.002]		[-0.053, -0.012]		-		-	
Self-control×Gender	-	-	-	-	0.13	2.04*	0.06	0.94
Belief×Gender	-	-	-	-	0.25	3.91***	0.19	2.89**

Note. DDA = Direct digital aggression; DM/C = Digital monitoring/control; * $p < .05$, ** $p < .01$, *** $p < .001$.

To sum up, the current study found that being male, low self-control and several social control elements (i.e. low peer attachment and low belief in conventional values) may be the risk factors of CDA perpetration. Additionally, low self-control may decrease adolescents' belief in conventional values and in turn, increase their CDA perpetration. This link of low self-control—low belief in conventional values—high CDA perpetration was more stronger among male adolescents than their female peers.

4. Conclusion

4.1. CDA perpetration: Gender, Self-control, and Social control

Our study found Chinese male adolescents more prone to both DDA and DM/C behaviors than females. This aligns with prior research on male aggression and impulsivity in digital romantic relationships [50][56]. Male propensity for DM/C behaviors challenges previous findings of female dominance in cyber-control [56][70], possibly due to sample differences. Given the scarcity of research on CDA in the Chinese context, further studies are needed to explore gender differences.

Consistent with prior research [18], our results showed a significant negative relationship between self-control and CDA, even after accounting for social bonds and gender. CDA, due to its aggressive nature, is considered a cybercrime [18]. According to the general theory of crime [34], low self-control is a key trait in criminal behavior, associated with risk-taking, low frustration tolerance, and lack of consideration for consequences. In romantic relationships, self-control over narcissistic and violent urges and conflict resolution strategies relate to violence risk [41]. Our findings confirm self-control's predictive power on CDA among Chinese adolescents, aligning with self-control theory and supporting its cross-cultural applicability.

Our study also found peer attachment and belief in conventional values to be significant social control variables affecting CDA perpetration, even after controlling for self-control and gender. As adolescents transition, peer attachment becomes more prominent [51], uniquely impacting social development. Peer attachment fosters empathy and perspective-taking [42], potentially deterring CDA in romantic relationships. Belief in conventional values reflects adherence to societal norms, critical for regulating behavior [40]. Adolescents with weaker moral beliefs may endorse criminal values, including CDA perpetration in intimate relationships.

Our study revealed that social control theory explains 8%-9% of CDA perpetration variance, compared to 2%-3% by self-control. This aligns with China's collectivist culture, where social forces influence behavior more than individual traits [15]. However, in a full model including gender, self-control, and social control, these factors collectively accounted for 13% and 12% variance in DDA and DM/C behaviors, respectively. Thus, both self-control and social control contribute to CDA perpetration among Chinese adolescents, supporting a combined control perspective on deviance [46][47].

4.2. The mediating role of belief in conventional values and the moderating role of gender

Self-control theory posits that social factors are consequences of self-control and not causes of deviance [34]. Our findings showing that belief in conventional values mediates the relationship between self-control and CDA perpetration, while other social control variables do not. This aligns with research linking belief to self-control and delinquency [46]. The mediating role of social control primarily occurs through internal constraints (belief in conventional values), rather than affective ties, conventional activity investment, or time spent in such activities. Thus, low self-control may influence CDA perpetration through internalized deviant values or neutralized conventional values [46].

Furthermore, this study suggested that male adolescents with low self-control are more inclined to perpetrate DDA behaviors, and with low belief in conventional values are likely to perpetrate both DDA and DM/C behaviors than females. Gender difference in self-control and moral beliefs have consistently suggested in existing research [22][74], thus supporting the relation between being male and deviance and delinquency even in cyberspace and romantic relationship [58][64][75]. Additionally, male endorse strong male chauvinism rather than egalitarian gender role beliefs may be more likely to access scripts prescribing dominance towards others, including romantic partners [59].

4.3. Implications

The current study offers insights into preventing and intervening in adolescent CDA perpetration. School-based education programs promoting equality values can counteract gender stereotypes and sexist attitudes, fostering tolerance and respect. Meta-analysis supports the positive impact of such programs on knowledge and attitudes about dating violence [21][48]. Online dating platforms can use questionnaires to identify individuals with low self-control and social control, aiding in quick response to complaints. Additionally, enhancing adolescents' self-control, peer relationships, and fostering prosocial attitudes among perpetrators are crucial to reducing CDA perpetration.

5. Conclusion

The current study replicated and extended prior research by examining the predictive utility of gender, self-control, and social bonds (including parental and peer attachment, educational commitment, traditional activity involvement, and conventional value beliefs) in CDA perpetration among Chinese adolescents. Results indicated that male adolescents with low self-control, peer attachment, and conventional value beliefs were more likely to engage in DDA and

DM/C behaviors. This study supports the self-control and social control theoretical models of CDA perpetration, with self-control demonstrating a universal impact across cultures, even when considering social control variables. Contributions include enhancing the theoretical understanding of self-control's relationship with social bonds and the mechanisms involved in CDA perpetration. Integrating both theories has practical implications for managing and preventing CDA, a harmful online behavior.

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