Cyber intimate partner aggression in adulthood: The role of insecure attachment and self-control

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ABSTRACT:

Purpose: This study builds on existing literature on face-to-face aggression in intimate relationships and adopts Finkelâ€™s I3 theory to investigate the relationship between adult attachment style, dispositional self-control, and cyber intimate partner aggression (IPA) perpetration and victimization.

Methods: Participants (N = 173) aged 20 to 52 (M = 32.75 years, SD = 7.73, mode = 29 years) completed a series of standardized online measures to assess anxious and avoidant attachment, dispositional self-control, and experience of cyber IPA (psychological, sexual, and stalking), as both a perpetrator and victim.

Findings: Avoidant attachment was associated with increased perpetration of stalking and psychological abuse. Those high on avoidant attachment were also more likely to report that they were victims of cyber IPA psychological abuse and stalking. Self-control did not predict experience of cyber IPA, as a perpetrator or victim. Interactions between self-control and attachment were also non-significant.

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Introduction

Cyber aggression research has evolved rapidly in the last decade, reflecting the exponential growth of electronic information and communication technologies (ICTs). The broad and novel range of ICTs that people use to interact in their social and intimate relationships has increased interest on how different types of interpersonal aggression, rife in real-life, might exist in a cyber-environment (Kowalski et al., 2019). Consequently, there is now a plethora of research on various elements of cyber aggression, including cyberbullying in children and adolescents (e.g., Tian et al., 2023), cyber dating aggression in college-aged students (e.g., Standlee, 2023) and cyber stalking of intimate partners (e.g., Wilson, Sheridan, & Garratt-Reed, 2022; Woodlock, 2017). It is now clear that ICTs are a mechanism by which different forms of interpersonal abuse can be perpetrated, separately or along with face-to-face victimization (Wright, 2015), and that they can be harmful (Kim et al., 2018).

By comparison, and with the exception of cyber-stalking, research into adults' use of cyber intimate partner aggression (IPA), have lagged behind (Watkins et al., 2018). This is surprising as face-to-face IPA is ubiquitous in adulthood, is widely accepted as a serious global concern, and is associated with poorer mental and physical health (Cirici Amell, et al., Soler et al., 2023; Garcia-Moreno Jansen et al., 2006; Stubbs & Szoeke, 2022). Also, adults are active users of the internet, mobile phones, and social media (Burnell & Kuther, 2016; Kuss et al., 2018). Kowalski et al. (2019) summarised that in 2017, only 5% of all American adults reported not having a mobile phone, and of those who did, three-quarters owned smartphones. Thus, while there is potential for ICTs to be used positively in intimate relationships (e.g., keeping in contact when apart), ICT may also be used negatively (e.g., invading privacy, covert monitoring) (Wright, 2015). Both offline and cyber IPA includes

behaviors such as threats, insults, humiliation, excessive monitoring, tracking, stalking and omnipresence intended to control, distress, or isolate a partner (Borrajo et al., 2015; Creamer & Hand, 2022; Sheridan, 2023; Wheatley, 2023; Woodlock, 2017). Yet cyber IPA and real-life IPA are distinguishable by a number of features. For example, Watkins et al. (2018) noted that cyber exchanges occur without interpersonal feedback unlike real-life interactions (e.g., victim's reactions), thus fostering a disinhibiting environment in which words and actions unlikely to be expressed face-to-face, are more likely to occur in a cyber context. Portable ICT devices mean that victims can be targeted at any time, and harmful messages can be permanent (e.g., texts, social media posts), so momentary actions may not be short-lived and be witnessed and circulated by a large and public audience, all of which is beyond a victim's control.

Theoretical frameworks

In this digital era, these differences indicate a need to identify psychological factors that underpin experiences of cyber IPA perpetration and victimization in adulthood, separately from face-to-face experiences. Notably, when established associations between offline intimate relationships and attachment style (Wilson et al, 2022) are considered in line with the growing research on partner directed aggression online (Marganski & Melander, 2018; Yahner et al., 2015), there is a strong rationale for applying robust theoretical models developed for face-to-face IPA to cyber IPA.

Finkel's (2008) I³ model, in particular, has been a useful framework for examining the process by which face-to-face IPA occurs. Finkel (2008) proposes that the likelihood of aggressive behavior occurring depends on the strength of two forces (instigation and impellance), as well as inhibiting forces that guard an individual from acting on their impulses. Instigation refers to exposure to discrete partner behaviors that typically trigger an urge to aggress, (e.g., jealousy, provocation, conflict). Impellance refers to dispositional or

situational factors that psychologically prepare an individual to aggress when encountering instigation (e.g., insecure attachment styles, negative affect, anger). Inhibition refers to dispositional or situational factors that increase the likelihood that an individual will override their urge to aggress (e.g., self-control, relationship commitment). According to the I^3 model, the risk of partner-directed aggression increases in the context of an interaction between a strong impelling drive and a weak inhibitory force, in the presence of a strong instigating trigger, usually termed "perfect storm" theory (Finkel, 2014). Research has supported the "perfect storm" interaction to predict interpersonal aggression and IPA (Finkel, 2015; Finkel et al., 2012; Slotter et al., 2012). Application of Finkel's (2008) I^3 framework has enhanced understanding of the underlying processes and factors associated with face-to-face IPA. This has included the role of factors such as anger, provocation, relationship commitment, insecure attachment styles and self-regulatory processes (e.g., self-control) for understanding occurrences of IPA (e.g., Finkel & Slotter, 2007; Finkel et al., 2009; Finkel et al., 2012; Slotter et al., 2012). The present study draws upon Finkel's (2008) I^3 framework of partner-directed aggression to examine psychological factors (that is, partner attachment and self-control) that may act as impelling and inhibitory forces in experiences of cyber IPA (both perpetration and victimization) in adulthood.

Attachment theories also provide a useful framework upon which to better understand cyber IPA, in terms of the dynamics underpinning the two dimensions of insecure relationships in adulthood, characterized by anxiety and avoidance. The association between insecure intimate partner attachment and offline IPA perpetration and victimization is well established (Kuijpers et al., 2012; Miyagawa & Kanemasa, 2022). Associations between insecure attachment and cyber stalking of intimate partners has also been highlighted (Creamer & Hand, 2022). Thus, secure attachment has been identified as an inhibitory force

(Babcock et al., 2000), and insecure attachment is conceptualized as an impelling force that increases the likelihood of partner-directed aggression in intimate relationships.

According to Bowlby's (1973, 1980) theory of attachment, relationships with caregivers during early childhood influence the development of internal working models of the self (e.g., whether deserving of love), others (e.g., if others are responsive and supportive), and the relationship between the self and others. These internal working models influence relationship behavior and expectations of intimate partners during adulthood (Hazan & Shaver, 1987; Mikulincer & Shaver, 2007). Attachments styles, which can be categorized as secure or insecure, influence sensitivity to perceived relationship threats (Besser & Priel, 2009), interactions with intimate partners (Gouin et al., 2013), and relationship conflict (Brewer & Forrest-Redfern, 2022). Those with secure attachments expect others to be available, responsive, and display confidence in their relationships (Simpson et al., 1996). In contrast, insecure attachments are characterized by anxiety (i.e., dependence, fear of rejection or abandonment) and/or avoidance (i.e., discomfort with emotional closeness, desire for independence) (Mikulincer & Shaver, 2007).

Reflecting a fear of abandonment or rejection, anxious attachment is characterized by a motivation to preserve intimate relationships and sensitivity to relationship threats. Gormley (2005) posits that anxiously attached adults experience negative feelings of self, lack confidence in emotion management, and blame themselves for conflict. Those high on attachment anxiety underestimate their partner's commitment and overestimate relationship threats (Collins, 1996), seek reassurance and proximity to the partner (Eastwick & Finkel, 2008), and are more likely to perceive behavior as infidelity (Kruger et al., 2013). Finkel and Slotter (2007) describe how individuals with strong attachment anxiety can engage in 'hyper activating strategies' that involve monitoring partner's behavior, and if they perceive their relationship to be under threat, they are motivated to escalate security-seeking efforts

(Doumas et al., 2008). Thus, it is predicted that those high on anxious attachment will be more likely to engage in cyber IPA stalking, but not other overt forms of partner-directed cyber aggression (e.g., psychological or sexual abuse) that could damage the relationship.

Avoidant attachment is characterized by a desire to maintain independence and avoid closeness. Those high on avoidant attachment distance themselves from emotional situations (Mikulincer & Shaver, 2007), seek autonomy (Hazan & Shaver, 1994), and dislike intimacy (Brennan et al., 1998). With higher levels of self-control, but limited awareness of the emotional state of others, attachment avoidance is associated with affect escalation followed by anger, grudge bearing, and the externalization of blame to others (Gormley, 2005). Their use of intimate partner aggression may involve devaluing and controlling them, using psychological means, in order to maintain their own sense of self-control (Gormley, 2005). Thus, it is predicted that avoidant attachment will predict both greater perpetration of controlling and dismissive behavior (i.e., psychological cyber IPA) and the perception that they are victims of cyber IPA. Though previous research suggests that insecure attachment is related to the perpetration of offline IPA (e.g., Goldenson et al., 2007; Spencer et al., 2021; Trombetta & Rolle, 2022) and cyber IPA (Marshall et al., 2013; Toplu-Demirtas et al., 2022), partner violence research has, however, typically focused on anxious rather than avoidant attachment, child or adolescent rather than adult populations, and offline rather than cyber IPA.

Self-Control

Dispositional self-control, one feature of self-regulation, refers to an individual's ability to control and override impulses and urges, including aggressive thoughts and behavior. According to the strength model of self-regulation, self-regulation relies on a limited, depletable, and renewable resource (Baumeister et al., 2007; Muraven & Baumeister, 2000). Refraining from aggression involves drawing from this resource. Therefore,

individuals with limited dispositional self-control may be at increased risk of engaging in harmful behaviors, including partner violence (DeWall et al., 2007). In accordance with Finkel's (2008) I^3 model, dispositional self-control represents a potential inhibiting force. Previous research indicates that self-regulatory failure, such as depleted self-control, predicts greater frequencies of partner-directed aggression (Finkel et al., 2009) while greater levels of dispositional self-control act as a protective factor, reducing the likelihood of this occurring (Finkel et al., 2012). Further, dispositional self-control is associated with cyber aggression, including the use of harassing or threatening posts (Donner et al., 2014) and cyberbullying (Vazsonyi et al., 2012).

Applying Finkel's (2008) I^3 model, lower levels of dispositional self-control represents a weak inhibition factor that, in the presence of a strong impelling force, such as insecure attachment, is theorized to increase the likelihood of aggressive behavior occurring in intimate relationships. Watkins et al. (2015) reported that self-control depletion was a significant predictor for partner violence only when taking into account its interaction with emotional affect as an impelling force. This is consistent with other research that emphasizes the moderating role of self-control, as opposed to direct effects on aggression (Cooper et al., 2017). Similar to the attachment literature, research investigating dispositional self-control and partner violence has focused on offline rather than cyber aggression and typically recruited student samples. There is, therefore, a need to investigate dispositional self-control as a direct predictor of cyber IPA and consider interactions between attachment and self-control.

The current study aims to investigate the processes and factors influencing cyber IPA in adults, to improve knowledge of online perpetration and victimization. The current study builds upon previous offline partner violence research by examining the role of partner attachment style and dispositional self-control on cyber IPA perpetration and victimization in

an adult sample. It is predicted that a) those high on anxious attachment will be more likely to engage in stalking, b) those high on avoidant attachment will be more likely to perpetrate psychological aggression and perceive themselves to be a victim of cyber IPA, and c) those with high dispositional self-control will be less likely to perpetrate psychological aggression, sexual aggression, and stalking. Further, d) it is predicted that interactions between attachment and self-control - that those high on anxious or avoidant attachment will be more likely to perpetrate cyber IPA when self-control is low.

Method

Ethics

The study materials and procedure received full approval from the University of Central Lancashire Psychology and Social Work Ethics Committee and complied with British Psychological Society (BPS) ethics guidelines.

Participants

Women (N = 173) aged 20 to 52 years (M = 32.75 years, mode = 29 years, SD = 7.73), were recruited online via social media platforms. All participants were required to be in a romantic relationship of at least six months duration at the time of the study. Mean relationship length was 98.55 months (SD = 80.03), with a large proportion of participants married or cohabiting (72.9%). The majority of participants were of white ethnic origin (92.5%), with more than half the sample (60.1%) reporting that they had dependents.

Measures

Participants completed initial demographic questions (e.g., age, sex, ethnicity, relationship length) followed by a series of standardized measures.

The Cyber Aggression in Relationships Scale (Watkins et al., 2018) is a 34 item self-report measure of cyber aggression between intimate partners. Participants report the frequency of their own, and their partner's, engagement in aggressive behavior (0 = this has never happened to 7 = more than 20 times in the past 6 months). Perpetration and

victimization are measured (17 items each) across three domains; psychological (5 items), sexual (4 items), and stalking (8 items). Example statements include "I intentionally ignored my partner's phone calls or text messages to hurt my partner's feelings" (psychological), "I pressured my partner to send sexual or naked photos of him or her to me" (sexual), and "I kept tabs on the whereabouts of my partner using social media" (stalking).

The Experiences in Close Relationships–Revised (Fraley et al., 2000) is a 36-item self-report measure examining romantic attachment orientation. The measure contains two subscales (18 items per subscale), assessing anxious attachment and avoidant attachment. Example items include "I'm afraid that I will lose this person's love" (anxious attachment) and "I get uncomfortable when this person wants to be very close" (avoidant attachment). Participants respond to each item in relation to their current romantic partner (1 = strongly disagree to 7 = strongly agree).

The Brief Self-Control Scale (Tangney et al., 2004) is a 13-item self-report dispositional self-control measure. Participants indicate how much each item reflects their typical behavior (1 = not at all to 5 = very much). Example statements include "I often act without thinking through all the alternatives".

The Cronbach's alpha's in this study were: anxious attachment $\alpha = .95$; avoidant attachment: $\alpha = .95$; self-control: $\alpha = .85$; psychological perpetration: $\alpha = .59$; sexual perpetration: $\alpha = .43$; stalking perpetration: $\alpha = .77$; psychological victimization: $\alpha = .57$; sexual victimization: $\alpha = .46$; and stalking victimization: $\alpha = .70$. Low Cronbach's alpha's for the psychological (perpetration: $\alpha = .59$; victimization: $\alpha = .57$) and sexual (perpetration: $\alpha = .43$; victimization: $\alpha = .46$) aggression subscales reflect the relatively low number of items (5 and 4 respectively) contributing to each subscale.

Statistical Analysis

Initial inspection of the data revealed substantial experiences of both cyber IPA perpetration and victimization. The frequencies of those reporting any psychological, sexual, and stalking perpetration were 63.6%, 8.1%, and 67.6% respectively. The frequencies of those reporting any psychological, sexual, and stalking victimization were 50.9%, 17.3%, and 48.0% respectively. Total cyber IPA perpetration and victimization frequencies were 80.3% and 67.6%. Exploration of the data revealed univariate outliers for all variables with the exception of anxious attachment. Square root transformations were applied to all variables, which resulted in the removal of outliers and improved skewness. Correlations were then conducted to examine relationships between (anxious and avoidant) attachment, self-control, and cyber IPA (perpetration and victimization). These data are shown in Table 1.

To test our predictions that a) those high on anxious attachment will be more likely to engage in stalking, b) those high on avoidant attachment will be more likely to perpetrate psychological aggression and perceive themselves to be a victim of cyber IPA, c) those with high dispositional self-control will be less likely to perpetrate psychological aggression, sexual aggression, and stalking, and d) those high on anxious or avoidant attachment will be more likely to perpetrate cyber IPA when self-control is low, a series of hierarchical multiple regression analyses were performed. Psychological, sexual, and stalking aggression perpetration and victimization were the criterion variables. Anxious attachment, avoidant attachment, and self-control were entered into Block 1. Interactions between anxious attachment and self-control and avoidant attachment and self-control were entered into Block 2.

Results

For perpetration of psychological IPA, both the first model (anxious attachment, avoidant attachment, self-control), $F(3, 165) = 5.52$, $p = .001$, $R^2 = .09$, Adj $R^2 = .08$, and second model (with the addition of the attachment self-control interactions), $F(5, 163) = 3.45$,

$p = .005$, $R^2 = .10$, Adj $R^2 = .07$, were significant. Avoidant attachment was a significant independent predictor, such that those high on avoidant attachment were more likely to engage in psychological IPA. No other individual predictors or interactions were significant. For perpetration of sexual aggression, neither the first model, $F(3, 166) = 1.93$, $p = .126$, $R^2 = .03$, Adj $R^2 = .02$, nor the second model, $F(5, 164) = 1.55$, $p = .178$, $R^2 = .05$, Adj $R^2 = .02$, were significant. For stalking perpetration, both the first model, $F(3, 165) = 8.90$, $p < .001$, $R^2 = .14$, Adj $R^2 = .12$, and second model, $F(5, 163) = 5.30$, $p < .001$, $R^2 = .14$, Adj $R^2 = .11$, were significant. Avoidant attachment was a significant predictor, such that those high in avoidant attachment were more likely to stalk their partner. No other individual predictors or interactions were significant. These data are shown in Tables 2-4.

For psychological IPA victimization, both the first model (anxious attachment, avoidant attachment, self-control), $F(3, 164) = 5.38$, $p = .001$, $R^2 = .09$, Adj $R^2 = .07$, and second model (with the addition of the attachment self-control interactions), $F(5, 162) = 3.62$, $p = .004$, $R^2 = .10$, Adj $R^2 = .07$, were significant. Avoidant attachment was a significant predictor such that those high on avoidant attachment were most likely to report victimization from psychological IPA. No other individual predictors or interactions were significant. For sexual IPA victimization, neither the first model, $F(3, 166) = 2.41$, $p = .071$, $R^2 = .04$, Adj $R^2 = .02$, nor the second model $F(5, 164) = 1.56$, $p = .175$, $R^2 = .05$, Adj $R^2 = .02$, was significant.

For stalking victimization, both the first model, $F(3, 165) = 8.91$, $p < .001$, $R^2 = .14$, Adj $R^2 = .12$, and the second model, $F(5, 163) = 5.40$, $p < .001$, $R^2 = .14$, Adj $R^2 = .12$, were significant. Avoidant attachment was a significant individual predictor such that those high on avoidant attachment were more likely to report that they were being stalked by their partner. No other individual predictors or interactions were significant. These data are shown in Tables 5-7.

Discussion

This study makes a novel contribution by synthesizing existing offline IPA research with Finkel's (2008) I³ model of aggression as a framework, to examine the association between intimate partner attachment style (impellance), dispositional self-control (inhibition) and experiences of cyber IPA in adulthood – both perpetration and victimization. In examining attachment style, those high on avoidant attachment were more likely to cyber stalk their partner. This finding was contrary to initial predictions and inconsistent with previous research where the relationship between anxious attachment and face-to-face IPA (Goldenson et al., 2007) and excessive monitoring and stalking of partners (Civilotti et al., 2020; Creamer & Hand, 2022; Woodlock, 2017) is more commonly documented. Future research would benefit from examining the consistency of these findings within cyber IPA, and the underlying function that partner stalking may serve for those with avoidant attachment. This novel finding emphasizes the need for wider exploration of factors predictive of cyber IPA and how these may differ from face to face IPA.

Those high on avoidant attachment were also more likely to report perpetration of psychological abuse and were more likely to perceive themselves as victims of psychological abuse and stalking. Avoidant attachment is characterized by a desire to maintain independence and a rejection of intimacy (Mikulincer & Shaver, 2007). Greater perpetration of psychological IPA (e.g., posting insulting information about a partner online) may, therefore, serve to reduce intimacy and increase emotional distance from a partner. This is consistent with previous assertions that violence against a partner may be used create psychological distance (Allison et al., 2008). The tendency for those high on avoidant attachment to report that they were being stalked by their partner (e.g., monitoring internet activity) or the target of psychological abuse (e.g., personal information shared online without permission) may reflect discomfort with physical and emotional intimacy. Future

research should investigate the manner in which avoidant attachment predicts perceptions of appropriate online behavior and responses to a partner's monitoring.

Contrary to initial predictions, self-control did not predict engagement in cyber IPA. Interactions between attachment and self-control were also non-significant. Findings were not consistent with previous research indicating that those with elevated self-control are less likely to act aggressively towards intimate partners (Finkel et al., 2009) or engage in online deviance (Donner et al., 2014) and online aggression (Vazsonyi et al., 2012). Thus, self-control does not appear to act as an inhibiting factor that reduces the likelihood of cyber IPA either alone or in interaction with insecure attachment. However, bivariate analyses reveal a relationship between self-control and anxious attachment, as well as relations with psychological and stalking perpetration, and stalking victimization. In support of these findings, previous research has indicated that dispositional self-control may not be sufficient as a direct predictor of IPA when examined in isolation (Cooper et al., 2017; Watkins et al., 2015). Watkins et al. (2015) found that reduced dispositional self-control was not predictive of IPA, but that the effect of low self-control was mediated by interactions with other risk factors, such as negative affect. Research has also indicated that the influence of self-control may differ across genders (Watkins et al., 2015). As the current study was unable to examine gender differences due to an under-representation of males, potential gender differences in the effect of dispositional self-control could not be explored. While self-control was not predictive of cyber IPA in this study, the indication of a relationship between self-control and cyber IPA should be further explored, including consideration of other potential mediator variables not captured within the current study. The inconsistency between previous studies of self-control and attachment style in IPA, and the findings of the current study, highlight that there may be fundamental differences in the processes and factors at play in cyber IPA. Furthermore, consideration should be given to contextual differences, recognizing how the

reality of interaction within the cyber world, differs greatly to that of face-to-face interpersonal interaction.

Limitations and Future Research

Findings are limited by the use of self-report questionnaire measures that may be subject to bias recall or socially desirable responding. In addition, participants may not be aware that they were the target of aggressive cyber behavior (e.g., "my partner checked my social media account without my permission"). Future research should, therefore, incorporate objective measures of cyber activity and collect reports from both partners (e.g., Maneta et al., 2013). Although it is outside the scope of the current study, which examined three forms of cyber IPA (psychological, sexual, stalking), it would be beneficial for future studies to further scrutinize each of these different types of IPA with more extensive measures of cyber sexual abuse, to prevent overreliance on a relatively small number of questionnaire items.

In this study, participants were female and typically married or cohabiting and of 'white' ethnic origin. Though, caution is recommended when extrapolating findings to other populations, this represents an important contribution to a research area typically dominated by student, dating samples (e.g., Burke et al., 2011; Marganski & Fauth, 2013). Further, as the COVID-19 pandemic has impacted on the nature of partner violence (Lyons & Brewer, 2021), future research may consider environmental factors such as lockdowns on the use of cyber partner violence perpetration and victimization.

As this study focused on attachment, self-control and incidence of cyber IPA as a perpetrator or victim, it did not explore the manner in which attachment or self-control were associated with responses to cyber IPA (e.g., confrontation). It would be expected that those high on anxious and avoidant attachment to be less and more likely to terminate an abusive relationship respectively. It is also noteworthy that this study extended the application of the I^3 model (specifically developed to understand the manifestation of IPA) to examine the

extent to which it could also explain victimization. This approach is encouraged (e.g., Chester & DeWall, 2017), so that well-established aggression models like the I^3 theory can indicate novel avenues for hypothesis-testing. Indeed, this approach has produced new and valuable findings, yet it would be advantageous if future studies more comprehensively examined the I^3 model, which states that it is the interaction between impelling and disinhibition at the time of instigation that increases the risk of aggressive conduct (Finkel, 2008).

Conclusions

This study addresses the paucity of cyber IPA research conducted with adult populations. The findings of this investigation contribute to an improved understanding of online abuse perpetration and victimization, experienced in adult's intimate relationships**.** Avoidant attachment predicted perpetration of psychological abuse and stalking and victimization from psychological abuse and stalking. Self-control did not predict experience of cyber IPA as a perpetrator or victim. Interactions between self-control and attachment were also non-significant. Therefore, we found evidence for the importance of impellance factors but not inhibiting factors (Finkel, 2008). Future research should investigate responses to perceived cyber aggression and obtain reports from both members of the relationship dyad.

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Table 1: Correlations and Descriptive Statistics for Attachment, Self-Control, Perpetration and Victimization

	ANX	AVO	CON	PSP	SEP	STP	PSV	SEV	STV	PER	VIC
ANX											
AVO	.64**										
CON	.30**	.07									
PSP	.25**	.27**	.14								
SEP	.16*	.09	.14	.17*							
STP	.33**	.33**	.16*	.56**	.11						
PSV	.25**	.28**	.10	.64**	.23**	.51**					
SEV	.20**	.13	.09	.24**	.44**	.25**	.26**				
STV	.26**	.35**	.17*	.56**	.05*	.63**	.55**	.16**			
PER	.35**	.36**	.17*	.80**	.25**	.94**	.63**	.32**	.66**		
VIC	.30**	.36**	.16*	.67**	.23**	.67**	.81**	.43**	.90**	.75**	
M	6.84	6.05	5.90	2.87	2.07	3.86	2.75	2.19	3.48	5.30	5.01
SD	1.72	1.46	.71	.81	.33	1.19	.77	.52	.96	1.26	1.11

ANX = Anxious Attachment, AVO = Avoidant Attachment, CON = Self-Control, PSP = Psychological Aggression Perpetration, SEP = Sexual Aggression Perpetration, STP = Stalking Perpetration, PSV = Psychological Aggression Victimization, SEV = Sexual Aggression Victimization, STV = Stalking Victimization, PER = Perpetration Total, VIC = Victimization Total

NB * = $p < .05$, ** = $p < .01$. All correlations conducted post square root transformations

Table 2: Hierarchical Multiple Regression for Psychological Cyber IPA Perpetration

	b	*SE b*	*β*
Step 1			
Anxious attachment	.05	.05	.10
Avoidant attachment	.11	.06	.20*
Self-control	.10	.09	.09
Step 2			
Anxious attachment	-.17	.38	-.37
Avoidant attachment	.06	.47	.12
Self-control	-.21	.39	-.18
Anxious attachment* Self-control	.04	.06	.58
Avoidant attachment* Self-control	.01	.08	.10

Note $R^2 = .09$, Adj $R^2 = .08$ for Step 1, $R^2 = .10$, Adj $R^2 = .07$ for Step 2. * $p < .05$, ** $p < .01$, *** $p < .001$

Table 3: Hierarchical Multiple Regression for Sexual Cyber IPA Perpetration

	b	*SE b*	*β*
Step 1			
Anxious attachment	.02	.02	.12
Avoidant attachment	.00	.02	.00
Self-control	.05	.04	.10
Step 2			
Anxious attachment	-.08	.16	-.43
Avoidant attachment	.26	.19	1.16
Self-control	.19	.16	.42
Anxious attachment* Self-control	.02	.03	.67
Avoidant attachment* Self-control	-.04	.03	-1.33

Note $R^2 = .03$, Adj $R^2 = .02$ for Step 1, $R^2 = .05$, Adj $R^2 = .02$ for Step 2. * $p < .05$, ** $p < .01$, *** $p < .001$

Table 4: Hierarchical Multiple Regression for Stalking Perpetration

	b	*SE b*	*β*
Step 1			
Anxious attachment	.11	.07	.16
Avoidant attachment	.18	.08	.22*
Self-control	.15	.13	.09
Step 2			
Anxious attachment	.29	.55	.42
Avoidant attachment	.02	.67	.03
Self-control	.20	.55	.12
Anxious attachment* Self-control	-.03	.09	-.32
Avoidant attachment* Self-control	.03	.11	.22

Note $R^2 = .14$, Adj $R^2 = .12$ for Step 1, $R^2 = .14$, Adj $R^2 = .11$ for Step 2. * $p < .05$, ** $p < .01$, *** $p < .001$

Table 5: Hierarchical Multiple Regression for Psychological Cyber IPA Victimization

	b	*SE b*	*β*
Step 1			
Anxious attachment	.05	.05	.11
Avoidant attachment	.11	.05	.21*
Self-control	.06	.09	.05
Step 2			
Anxious attachment	-.31	.37	-.67
Avoidant attachment	.08	.45	.15
Self-control	-.40	.37	-.36
Anxious attachment* Self-control	.06	.06	.98
Avoidant attachment* Self-control	.01	.07	-.06

Note $R^2 = .09$, Adj $R^2 = .07$ for Step 1, $R^2 = .10$, Adj $R^2 = .07$ for Step 2. * $p < .05$, ** $p < .01$, *** $p < .001$

Table 6: Hierarchical Multiple Regression for Sexual Cyber IPA Victimization

	b	*SE b*	*β*
Step 1			
Anxious attachment	.06	.03	.19
Avoidant attachment	.00	.04	.01
Self-control	.02	.06	.03
Step 2			
Anxious attachment	.25	.25	.83
Avoidant attachment	-.10	.31	-.29
Self-control	.14	.25	.20
Anxious attachment* Self-control	-.03	.04	-.79
Avoidant attachment* Self-control	.02	.05	.34

Note $R^2 = .04$, Adj $R^2 = .02$ for Step 1, $R^2 = .05$, Adj $R^2 = .02$ for Step 2. * $p < .05$, ** $p < .01$, *** $p < .001$

Table 7: Hierarchical Multiple Regression for Stalking IPA Victimization

	b	*SE b*	*β*
Step 1			
Anxious attachment	.00	.06	.00
Avoidant attachment	.22	.06	.34***
Self-control	.19	.10	.14
Step 2			
Anxious attachment	.29	.44	.53
Avoidant attachment	-.12	.54	-.18
Self-control	.19	.44	.14
Anxious attachment* Self-control	-.05	.07	-.66
Avoidant attachment* Self-control	.06	.09	.60

Note $R^2 = .14$, Adj $R^2 = .12$ for Step 1, $R^2 = .14$, Adj $R^2 = .12$ for Step 2. * $p < .05$, ** $p < .01$, *** $p < .001$