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Passive, invasive, and duplicitous: Three forms of intimate partner cyberstalking

Evita March [a,*], Piotr Szymczak [b], Melissa Di Rago [c], Peter K. Jonason [d,b]

[a] Federation University, Australia
[b] Cardinal Stefan Wyszyński University, Poland
[c] Institute for Social Neuroscience, Australia
[d] University of Padua, Italy

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ABSTRACT

Intimate partners are common targets of cyberstalking, yet despite the negative impact the behavior remains largely underexplored. In the present study, we explore behavioral methods adopted to cyberstalk intimate partners. Participants (N = 449, 50.1% men) recruited via Amazon's Mechanical Turk completed an online questionnaire and we assessed a range of intimate partner cyberstalking behaviors across mating contexts (i.e., short-term v long-term relationships) and goals (i.e., mate retention v mate attainment). These cyberstalking behaviors were factor analyzed (i.e., Exploratory Factor Analysis) and reduced to reveal three dimensions: Passive, invasive, and duplicitous. Both men and women largely engage in passive cyberstalking, though women perpetrated more overall, passive, and invasive intimate partner cyberstalking. Women were also likely to adopt invasive behaviors to retain a long-term mate and attain a short-term mate. We also examined associations between the Dark Tetrad traits, social motives, and cyberstalking. All Dark Tetrad traits were associated with more overall cyberstalking but demonstrated differential patterns across the three forms, substantiating a dimensional conceptualization of this online behavior. Results of the current study contribute to establishing a theoretical framework to understand perpetration of intimate partner cyberstalking, ultimately contributing to managing the potentially harmful online behavior.

1. Introduction

Intimate partner cyberstalking is characterized by a behavioral pattern of online monitoring and surveillance of current and/or former romantic partners (March et al., 2020). This cyberstalking of an intimate partner can be employed as a tactic to surreptitiously gain information about a partner (Darvell et al., 2011; Muise et al., 2014), especially in the initiation stages of a relationship or in response to perceived relationship threats (Tokunaga, 2011). Compared to strangers, intimate partners are more common targets of cyberstalking (Dhillon et al., 2016). Online platforms, such as social media, provide opportunity to covertly monitor an intimate partner's activities with minimal risk of detection (Muise et al., 2014). Given the public nature of most social media profiles, online monitoring of an intimate partner could even be justified as acceptable behavior, unavoidable to a degree, because the information is automatically fed into personal newsfeeds (Utz & Beukeboom, 2011). This unobtrusive, more passive form of cyberstalking (see Fox & Warber, 2014) capitalizes on information being publicly available and obtained without invasion. In addition to these passive forms, cyberstalking an intimate partner can also include more invasive, deceptive behaviors that directly intrude on and even violate privacy, such as logging into an intimate partner's social media account to check activity, accessing an intimate partners (password-protected) emails (Marcum et al., 2017, 2018), and creating fake social media profiles to overcome privacy controls (e.g., private social media profiles or being blocked; Tseng et al., 2020).

There is some debate as to whether passively monitoring an intimate partner online can be considered cyberstalking (see Marcum et al., 2018). Indeed, when adopting cyberstalking definitions that encompass threats, harassment, and intimidation (Wright, 2018), this passive monitoring appears comparatively innocuous. We posit that such debate highlights two critical limitations in the cyberstalking literature: (1)

* Corresponding author at: Federation University Australia, School of Science, Psychology, and Sport, Berwick Campus, 100 Clyde Road, Berwick, VIC 3806, Australia.
E-mail address: e.march@federation.edu.au (E. March).

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there is considerable inconsistency regarding definitions of cyberstalking (Short et al., 2015), and (2) there remains a paucity in research specifically exploring cyberstalking in intimate relationships (Reiss et al., 2021). In the current study, we address these limitations by adopting a core definition of cyberstalking to explore intimate partner cyberstalking. Specifically, we define cyberstalking as "repeated pursuit of an individual via technology" (Reyns et al., 2012, p. 1), and explore the behavioral methods of pursuing an intimate partner online to gain information. Here, we do not explore *why* people extract such information (e.g., intentions to harm the partner or ensure the partner is safe; Reiss et al., 2021). Rather, we are interested in exploring *how* (i.e., behavioral methods) they extract information. Such findings could in turn inform future studies exploring intimate partner cyberstalking intentions; for example, whether different behavioral methods are associated with more innocuous or malevolent intentions.

1.1. Intimate partner cyberstalking: sex, context, and goals

In addition to definitional inconsistency, theoretical understanding of intimate partner cyberstalking remains limited (March et al., 2020). As recent research has adopted an evolutionary framework to understand online relationship behavior (Bhogal, Rhead, & Tudor, 2019; Branson & March, 2021), we seek to explain intimate partner cyberstalking through an evolutionary psychology lens. We conceptualize intimate partner cyberstalking as an adaptive mating strategy, played out in a modern context, that yields information about current or potential intimate partners – information that could benefit both sexes. For example, cyberstalking a potential long-term mate could provide information about desirable long-term mate characteristics, such as intelligence, dependability, and emotional stability (Buss & Schmitt, 2019). Further, cyberstalking a long-term mate suspected of infidelity could provide information about the mate's whereabouts and activities, ultimately aiding the avoidance of an unfaithful mate and potentially costly long-term union. For shorter relationships, cyberstalking a potential short-term mate could yield valuable information about their sexual activity, which could aid in avoiding sexual pathogens, or even wasting time and resources on the insufficiently promiscuous (March et al., 2021). There is likely a range of motivations associated with intimate partner cyberstalking, such as attaining mates, retaining mates, and avoiding pathogens. In the current study, we explore a range of fundamental social motives (see Neel et al., 2016) and their associations with intimate partner cyberstalking.

Adopting an evolutionary perspective may also aid interpretation of why women cyberstalk intimate partners more than men (Muise et al., 2014), especially in long-term relationships (March et al., 2021). Compared to men, women's investment in potentially reproductive relationships is greater (Trivers, 1972). Because of their increased investment, women likely seek information about potential mates that could aid in the avoidance of incurring reproductive costs, such as infidelity and pathogens. Compared to more traditional, direct methods of gathering information (e.g., physically stalking) that may be too risky for women (Duntley & Buss, 2012), cyberstalking intimate partners presents a less risky, even normalized, method to obtain information about a mate. Thus, the tendency for women to cyberstalk intimate partners more than men, particularly in long-term relationships, could be an adaptive, comparatively low-risk mating strategy adopted to avoid costly "mating mistakes". To date, only one study (March et al., 2021) has explored associations between sex, mating contexts (short- and long-term), and intimate partner cyberstalking - a paucity we address in the current study.

In addition to sex, context, and goals, we also explore whether the Dark Tetrad personality traits (i.e., narcissism, Machiavellianism, psychopathy, and sadism; Chabrol et al., 2009) are related to intimate partner cyberstalking behaviors. People with higher levels of the Dark Tetrad traits have been shown to engage in more intimate partner cyberstalking (Smoker & March, 2017). Further, there is rationale to expect the Dark Tetrad traits to relate to different behavioral forms of intimate partner cyberstalking. For example, as perpetration of intimate partner cyberstalking has previously been attributed to increased sensation seeking tendencies (especially for men; March et al., 2020), it is plausible that Dark Tetrad traits associated with increased thrill-seeking and risk taking (e.g., psychopathy; Derefinko & Lynam, 2007) could relate to more risky cyberstalking behaviors, such as invasive methods.

1.2. The current study

The objective of the current study is to explore the behavioral methods of intimate partner cyberstalking. Specifically, we explore how people gain information about intimate partners online, which can range from relatively passive forms like checking someone's social media status, to more invasive forms such as logging into someone's account, to even duplicitous forms such as creating fake profiles to mask their own identity. We explore these behaviors across sex, mating contexts (i.e., short- and long-term), and mating goals (i.e., attaining and retaining a mate), and assess the influence of individual differences (e.g., the Dark Tetrad traits and social motives). As this study is largely exploratory, no specific hypotheses are generated.

2. Method

2.1. Participants and procedure

A sample from Amazon's Mechanical Turk ($N = 515$) was paid US$1 to complete a questionnaire about personality, motives, and online behavior, as previously reported (March et al., 2021).[1] After removing incomplete surveys or failed attention checks ($n = 18$), 449 participants (50.1% men[2]) with a mean age of 41.19 years ($SD = 11.35$; *Range* = 23–75) remained. Of the participants, 64.4% were currently in a committed intimate relationship. Participants were informed of the nature of the study and provided tick-box consent before completing self-report questions. Upon completion, they were thanked, provided with details for obtaining counseling, and debriefed. The current research was conducted with the approval of Institute for Social Neuroscience Human Research Ethics Committee (181001).[3]

2.2. Measures and design

To measure individual differences in cyberstalking, 21 items were generated based on previous unidimensional measures of intimate partner cyberstalking (i.e., Smoker & March, 2017) and conceptualizations (Marcum et al., 2017). For each item, participants were asked whether (fully between-groups manipulation) they would do each item (yes/no) if they were trying to retain ($n = 222$) or attain ($n = 227$; i.e., goal) a long-term ($n = 216$) or a short-term partner ($n = 233$; i.e., context).[4] A response of "yes" was coded as 2, and "no" was coded as 1 with responses summed for a total score. This was a $2 \times 2 \times 2$ between-subjects design, with sex (2 levels: men and women), goals (2 levels: retain and attain), and contexts (2 levels: long-term and short-term) as the independent variables.

The Dark Tetrad traits were assessed using the Short Dark Tetrad (Paulhus et al., 2020), which comprises 28 items (seven per trait) to assess trait Machiavellianism (e.g., It's not wise to let people know your

[1] A power analysis using *G*Power (Faul et al., 2007) indicated 270 participants for statistical power.

[2] Participants were asked "what is your sex?".

[3] Data provided on OSF (https://osf.io/8ne3j/?view_only=716fef6ca617403e823b4e51c0585534).

[4] Long-term partners were defined as a committed romantic relationship, short-term partners were defined as casual romantic relationships.

secrets; current α = 0.82), narcissism (e.g., People see me as a natural leader; current α = 0.84), psychopathy (e.g., People often say I'm out of control; current α = 0.78), and sadism (e.g., Watching a fistfight excites me; current α = 0.81). Participants were asked their agreement (1 = *strongly disagree*; 5 = *strongly agree*), and items were summed to create total scores.

To reduce participant fatigue, fundamental social motives were assessed with an ultra-brief measure (Jonason & Tome, 2019) to capture the importance (1 = *not at all important*; 5 = *extremely important*) of eight motives: [when you have one] making sure your present mate is faithful/happy (i.e., mate retention motive); avoiding disease, viruses, and colds; making new friends; making sure you are safe; having a good relationship with family members; [when you need one] finding new mates for sexual/romantic relationships (i.e., mate seeking motive); earning status/power; and having autonomy.

3. Results

3.1. Dimensions of intimate partner cyberstalking

We conducted an initial Exploratory Factor Analysis (EFA) with Principal Axis Factoring extraction on the 21 intimate partner cyberstalking items. As the Scree plot indicated three factors (42.70% of total variance), we re-ran the EFA, extracting three factors with Principal Axis Factoring extraction and an oblique (Promax) rotation. We retained the three best loading items on each factor and labelled the factors passive, invasive, and duplicitous (see Table 1). The three were correlated (*ps* < 0.001) themselves (Passive-Invasive = 0.40; Passive-Duplicitous = 0.30; Invasive-Duplicitous = 0.44) and people responded similarly to all the items (Cronbach's α = 0.74). Using Jamovi, we conducted a Confirmatory Factor Analysis (CFA) with maximum likelihood estimation and found that a one-dimensional model (i.e., overall cyberstalking) fit the data poorly ($\chi^2[27] = 327$, $p < .001$, CFI = 0.74, RMSEA = 0.16, 95%CI [0.14, 0.17]) compared to a three-dimensional model ($\chi^2[24] = 94.8$, $p < .001$, CFI = 0.94, RMSEA = 0.08, 95%CI [0.06, 0.10]). We tentatively label this new measure the Multidimensional Intimate Partner Cyberstalking Inventory (MIPCI). We conducted analyses with both the three factors (forms) and the overall index.

Table 1
Exploratory factor analysis (principal axis factoring – Promax rotation) for the forms of intimate partner cyberstalking.

	Passive	Invasive	Duplicitous
Check their online accounts to see what they've been up to.	0.63		
Monitor their behaviors (e.g., friendships, movements, activities) through social media.	0.61		
Check their last "online" status.	0.59		
Check their messages (e.g., email, Facebook) without them knowing.		0.90	
Log into their accounts (e.g., email, Facebook) without them knowing.		0.68	
Check their phone/computer history.		0.53	
Pose as someone else over social media or email.			0.86
Use a fake account (e.g., Facebook, Instagram) to check up on them.			0.66
Use location settings on their phone/computer to see where they've been or are going.			0.49
Cronbach's α	0.62	0.79	0.72
% variance	14.90	13.8	13.9
Eigen	2.09	1.94	1.95

Note. Kaiser-Meyer-Olkin measures of sampling adequacy = 0.86; Bartlett's $\chi^2(91) = 1926$, $p < .001$.

3.2. Inferential analyses

First, we performed a 2 × 2 × 2 ANOVA with sex (men or women), cyberstalking goal (attain or retain), and mating context (short-term or long-term) as the IVs and the overall index of cyberstalking as the DV (see Table 2). Women cyberstalked more than men, but there were no differences in goal or mating context and no interactions. We then performed a 2 × 2 × 2 MANOVA with sex, cyberstalking goal, and mating context as the IVs and the three forms of cyberstalking (i.e., passive, invasive, and duplicitous) as the DVs (see Table 2). We used a MANOVA instead of a mixed model ANOVA due to heterogeneous covariance ($p < .001$) and heterogeneous variance for invasive ($p = .013$) and duplicitous ($p = .004$) cyberstalking. We report Pillai's Trace, as it is considered robust to the violations of these assumptions. There was a multivariate effect for sex (Pillai's Trace = 0.02, $F[3, 438] = 3.12$, $p = .026$, $\eta_p^2 = 0.02$), with women more likely than men to engage in invasive and passive forms of cyberstalking (see Table 2). For univariate tests, there was a three-way interaction between sex, cyberstalking goals, and mating context for invasive cyberstalking ($F[1, 440] = 5.10$, $p = .024$, $\eta_p^2 = 0.01$). Compared to men, women engaged in invasive cyberstalking to retain a long-term mate ($p = .002$) and attain a short-term mate ($p = .047$).

Sex differences were present in the Dark Tetrad traits and social motives, indicating potential mediation of the relationships between sex and cyberstalking forms. Six multiple mediation models were run via PROCESS (Hayes, 2017), with three models testing personality as mediators and three models testing social motives as mediators. Machiavellianism mediated the relationship between sex and passive cyberstalking ($B = -0.02$, $SE = 0.01$, 95% CI [−0.04, −0.01]), psychopathy mediated the relationship between sex and invasive cyberstalking ($B = -0.02$, $SE = 0.01$, 95% CI [−0.05, −0.00]), and psychopathy mediated the relationship between sex and duplicitous cyberstalking ($B = -0.03$, $SE = 0.01$, 95% CI [−0.05, −0.01]). For motives, avoiding pathogens mediated the relationship between sex and passive cyberstalking ($B = 0.02$, $SE = 0.01$, 95% CI [0.01, 0.04]), and money mediated the relationship between sex and duplicitous cyberstalking ($B = -0.01$, $SE = 0.00$, 95% CI [−0.01, −0.00]).

We correlated overall cyberstalking and the three forms with the Dark Tetrad traits and social motives across total scores, sex, and mating contexts (Table 3). We tentatively report these correlations, regardless of the lack of formal moderation. Although all Dark Tetrad traits correlated with overall cyberstalking and passive cyberstalking, relationships differed across invasive and duplicitous cyberstalking. Invasive cyberstalking was only correlated with psychopathy (for both sexes and long-term contexts). Duplicitous cyberstalking was correlated with narcissism (for women), psychopathy (for both sexes and both mating contexts), and sadism (for women and long-term contexts). Although motives did not correlate with overall cyberstalking and invasive cyberstalking, avoiding pathogens correlated with passive cyberstalking, and status/power, safety, and mate seeking correlated with duplicitous cyberstalking.

4. Discussion

In the current study, we explored, for the first time, the behavioral methods of intimate partner cyberstalking. We explored how people seek information about intimate partners online across sex, mating contexts (i.e., short- and long-term), and mating goals (i.e., attaining and retaining a mate), and assessed the influence of individual differences (e.g., the Dark Tetrad traits and social motives). Compared to men, women perpetrated more overall, invasive, and passive cyberstalking, a result that replicates (Muise et al., 2014; Smoker & March, 2017) and extends previous research. Although cyberstalking has been conceptualized as a male-perpetrator/female-victim crime (Piazza & Ingram, 2015), the results of the current study add to the growing trend that the reality of cyberstalking may differ from assumptions (Gavin & Scott, 2016).

Table 2
Between-groups (down) and within-subjects (across the three forms) effects of overall intimate partner cyberstalking and three forms.

	Mean (SD)				F	η_p^2
	Cyberstalking	Passive	Invasive	Duplicitous		
Total	1.15 (0.19)	1.33 (0.35)	1.08 (0.22)	1.05 (0.17)	238.37**	0.35
Men	1.05 (0.17)	1.29 (0.34)	1.05 (0.17)	1.04 (0.16)	100.72**	0.31
Women	1.11 (0.26)	1.37 (0.35)	1.11 (0.26)	1.06 (0.19)	141.37**	0.37
F	7.96**	5.20*	7.63**	1.19		
η_p^2	0.02	0.01	0.02	<0.01		
Attain	1.08 (0.24)	1.34 (0.35)	1.08 (0.24)	1.05 (0.17)	126.89**	0.36
Retain	1.08 (0.21)	1.32 (0.35)	1.08 (0.21)	1.05 (0.17)	111.23**	0.34
F	0.15	0.40	0.05	0.02		
η_p^2	<0.01	<0.01	<0.01	<0.01		
Long-term	1.09 (0.24)	1.31 (0.35)	1.09 (0.24)	1.05 (0.17)	97.87**	0.31
Short-term	1.06 (0.21)	1.35 (0.35)	1.06 (0.21)	1.05 (0.17)	143.47**	0.38
F	0.08	0.14	0.09	0.01		
η_p^2	<0.01	<0.01	<0.01	<0.01		

* $p < .05$.
** $p < .01$

Table 3
Correlations between overall intimate partner cyberstalking and three forms for men and women (M/W) across long-term and short-term (L/S) relationships.

	Cyberstalking			Passive			Invasive			Duplicitous		
	Total	M/W	L/S	Total	M/W	L/S	Total	M/W	L/S	Total	M/W	L/S
Narcissism	0.13**	0.18**/ 0.14*	0.15*/ −0.11	0.11**	0.16**/ 0.11	0.13/ 0.09	0.08	0.12/ 0.10	0.13/ 0.03	0.10**	0.07/ 0.15*	0.08/ 0.12
Machiavellianism	0.16**	0.24**/ 0.17*	0.21**/ 0.13	0.20**	0.30**/ 0.17*	0.26**/ 0.16*	0.05	0.07/ 0.09	0.08/ 0.03	0.07	0.00/ 0.15*	0.08/ 0.07
Psychopathy	0.21**	0.23**/ 0.31**	0.25**/ 0.18**	0.15**	0.18**/ 0.21**	0.21**/ 0.11	0.15**	0.15*/ 0.24**	0.19**/ 0.10	0.22**	0.18**/ 0.32**	0.21**/ 0.24**
Sadism	0.16**	0.25**/ 0.23**	0.22**/ 0.11	0.16**	0.26**/ 0.18**	0.21**/ 0.11	0.08	0.13/ 0.18**	0.14*/ 0.04	0.11**	0.07/ 0.21**	0.14*/ 0.08
Making new friends	−0.02	0.03/ −0.05	0.06/ −0.09	−0.01	0.02/ −0.03	0.04/ −0.05	−0.04	0.02/ 0.07	0.06/ −0.13*	0.01	0.04/ −0.02	0.05/ −0.03
Earning status/ power	0.08	0.07/ 0.12	0.09/ 0.08	0.05	0.08/ 0.04	0.06/ 0.04	0.05	−0.00/ 0.10	0.08/ 0.03	0.12**	0.05/ 0.20**	0.09/ 0.14*
Making sure you are safe	−0.02	0.05/ −0.14*	−0.06/ 0.01	0.05	0.11/ −0.07	−0.02/ 0.10	−0.05	0.04/ −0.16*	−0.05/ −0.04	−0.11**	−0.12/ −0.12	−0.10/ −0.12
Mate seeking motive	0.06	0.04/ 0.15*	0.14*/ −0.02	0.05	0.04/ 0.11	0.11/ −0.01	−0.00	−0.05/ 0.08	0.09/ −0.10	0.11**	0.07/ 0.18**	0.14*/ 0.08
Mate retention motive	0.06	0.07/ 0.03	0.00/ 0.11	0.09	0.13/ 0.02	0.03/ 0.15*	0.04	0.04/ 0.02	−0.01/ 0.09	−0.05	−0.12/ 0.02	−0.04/ −0.05
Avoiding pathogens	0.08	0.12/ 0.01	0.02/ 0.14*	0.15**	0.20**/ 0.07	0.13/ 0.16*	0.00	0.03/ −0.06	−0.07/ 0.09	−0.04	−0.08/ −0.03	−0.12/ 0.02
Family relationships	0.01	−0.03/ −0.00	−0.03/ 0.05	0.04	−0.01/ 0.04	−0.02/ 0.09	0.01	0.04/ −0.04	−0.01/ 0.03	−0.06	−0.12/ −0.02	−0.05/ −0.07

Note. Bolded coefficients differed ($z > 1.96$, $p < .05$) based on Fisher's z tests (http://quantpsy.org/corrtest/corrtest.htm); 225 men, 224 women; 216 long-term mating; 233 short-term mating.
* $p < .05$.
** $p < .01$.

Applying an evolutionary perspective, we theorized that intimate partner cyberstalking may be a mating strategy employed by both sexes, but especially by women, to avoid mating mistakes. Specifically, the information gained via cyberstalking could prevent costly mating mistakes such as retaining an unfaithful long-term mate or sexual encounters with a sexually diseased short-term mate. As mating mistakes are considered more costly for women (i.e., higher levels of parental investment; Trivers, 1972), they may be more inclined to cyberstalk both long- and short-term intimate partners. As cyberstalking provides a relatively low-risk opportunity to elicit important information about a mate (see Muise et al., 2014), this may be particularly appealing to women (see Duntley & Buss, 2012).

Both men and women were more likely to passively cyberstalk an intimate partner compared to more invasive, duplicitous forms. Women were also more likely than men to engage in passive and invasive cyberstalking, and this invasive cyberstalking behavior was especially likely in when attempting to retain a long-term mate and attain a short-term mate. Although cyberstalking may provide a relatively low-risk opportunity to obtain information about a mate information, our findings suggest that such information could be so valuable for women that they are willing to invade a mate's privacy to obtain it. We also acknowledge that it is curious women engage in more invasive cyberstalking to attain a short-term mate, given the very nature of invasive cyberstalking behaviors (i.e., checking messages, logging into accounts) are somewhat dependent on established knowledge of and intimacy with a mate.

Despite the tendency to engage in more invasive and passive forms of intimate partner cyberstalking, women were no more likely than men to adopt duplicitous means of obtaining information. Given the dishonest, devious nature of duplicitous cyberstalking, engaging in this behavior could result in more problematic outcomes (see Marcum et al., 2018), such as harms to reputation, irreversible relationship damage, and even criminal charges. For both sexes, the benefits of obtaining mate information via duplicitous cyberstalking means may not outweigh the risks. It is also possible that both men and women engage in less duplicitous cyberstalking behaviors (i.e., creating a fake account, posing as someone

else online) as such behaviors require a level of access that is difficult to attain.[5]

Regarding mediations, men reported higher levels of Machiavellianism which subsequently related to more passive cyberstalking. Here, it is reasonable that the strategically manipulative, aloof, and deceptive Machiavellian (Ali et al., 2009) would engage in the most detached and undetected form of cyberstalking (i.e., passive). Further, men reported higher levels of psychopathy, which subsequently related to more invasive and duplicitous cyberstalking, a result likely attributed to characteristics associated with the trait such as increased risky behavior (Derefinko & Lynam, 2007) and impulsivity (Jones & Paulhus, 2011). Women reported higher levels of avoiding pathogen motives, which subsequently related to increased passive cyberstalking, and men reported higher levels of money motives, which subsequently related to increased duplicitous cyberstalking. Given the novelty of these results, we recommend future researchers seek to validate these pathways.

For the Dark Tetrad traits, all traits were positively related to overall intimate partner cyberstalking, corroborating previous findings (Smoker & March, 2017). Although psychopathy correlated with all three behavioral forms of intimate partner cyberstalking, this was not the case for the remaining traits. Narcissism, Machiavellianism, and sadism did not correlate with invasive forms and Machiavellianism did not correlate with duplicitous forms. Importantly, these differential patterns of correlations further establish the multidimensional nature of intimate partner cyberstalking. Associations between fundamental social motives and behavioral forms of intimate partner cyberstalking were sparse; however, higher motives for status/power and mate seeking and lower motives for safety were related to increased duplicitous cyberstalking, and high motives to avoid pathogens was related to increased passive cyberstalking.

4.1. Limitations, future directions, and conclusion

A potential limitation of the current study is the measurement of intimate partner cyberstalking via a series of dichotomous questions, and this behavioroid-count data may be limited in terms of restricted range (i.e., scores range from 0 to 3 in the forms). Future research might increase range by employing Likert scales; still, we suspect positive skew will still be an issue with this rare phenomenon, at least in terms of self-report intentions/behaviors. Another potential limitation is that, although novel, the multidimensional model of intimate partner cyberstalking (Multidimensional Intimate Partner Cyberstalking Inventory; MIPCI) lacks psychometric rigor. Although our initial evaluations revealed poor fit for a one-dimensional model, we recommend future researchers seek to test the psychometrics of this promising multidimensional scale. Future researchers might also assess the nomological network associated with the three cyberstalking forms to differentiate and understand their causes and sequelae.

Our conceptualization of intimate partner cyberstalking is also an important consideration. Here, we explored the behavioral methods of pursuing an intimate partner online to gather information; specifically, we were interested in how, not why, people obtain information. Our findings indicate that there are three methods of obtaining information about an intimate partner online – passive, invasive, and duplicitous. Future researchers exploring intimate partner cyberstalking could adopt this novel, multidimensional conceptualization of cyberstalking behaviors, and build on these findings by exploring intentions (i.e., the *why*). For example, it is reasonable to expect that the more invasive, deceitful forms are associated with greater intent to impact and/or harm the target. Lastly, we recommend that future researchers exploring intimate partner cyberstalking continue to apply theoretical frameworks to understand the behavior. For example, the General Aggression Model (Anderson & Bushman, 2002) has been applied to understand the perpetration of Cyber Dating Abuse (March et al., 2021).

When a spy wants to gather information about someone, there are three possible ways to extract it. They can observe from a distance. They can "bug" a device. Or they can masquerade as someone else to extract that information. Likewise, those engaging in intimate partner cyberstalking may employ these methods of getting information about romantic/sexual partners. In the current study, we found evidence of a multidimensional model of intimate partner cyberstalking, which includes passive, invasive, and duplicitous forms. We adopted an evolutionary perspective to understand intimate partner cyberstalking, theorizing this behavior as a low-risk mate strategy adopted (especially by women) to avoid potential mating mistakes. A particularly salient theoretical implication of the current study is the contribution of an evolutionary perspective to a growing body of theoretical research exploring cyberstalking (see Dhir et al., 2021). Replicating previous research, we found associations between all Dark Tetrad traits and overall intimate partner cyberstalking. We also found differential patterns of relationships between the traits and different forms of cyberstalking, attesting to the multidimensional nature of this behavior. These initial, exploratory results have significant theoretical implications for future research, providing scope to explore a range of predictors and outcomes associated with the three forms of intimate partner cyberstalking.

CRediT authorship contribution statement

Evita March: Conceptualization, Methodology, Formal analysis, Writing – original draft, Writing – review & editing, Visualization. **Piotr Szymczak:** Formal analysis, Writing – original draft, Writing – review & editing. **Melissa Di Rago:** Conceptualization, Methodology, Writing – original draft. **Peter K. Jonason:** Conceptualization, Methodology, Writing – review & editing, Supervision.

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Appendix A. Supplementary data

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