

IN NEGATIVE LIFE CONTEXTS MEN REPORT A LOWER DESIRE TO END RELATIONSHIP IF THEIR PARTNERS ARE HIGH IN BORDERLINE BEHAVIOURAL CHARACTERISTICS. A QUASIEXPERIMENTAL RESEARCH

<https://doi.org/10.21697/sp.2022.22.2.01>

VLAD BURTĂVERDE^{1*}, TODD K. SHACKELFORD²
ȘTEFAN-COSMIN IONESCU³, BUMBĂNAC MARIA¹, EUGEN AVRAM¹

¹ University of Bucharest, Romania

² Oakland University, USA

³ National School of Political and Administrative Studies, Romania

ABSTRACT

We investigated the relationship between borderline symptoms in women and their partner's desire to continue the relationship and relationship commitment in an aversive living environment using an experimental design. We aimed to highlight the adaptive mechanisms of borderline symptoms, which may materialize in reproductive advantages for women in aversive contexts. We conducted two experiments to test the same hypotheses. In Study 1, online participants were assigned to the experimental group ($N = 123$). The experimental scenario hypothesized having a relationship with a woman high in borderline characteristics, during an aversive life environment. The control group ($N = 118$) hypothesized having a relationship with a woman high in borderline characteristics, during normal living conditions. We repeated the same experimental manipulation using a within-subjects design in Study 2 ($N = 171$). Environmental conditions influenced the desire to end the relationship with women characterized by borderline symptoms; men had a lower desire to end the relationship with their partner in aversive life events than in normal living conditions. Thus, women's borderline behavioral characteristics may bring mating benefits in aversive living environments.

BORDERLINE PERSONALITY
MATING
LIFE HISTORY THEORY
EVOLUTIONARY PSYCHOPATHOLOGY

KEYWORDS

- | | |
|----|--|
| 7 | BORDERLINE PERSONALITY FROM AN EVOLUTIONARY PERSPECTIVE |
| 8 | BORDERLINE BEHAVIORAL CHARACTERISTICS IN WOMEN AND PARTNER'S RELATIONSHIP COMMITMENT |
| 9 | METHOD |
| 11 | RESULTS |
| 12 | DISCUSSION |



* CORRESPONDENCE ADDRESS

* University of Bucharest, Department of Psychology, Panduri avenue, no.90, Bucharest, Romania,

email: vlad.burtaverde@fpse.unibuc.ro

W NEGATYWNYCH KONTEKSTACH ŻYCIOWYCH MĘŻCZYŹNI ZGŁASZAJĄ MNIEJSZĄ CHĘĆ ZAKOŃCZENIA ZWIĄZKU, JEŚLI ICH PARTNERZY MAJĄ WYSOKIE CECHY TYPU BORDERLINE. BADANIA QUASI-EKSPERYMENTALNE

ABSTRAKT

Zbadaliśmy związek między objawami borderline u kobiet a chęcią ich partnera do kontynuacji związku i zaangażowaniem w związek w awersyjnym środowisku życia za pomocą projektu eksperymentalnego. Naszym celem było podkreślenie mechanizmów adaptacyjnych objawów borderline, które mogą przejawiać się w korzyściach reprodukcyjnych dla kobiet w kontekstach awersyjnych. Przeprowadziliśmy dwa eksperymenty, aby przetestować te same hipotezy. W badaniu 1 uczestnicy online zostali przydzieleni do grupy eksperymentalnej (N = 123). Scenariusz eksperymentalny zakładał związek z kobietą o wysokich cechach borderline, w awersyjnym środowisku życiowym. Grupa kontrolna (N = 118) postawiła hipotezę o związku z kobietą o wysokich cechach borderline, w normalnych warunkach życia. W Badaniu 2 (N = 171) powtórzyliśmy tę samą manipulację eksperymentalną, stosując podejście grup naprzemiennych. Warunki środowiskowe wpłynęły na chęć zakończenia związku z kobietami charakteryzującymi się objawami borderline; mężczyźni wykazywali mniejszą chęć zakończenia związku z partnerem w awersyjnych wydarzeniach życiowych niż w normalnych warunkach życia. Zatem behawioralne cechy borderline kobiet mogą przynosić korzyści włączeniu się w awersyjnych środowiskach życia.

SŁOWA KLUCZOWE

osobowość borderline, teoria historii życia, psychopatologia ewolucyjna

Credit author statement

Vlad Burtăverde: Conceptualization, Methodology, Data analysis, Data interpretation, Reviewing and Editing.

Todd K. Shackelford: Data interpretation, Reviewing and Editing.

Ștefan-Cosmin Ionescu: Reviewing and Editing, Data preparation

Maria Bumbănac: Conceptualization, Methodology, Data analysis

Eugen Avram: Reviewing and Editing, Methodology

Among all personality disorders, borderline personality disorder (BPD) may produce the most suffering and burden to individuals (Bouchard et al., 2009). BPD is characterized by a pattern of unstable and intense relationships, uncontrolled emotional reactions, and impulsivity (Sperry, 2016). Other symptoms include fear of abandonment, self-destructive behaviors and recurrent suicidal episodes, and a sense of inner emptiness (American Psychiatric Association, 2013). The American Psychiatric Association (2013) estimates that the prevalence of BPD to be between 1.6% and 5.9%. At least three-quarters of diagnosed patients attempt suicide, and 10% commit suicide (Black et al., 2004). The average number of suicide attempts is three, and the suicide rate is 400 times higher than in the general population (Oumaya et al., 2008). Women comprise about 75% of BPD diagnoses (American Psychiatric Association, 2013). Previous research focused on dysfunctional BPD symptoms in couples, highlighting low relationship satisfaction and emotional distress when one partner is diagnosed with BPD (Bouchard et al., 2009). Hill et al. (2011) also suggested that borderline symptoms are associated with dysfunctional romantic relationships. In this research, we investigate if the characteristics of BPD in women may offer them mating advantages in aversive life contexts: their partners should manifest a lower desire to end the relationship and higher relationship commitment in aversive living conditions compared to normal living conditions.

Like most psychopathologies, BPD is described and conceptualized as maladaptive. In psychology, other social sciences, and psychiatry, the term “adaptive” refers to behaviors and characteristics that contribute to health, quality of life, well-being, and functional social relations. “Maladaptive” is understood as socially undesirable or distressing (Del Giudice, 2014). However, the terms adaptive and maladaptive have different meanings in evolutionary biology. Regarding an individual organism, they refer to the fitness of that organism, which represents the transmission of its genes into the next generation (Buss, 2008). As such, adaptive traits maximize inclusive fitness, contributing to individual reproductive success in ancestral populations. Maladaptive traits impede the survival or reproductive success of the individual (West et al., 2007). Thus, the meanings of adaptive and maladaptive in biology are different from their use in the social sciences. This is mainly because natural selection targets reproductive success rather than well-being or happiness (Cosmides & Tooby, 1999). As such, characteristics that are adaptive from a biological perspective may be socially undesirable or may impede the individual’s well-being. This is also valid for psychopathology, for which symptoms may be adaptive traits or behaviors (Del Giudice, 2014). Typical examples include impulsive, aggressive, and exploitative behaviors. Many disorders list such behaviors as symptoms, but they may facilitate survival and reproduction in certain environments and contexts, such as in resource-scarce environments. Being selfish, exploitative, and impulsive in such environments may afford the individual somatic or reproductive advantages. Many disorders or symptoms, such as psychopathy, narcissism, aggression, risk-taking, autism, schizotypal traits, internalizing and externalizing symptoms, and eating disorders have been investigated from an evolutionary perspective (Barr & Quinsey, 2004; Figueredo & Jacobs, 2010; Del Giudice et al., 2010).

BORDERLINE PERSONALITY FROM AN EVOLUTIONARY PERSPECTIVE

Drawing on the above, we test the hypothesis that BPD symptoms may be adaptive from an evolutionary perspective. We can understand the adaptive nature of BPD characteristics

from the perspective of Life History Theory (Figueredo et al., 2006). This middle-level evolutionary theory notes that the energy of an organism is limited, and tradeoffs are requisite in allocating resources and energy to important life challenges (Szepeswol & Simpson, 2019). The theory proposes that the allocation of resources is performed on an r/K continuum in which one pole is represented by a fast strategy (r -selected traits), whereas the other pole is represented by a slow strategy (K -selected traits). The strategies aim to facilitate fitness (through tradeoffs) dependent on environmental conditions (Dunkel et al., 2011). Childhood environments characterized by harshness and unpredictability lead individuals to develop a fast life history strategy (e.g., early physical maturation, giving birth at a young age; Figueredo et al., 2004). The psychological or behavioral characteristics of individuals with a fast life history strategy are clustered around impulsivity and lowered empathy, and include orientation toward short-term gains and an opportunistic lifestyle, sexual variety, lower parental investment, disregard for social rules, lower social support, and extensive risk-taking (Figueredo et al., 2006).

BPD includes fast life history traits such as impulsivity, unstable attachments, risk-taking, promiscuous sexuality, anger, and aggressiveness (Brune et al., 2010; Brune, 2014, 2016), and childhood maltreatment (Ball & Links, 2009). From a life history perspective, individuals high in BPD symptoms may succeed in a harsh and unpredictable environment. For example, impulsivity and anger may lead to an exploitative and predatory interpersonal style and may help the individual gain access to resources in a scarce and competitive environment (Figueredo et al., 2006). Also, the feeling of emotional emptiness can lead the individual to take risky decisions that facilitate access to resources in a harsh environment. Therefore, harsh childhood environments shape the psychological mechanisms of individuals to adapt to such an environment during adulthood. Many of these mechanisms may be manifestations of BPD.

BORDERLINE BEHAVIORAL CHARACTERISTICS IN WOMEN AND PARTNER'S RELATIONSHIP COMMITMENT

The outcomes we focus on in the current research are related to mating and measured from the perspective of the partners of women with BPD behaviors: (1) continuing the relationship in aversive life contexts and (2) relationship commitment in aversive life contexts, both manifested by the partners of people with borderline behavioral characteristics. Given that women are more affected by BPD (American Psychiatric Association, 2013), we investigated men's desire to continue the relationship and their commitment in aversive life contexts if they are mated to women high in borderline symptoms.

The reasons we used these two behavioral indicators as mating advantages are as follows. Many couples decide to end the relationship when confronted with difficult living conditions and times (Zhu et al., 2021). By doing this, both partners must invest resources to attract a new mate, which may bring reproductive costs. Humans evolved mate retention strategies to prevent relationship defection and its costs (Buss & Shackelford, 1997). Behaviors that directly or indirectly encourage the partner to continue the relationship may be understood as mate retention strategies. These can range from benefit-provisioning behaviors, such as giving a partner gifts (which are lower-risk behaviors), to cost-inflicting behaviors, such as monopolizing a partner's time, which are higher-risk behaviors because they are more likely to drive away a partner (Buss, 1988).

We argue that many of the symptoms and characteristics of BPD in the case of women function as mate retention behaviors. We decided to consider only women for the behavioral prototype as borderline personality is mostly found in women (American Psychiatric

Association, 2013), which may lead to the idea that there are sex differences when it comes to the adaptiveness of borderline traits. For example, in terms of mating and relationship functioning, it may be more adaptive for women to be needy than for men, considering the stereotype perception that emotionally unstable men are weak.

Among social perceptions, masculinity and the male gender are described as having three major components: toughness, poise, and responsibility (Doss & Hopkins, 1998). When confronted with a situation in which his partner – a woman high in BPD characteristics – gets through an aversive life context (e.g., losing her job, having an ill family member, a personal loss, etc.), a man is expected to show care and compassion to her and to manifest a combination of two components of masculinity: responsibility and toughness. As such, by caring and showing responsibility, he should decide to remain in the relationship with his partner. A woman high in borderline symptoms is gripped by a deep sadness that she cannot handle and is overwhelmed, often crying frequently; she has trouble enjoying the small pleasures in life, and she is often afraid she will be abandoned; in addition, she often reports discomfort and irritability and is prone to self-harming. In harsh life situations such as those mentioned above, women high in BPD characteristics tend to be overwhelmed and express these negative emotional states and thoughts and communicate to their partners that they cannot go through this alone. To comply with the social identity of masculinity, her partner may show responsibility and help her in this harsh situation and, consequently, continue the relationship with her.

Conversely, in normal and prosperous living conditions, the man should not be overwhelmed by her emotional and cognitive problems when the woman does not get through harsh life events. He may be dissatisfied with their relationship and decide to leave her. Therefore, we argue that the BPD symptoms in women may function as mate retention strategies in harsh living conditions, which include harsh environments that facilitated fast life history strategies (Figueredo et al., 2006).

To sum up, in this research we investigate if the characteristics of BPD in women may offer them mating advantages in harsh life contexts: their partners should manifest a lower desire to end the relationship and higher relationship commitment in aversive living conditions compared to normal living conditions. We developed a scenario in which men had to imagine that they were in a relationship with a woman high in BPD symptoms and then rate their intention to end the relationship in aversive living conditions and in normal living conditions. These scenarios are described next. In Study 1, we tested the hypotheses using a between-subjects design, whereas in Study 2, we used a within-subject design.

METHOD

PARTICIPANTS

We used *G*Power* to determine the necessary sample size to obtain significant effect sizes. The minimum required sample size for effect size of .30, with alpha set at .95, and the statistical power set at .95 was 141 participants for each group. Participants were recruited online through a social media platform. We noted that only men at least 18 years old are eligible to participate. A convenience sample was used to comprise the experimental group, consisting of 123 participants, with an average age of 23.56 ($SD = 7.84$). The control group was comprised of 118 participants, with an average age of 23.48 ($SD = 6.89$). The initial group consisted of 135 responses in the experimental group, but 11 females and one 17-year-old male participant were excluded from the data analysis. The initial control group consisted of 120 participants; two women were excluded from the control group.

In the experimental group, 49.6% of respondents indicated that they are not in a romantic relationship, and 50.4% indicated that they are in a relationship. Among the participants in a relationship, 37.1% had a relationship of less than one year, 29.0% between 1 and 3 years, 14.4% between 3 and 5 years, and 19.4% over 5 years. In the control group, 39% of participants indicated that they are not in a romantic relationship, whereas 61% indicated that they are in a relationship. Of the latter, two respondents did not mention the duration of the relationship, 36.1% had a relationship of less than one year, 26.4% between 1 and 3 years, 15.3% between 3 and 5 years, and 19.4% over 5 years.

For study 2, we used *G*Power* to determine the necessary sample size to obtain significant effect sizes. The minimum required sample size for effect size of .30, with alpha set at .95, and the statistical power set at .95 was 45 participants. As in Study 1, participants were recruited online through a social media platform. It was mentioned that only men at least 18 years old are eligible to participate. A convenience sample was used, resulting in 171 participants, with an average age of 23.62 ($SD = 4.54$), of which 66.7% were in a relationship. Among the participants who reported that they were in a relationship, 22.6% were in the relationship for less than a year, 28.6% between one and 3 years, 8.9% between 3 and 5 years, and 6.5% longer than 5 years. The data of this research is available on Open Science Framework: <https://osf.io/um9qb/>

DESIGN AND PROCEDURE

We created two independent forms that contained the scenarios and the measures to be used in this quasi-experimental design—one for the experimental group and one for the control group. In the first form, we included the experimental condition, which asked participants to imagine that they are in a relationship with a woman that thinks, feels, and behaves specifically as a person with borderline personality symptoms. To create the borderline prototype, we used the behavioral anchors mentioned as diagnostic criteria in DSM-V (American Psychiatric Association, 2013; e.g., She is often afraid that she will be abandoned).

Considering this description, participants were presented a harsh life context that their partner must deal with right now. In these circumstances, they were asked to rate to what extent they intend to leave her and their relationship commitment (1 = *totally disagree*; 5 = *totally agree*). The scenarios presented to the participants can be found in Appendix 1.

In the second form, we included the control condition, which asked participants to imagine that they are in a relationship with a woman that thinks, feels, and behaves specifically as a person with borderline personality symptoms (as in the case of the experimental condition). After presenting the behavioral prototype, they were asked the degree they intend to leave her and to rate their relationship commitment (1 = *totally disagree*; 5 = *totally agree*). The behavioral borderline prototype was the same as in the experimental condition. The main difference was that in the control condition the harsh life context was absent.

We presented the behavioral prototype description to a group of psychology undergraduates who were asked to rate how representative that description is for a person with a borderline personality disorder on a rating scale from 1 to 10 (1 = *a very weak description*; 10 = *a very good description*). The behavioral description of the borderline prototype was perceived as a good description of the borderline personality prototype ($N = 31$, $M = 8.53$, $SD = 1.65$).

We presented the harsh living context to a group of undergraduates. We asked them to rate how representative that description of a harsh life context is on a rating scale from 1 to 10 (1 = *a very weak description*; 10 = *a very good description*). The description was perceived as a good description of an aversive living context ($N = 31$, $M = 8.00$, $SD = 1.67$).

In study 2, we constructed an online form that contained the scenarios and the measures to be used in this within-subject experimental design. We used the same scenarios and instruments as in Study 1. The only difference was that here we used a repeated-measures design. To control as much as possible the order and learning effect, we counterbalanced the participants. Half of them started the study with Condition B (stable environment) and half of them with Condition A (harsh environment). The participants were initially induced in Condition A, where they had to imagine that they were in a relationship with a woman that thinks, feels, and behaves specifically as a person with borderline personality symptoms. To create the borderline prototype, we used the behavioral anchors diagnostic criteria in DSM-V (American Psychiatric Association, 2013; e.g., She is often afraid that she will be abandoned). Considering this description, participants were presented a harsh life context that their partner must deal with right now. In these circumstances, they were asked to rate the extent to which they expected to end the relationship and their relationship commitment.

Condition B asked participants to imagine that they are in a relationship with a woman that thinks, feels, and behaves specifically as a person with borderline personality symptoms (as in the case of the experimental condition). After presenting the behavioral prototype, they were asked to rate the extent to which they expected to end the relationship and their relationship commitment without the harsh life context.

MEASURES

Relationship commitment was measured with the Triangular Love Scale - Commitment (Sternberg, 1997), containing 12 items scored on a 5-point Likert scale (1 = not characterizing me, 5 = characterizing me very much). For this scale, examples of items are: "I always feel a responsibility for my partner," "I am determined to continue the relationship with my partner." The score is calculated by summing responses to the items. The internal consistency coefficient was .92 for the control group and .92 for the experimental group. Participants from both groups responded, on a scale of 1 to 5, where 1 = I am not thinking of leaving her and 5 = I am very often thinking of leaving her, the degree to which they expected to end the relationship with the partner. It was also mentioned that the participants must relate to the potential relationship with the partner described above in the scenarios. Therefore, with these scenarios, we manipulated life conditions. In the experimental condition, a harsh life context was described, whereas there was no harsh life context described for the control group. In study 2 the measures were the same as in study 1.

RESULTS

In study 1, life conditions influenced men's expectation to end the relationship with women characterized by borderline symptoms, the model being significant with $F(1,237) = 10.52$, $p = .001$ such that men reported a lower desire to end the relationship with their partner in harsh life events than in normal living conditions. As such, the research hypothesis was partially supported by the data. Further, the environmental conditions did not influence the expected commitment to the relationship with a partner characterized by borderline symptoms, the model not being statistically significant with $F(1,237) = .64$, $p = .42$. Table 1 presents the means, standard deviations, and t-values for independent samples t-tests for the desire to end the relationship and relationship commitment in the experimental and control conditions.

In study 2, we tested the same hypothesis in a within-subject experimental design to overcome some of the limitations of a quasi-experimental design (e.g., lack of randomization and the presence of confounding variables). As expected, the desire to end the relationship in harsh conditions was strongly related to desire to end the relationship in normal living conditions ($r = .71, p = .001$). The desire to end the relationship was negatively related to relationship commitment in harsh ($r = -.54, p = .001$) and normal conditions ($r = -.48, p = .001$). Also, the desire to end the relationship in normal conditions was negatively associated with relationship commitment in harsh ($r = -.49, p = .001$) and normal conditions ($r = -.57, p = .001$). Relationship commitment in harsh conditions was strongly related to relationship commitment in normal living conditions ($r = .80, p = .001$). Tables 3 presents the means, standard deviations, and t-values for dependent samples t-tests for the desire to end the relationship and relationship commitment.

Environmental conditions influenced the desire to end the relationship with women characterized by borderline symptoms, the model being significant with [$F(1, 170) = 6.13, p < .05, \eta^2 = .04$], such that men reported a lower desire to end the relationship with their partner in harsh life events than in normal living conditions. As such, the research hypothesis was partially supported by the data. Further, the environmental conditions did not influence relationship commitment with a partner characterized by borderline symptoms, the model not being statistically significant, with [$F(1, 170) = 0.14, p > .05, \eta^2 < .01$].

Using a within-subject experimental design, we found that men intend less to end the relationship with a woman with borderline behavioral characteristics in harsh life conditions, compared to normal living conditions. Relationship commitment did not differ in the two experimental conditions. These findings are similar to those reported for Study 1, increasing the internal validity of the research. This partially supports the hypothesis that borderline behavioral characteristics may represent adaptations that afford mating advantages for women.

DISCUSSION

This research aimed to test if women with borderline behavioral characteristics have a mating advantage because their partners do not end the relationship when they experience aversive life events, and also are more committed to the relationship. Study 1 and Study 2 findings suggested that in aversive living conditions, a man will be more likely to remain in a relationship with a woman characterized by symptoms of borderline personality disorder, choosing not to leave her.

Previous research showed that borderline symptoms are linked with negative outcomes in couples, such as low relationship satisfaction and high emotional distress (Blanchard et al., 2021; Bouchard et al., 2009). Consequently, from what we know, our research is among the few that have tested if borderline behavioral characteristics may be understood from an adaptive and evolutionary perspective and if there are mating benefits for women affected by these symptoms.

We found that when men imagined they were mated to a woman with borderline behavioral characteristics who experienced a aversive life context, the desire to end the relationship was lower than in the control condition. Our findings extend prior research. For example, Brüne et al. (2010) sought to identify whether BPD, framed as a fast life strategy, described a mating strategy with adaptive benefits. Their findings indicated that in unsafe living environments, women characterized by borderline symptoms have a competitive advantage in mating, being more attractive to men. They showed that BPD could be considered an evolutionary mating strategy, going beyond the costs involved and analyzing the benefits that women can use to facilitate reproduction in unstable environments.

A possible explanation of the fact that in aversive living conditions a man is more likely to remain in a relationship with a woman characterized by symptoms of borderline personality disorder, choosing not to leave her, is that a man when confronted with a situation when his partner – a woman high in BPD characteristics – gets through an aversive life context would show caring and compassion to her and manifest a combination of three major components of masculinity: responsibility, poise, and toughness. Consequently, as we expected, some of the BPD behavioral characteristics may be understood as mate retention behaviors in the case of women, as they help them remain in a relationship in hard times. This finding is another indicator that the symptoms of BPD may be understood as manifestations of a fast life history strategy (Del Giudice et al., 2014), as they might be adaptive only in aversive and harsh life contexts.

Men did not rate their relationship commitment differently in harsh and normal living conditions. This may be explained by the fact that commitment is built on communication and emotional and attitudinal bonding (Sternberg, 1986). Individuals with borderline behavioral characteristics manifest an aggressive communication style and unstable emotional reactions (Sperry, 1986). Therefore, men mated to women with borderline symptoms may find it hard to develop their relationship commitment because of such emotional and communication incongruencies.

Our research has theoretical implications for evolutionary psychopathology. We highlighted potential mating benefits of borderline symptoms, supporting the idea that personality disorders favored, to some degree, survival or reproduction of the individuals characterized by them (Del Giudice, 2014). This can be supported by the fact that the specific symptoms of certain disorders have not disappeared over time, but have continued to appear, favoring adaptation and survival in certain situations, such as in unsafe living environments, in which women with these symptoms enjoy mating benefits, as, for example, in a couple's relationship, the borderline symptoms of women may facilitate greater responsibility by men, who choose not to leave their partners.

Even if we discussed BPD symptoms as adaptive, readers should not understand that we argue that personality disorders or other disorders are desirable and beneficial. In this regard, it is important to distinguish between the adaptive nature of characteristics, averaged across all the individuals who possess them, and how adaptive it is for a particular individual. In some situations, a characteristic may be selected even if most of the individuals that possess it suffer (Frankenhuis & Del Giudice, 2012). In this regard, the rewards of the few balance these potential costs. Moreover, symptoms characteristic of psychiatric disorders—but not necessarily the disorder itself—may represent adaptive strategies. Even if only some characteristics of a disorder are adaptive, the disorder may be retained in the population due to extreme variation in gene combinations (Del Giudice et al., 2014).

LIMITATIONS AND CONCLUSIONS

Even if this is the first experimental research that investigated the adaptive nature of women's BPD symptoms in mating contexts, it has limitations. First, we relied on convenience samples, which could affect the generalizability of the findings (Simons et al., 2017). Second, a between-subject experimental design with no randomization may involve individual differences that represent confounding variables that affect causality. Third, we relied only on reports of young men that may not have sufficient mating experience, which may alter how men would behave in real-life mating situations. Fourth, we used scenario-induced manipulation, in which participants had to imagine they are in a relationship with women characterized by borderline behavioral characteristics, which may lead to different judgments in terms of desire to end the relationship and commitment compared to real-life mating

experiences. Future studies should control for individual differences in participants and use randomization and a more balanced sample in terms of participant age.

From what we know, this is among the few studies that try to understand borderline personality from an evolutionary perspective. We showed that in aversive living conditions, a man is more likely to remain in a relationship with a woman characterized by symptoms of BPD disorder, choosing not to leave her. As such, some of the BPD behavioral characteristics may be understood as mate retention behaviors in the case of women, as they help them remain in a relationship in hard times.

Table 1. Mean, standard deviations, and t-values for independent samples t test for the desire to end the relationship and relationship commitment (Study 1 and 2)

Dependent variables	Aversive conditions (Experimental group)	Stable environment (control group/post-test)	<i>t</i>	<i>d</i>
	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)		
Desire to end the relationship (study 1)	2.06 (1.22)	2.59 (1.32)	-3.24**	0.41
Desire to end the relationship (study 2)	2.20 (1.21)	2.38 (1.25)	-2.51**	0.14
Relationship commitment (study 1)	3.54 (0.91)	3.65 (0.88)	-0.93	0.12
Relationship commitment (study 2)	3.62 (0.83)	3.64 (0.82)	-0.36	0.02

** = $p < .01$

Table 2. Correlations between all study variables (study 1)

Variable	1	2	3	4
1. Desire to end the relationship (aversive conditions)	-			
2. Desire to end the relationship (positive conditions)	.71**	-		
3. Commitment (aversive)	-.54**	-.49**	-	
4. Commitment (normal conditions)	-.48**	-.57**	.80**	-

** = $p < .01$

APPENDIX

The scenarios used to manipulate harsh life events in study 1 and study 2.

Imagine that you are in a relationship with a partner characterized by the following: She is often gripped by a deep sadness that she cannot handle and is overwhelmed by crying. She feels tense and panicked. She has trouble enjoying life's little pleasures; she says she can't feel anything. She is often afraid that she will be abandoned. She often reports discomfort and irritability. She has difficulty finding herself; she often says she doesn't know herself, she doesn't know who she really is. She is impulsive and prone to various addictions and addictions (e.g., alcohol, tobacco addiction, etc.). It is very difficult for her to manage her strong emotions, such as anger. She experiences interpersonal relationships very passionately and intensely, but she can oscillate in the way she relates to her partner (to you), she can idolize you, and on another day, she will resent you or criticize you for things. She often thinks of committing suicide.

Your partner is currently going through a very difficult time professionally, having problems at work due to a very high volume of work she has been facing lately and due to an authoritarian boss. She also recently received news from her doctor that she is facing some health problems. This news overwhelmed her, as she was already emotionally affected due to her mother's serious

health condition. Given the context described above, respond on a scale of 1 to 5 (1 = I don't think about leaving her at all and 5 = I think about leaving her very often) the degree to which you plan to leave her (ending the relationship).

REFERENCES

- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). <https://doi.org/10.1176/appi.books.9780890425596>
- Barr, K.N., & Quinsey, V.L. (2004). Is psychopathy pathology or a life strategy? Implications for social policy. In C.Crawford & C.Salmon (Eds.), *Evolutionary psychology, public policy and personal decisions* (pp. 293–317). Mahwah, NJ: Erlbaum.
- Black, D.W., Blum, N., Pfohl, B., & Hale, N. (2004). Suicidal behavior in borderline personality disorder: prevalence, risk factors, prediction, and prevention. *Journal of Personality Disorders, 18*, 226–239. <https://doi.org/10.1521/pedi.18.3.226.35445>
- Blanchard, A.E., Dunn, T.J., & Sumich, A. (2021). Borderline personality traits in attractive women and wealthy low attractive men are relatively favoured by the opposite sex. *Personality and Individual Differences, 109964*. doi:10.1016/j.paid.2020.109964
- Bouchard, S., Godbout, N., & Sabourin, S. (2009). Sexual attitudes and activities in women with borderline personality disorder involved in romantic relationships. *Journal of sex & marital therapy, 35*(2), 106–121. <https://doi.org/10.1080/00926230802712301>
- Brüne, M., Ghiassi, V., & Ribbert, H. (2010). Does borderline personality disorder reflect the pathological extreme of an adaptive reproductive strategy? Insights and hypotheses from evolutionary life-history theory. *Clinical Neuropsychiatry: Journal of Treatment Evaluation, 7*(1), 3–9.
- Brüne, M. (2014). Life history theory as organizing principle of psychiatric disorders: Implications and prospects exemplified by borderline personality disorder. *Psychological Inquiry, 25*(3-4), 311–321. <https://doi.org/10.1080/1047840X.2014.914120>
- Brüne M. (2016). Borderline Personality Disorder: Why 'fast and furious'? *Evolution, Medicine, and Public Health, 1*(1), 52–66. <https://doi.org/10.1093/emph/eow002>
- Buss, D.M. (1988). The evolution of human intrasexual competition: tactics of mate attraction. *Journal of Personality and Social Psychology, 54*(4), 616.
- Buss, D.M. (2008). Human nature and individual differences: Evolution of human personality. In O.P. John, R.W. Robins, & L.A. Pervin (Eds.), *Handbook of Personality: Theory and Research* (pp. 29–60). New York, NY: The Guilford Press.
- Buss, D.M., & Shackelford, T.K. (1997). From vigilance to violence: Mate retention tactics in married couples. *Journal of Personality and Social Psychology, 72*(2), 346–361. <https://doi.org/10.1037/0022-3514.72.2.346>
- Cosmides, L., & Tooby, J. (1999). Toward an evolutionary taxonomy of treatable conditions. *Journal of Abnormal Psychology, 108*(3), 453–464. <https://doi.org/10.1037/0021-843X.108.3.453>
- Del Giudice, M., Angeleri, R., Brizio, A., & Elena, M.R. (2010). The evolution of autistic-like and schizotypal traits: A sexual selection hypothesis. *Frontiers in Psychology, 1*, 41. <https://doi.org/10.3389/fpsyg.2010.00041>
- Del Giudice, M. (2014). An evolutionary life history framework for psychopathology. *Psychological Inquiry, 25*(3-4), 261–300. <https://doi.org/10.1080/1047840X.2014.884918>
- Doss, B.D., & Hopkins, J.R. (1998). The multicultural masculinity ideology scale: Validation from three cultural perspectives. *Sex Roles, 38*(9), 719–741. <https://doi.org/10.1023/A:1018816929544>
- Dunkel, C.S., Mathes, E., & Harbke, C. (2011). Life history strategy, identity consolidation, and psychological well-being. *Personality and Individual Differences, 51*(1), 34–38. <https://doi.org/10.1016/j.paid.2011.03.005>
- Figueredo, A.J., Vasquez, G., Brumbach, B.H., & Schneider, S.M. (2004). The heritability of life history strategy: The K-factor, covitality, and personality. *Social Biology, 51*(3-4), 121–143. <https://doi.org/10.1080/19485565.2004.9989090>
- Figueredo, A.J., Vásquez, G., Brumbach, B.H., Schneider, S.M., Sefcek, J.A., Tal, I. R., ... & Jacobs, W.J. (2006). Consilience and life history theory: From genes to brain to reproductive strategy. *Developmental Review, 26*(2), 243–275. <https://doi.org/10.1016/j.dr.2006.02.002>
- Figueredo, A.J., & Jacobs, W.J. (2010). Aggression, risk-taking, and alternative life history strategies: The behavioral ecology of social deviance. In M. Frias-Armenta & V. Corral-Verdugo (Eds.), *Biopsychosocial perspectives on aggression* (pp. 3–27). Hauppauge, NY: Nova Science.
- Frankenhuis, W.E., & Del Giudice, M. (2012). When do adaptive developmental mechanisms yield maladaptive outcomes? *Developmental Psychology, 48*, 628–642. <https://doi.org/10.1037/a0025629>
- Hill, J., Stepp, S.D., Wan, M.W., Hope, H., Morse, J.Q., Steele, M., Steele, H., & Pilkonis, P.A. (2011). Attachment, borderline personality, and romantic relationship dysfunction. *Journal of personality disorders, 25*(6), 789–805. <https://doi.org/10.1521/pedi.2011.25.6.789>
- Jonason, P. K., Li, N. P., Webster, G. D., & Schmitt, D.P. (2009). The dark triad: Facilitating a short-term mating strategy in men. *European Journal of Personality, 23*(1), 5–18. <https://doi.org/10.1002/per.698>
- Oumaya, M., Friedman, S., Pham, A., Abou Abdallah, T., Guelfi, J.-D., & Rouillon, F. (2008). Personnalité borderline, automutilations et suicide : revue de la littérature. *L'Encéphale, 34*(5), 452–458. doi:10.1016/j.encep.2007.10.007
- Salmon, C., Figueredo, A.J., & Woodburn, L. (2009). Life history strategy and disordered eating behavior. *Evolutionary Psychology, 7*(4), 147470490900700408. <https://doi.org/10.1177/147470490900700408>
- Simons, D.J., Shoda, Y., & Lindsay, D.S. (2017). Constraints on generality (COG): A proposed addition to all empirical papers. *Perspectives on Psychological Science, 12*(6), 1123–1128. <https://doi.org/10.1177/1745691617708630>
- Sperry, L. (2016). *Handbook of diagnosis and treatment of DSM-5 personality disorders: Assessment, case conceptualization, and treatment*. Routledge.
- Sternberg, R.J. (1997). Construct validation of a triangular love scale. *European Journal of Social Psychology, 27*(3), 313–335. [https://doi.org/10.1002/\(SICI\)1099-0992\(199705\)27:3<313::AID-EJSP824>3.0.CO;2-4](https://doi.org/10.1002/(SICI)1099-0992(199705)27:3<313::AID-EJSP824>3.0.CO;2-4)
- Szepeswol, O., & Simpson, J.A. (2019). Attachment within life history theory: An evolutionary perspective on individual differences in attachment. *Current opinion in psychology, 25*, 65–70. <https://doi.org/10.1016/j.copsy.2018.03.005>

Burtăverde, V., Shackelford, T.K., Ionescu, Ș.-C., Bumbănc, M., Avram, E. (2022), In negative life contexts men report a lower desire to end relationship if their partners are high in borderline behavioral characteristics. A quasi-experimental research. *Studia Psychologica: Theoria et Praxis, 22*(2), 5–16. <https://doi.org/10.21697/sp.2022.22.2.01>

West, S.A., Griffin, A.S., & Gardner, A. (2007). Social semantics: altruism, cooperation, mutualism, strong reciprocity and group selection. *Journal of Evolutionary Biology*, 20(2), 415-432. <https://doi.org/10.1111/j.1420-9101.2006.01258.x>

Zhu, Y., Xie, J., & Yu, Y. (2021). Effect of home isolation on domestic violence and divorce in China during COVID-19 pandemic. *Psychiatry Research*, 306, 114234. [10.1016/j.psychres.2021.114234](https://doi.org/10.1016/j.psychres.2021.114234)

