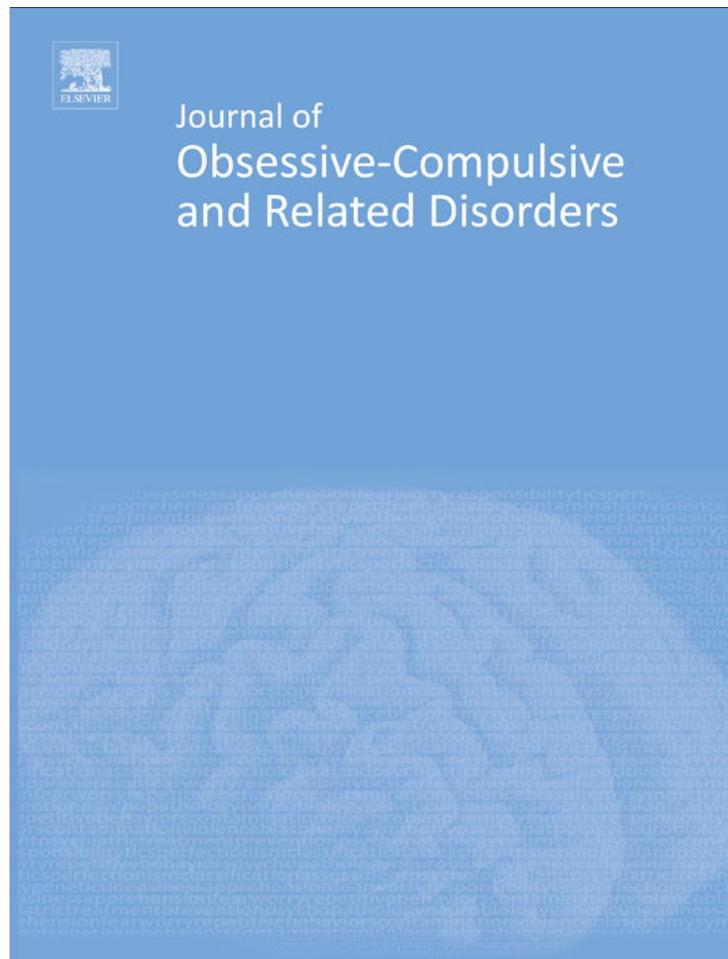


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## Flaws and all: Exploring partner-focused obsessive-compulsive symptoms

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## ABSTRACT

Obsessive-compulsive disorder (OCD) is a disabling disorder with a variety of clinical presentations. Recently, research has begun to explore relationship-centered obsessive-compulsive (OC) symptoms, which include obsessions, checking, and reassurance seeking behaviors centered on an individual's feelings towards his or her partner and the "rightness" of their relationship. The present investigation extends previous research by examining OC symptoms focused on one's partner's perceived flaws. We report on the development and validation of the Partner-Related Obsessive-Compulsive Symptoms Inventory (PROCSI), a 24-item self-report scale assessing the severity of partner-focused OC symptoms in six domains: physical appearance, sociability, morality, emotional stability, intelligence and competence. The PROCSI was found to be internally consistent, and its factorial structure was supported by confirmatory factor analysis. Moreover, the PROCSI showed the expected associations with measures of OCD symptoms and cognitions, negative affect and relationship functioning, and significantly predicted depression and relationship-related distress over and above other symptom and relationship measures (Study 1). In addition, longitudinal analyses suggested reciprocal links between relationship-centered OC symptoms and partner-focused OC symptoms. Links between body dysmorphic concerns and partner-focused OC symptoms were also found (Study 2). Implications for theory and treatment are discussed.

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## 1. Introduction

Obsessive-compulsive disorder (OCD) is a severe anxiety disorder marked by the presence of obsessions and compulsions. Obsessions are unwanted and disturbing intrusive thoughts, images, or impulses that lead to anxiety or distress. Compulsions are repetitive behaviors or mental acts that aim to eliminate distress or prevent the occurrence of feared events associated with the intrusions (American Psychiatric Association [APA], 2000; Rachman, 1997). While the presence of either obsessions or compulsions is sufficient for OCD diagnosis (DSM-IV-TR; 4th ed., text rev.; American Psychiatric Association, 2000), most clinical presentations include both types of symptoms (Foa & Kozak, 1995).

In recent years there has been a growing recognition of the complex and heterogeneous nature of OCD (e.g., Clark & Beck, 2010; McKay et al., 2004). Commonly identified and researched obsessional themes include contamination fears, pathological doubts, hoarding, need for symmetry or order, sexual, aggressive, or religious obsessions, and scrupulosity (Abramowitz, McKay, & Taylor, 2008; McKay et al., 2004; Taylor, 2005). One theme that

has only recently begun to be systematically explored is relationship-centered obsessive-compulsive phenomena—preoccupation, doubts, and neutralizing behaviors related to one's feelings towards a relationship partner, the partner's feelings towards oneself, and the "rightness" of the relationship experience (Doron, Derby, Szepeswol, & Talmor, 2012). In the present research, we examine an additional aspect of relationship-related obsessive-compulsive (OC) phenomena—disabling preoccupation with the perceived flaws of one's relationship partner.

## 2. Relationship-centered obsessive-compulsive symptoms

Previous research has indicated that, compared with the general population, OCD patients often report disturbances in relationship functioning, including lower likelihood of marrying and increased marital distress (Emmelkamp, de Haan, & Hoogduin, 1990; Rasmussen & Eisen, 1992; Riggs, Hiss, & Foa, 1992). Recently, Doron et al. (2012) proposed that OC phenomena affect intimate relationships more directly when the main focus of the symptoms is the relationship itself. Doron et al. (2012) conducted two independent studies using community cohorts to assess relationship-centered OC phenomena and its links with related constructs. In the first study, Doron et al. (2012) examined the factorial structure of a newly constructed self-report

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measure—the Relationship Obsessive-Compulsive Inventory (ROCI). This 12-item measure taps the severity of obsessive (e.g., preoccupation and doubts) and compulsive (e.g., checking and reassurance seeking) behaviors on three relational dimensions: one's feelings towards a relationship partner (e.g., “I continuously reassess whether I really love my partner”), the partner's feelings towards oneself (e.g., “I continuously doubt my partner's love for me”), and the “rightness” of the relationship (“I check and recheck whether my relationship feels right”). Results from this study supported a three-factor structure of the ROCI above two alternative measurement models and indicated that the three scales were highly reliable (Cronbach Alphas ranging from .84 to .89).

In a second study, Doron et al. (2012) replicated the factor structure of the ROCI and assessed the link between relationship-centered OC phenomena, OCD symptoms and cognitions, negative affect, low self-esteem, and relationship variables such as relationship ambivalence and attachment insecurity. Findings showed the expected positive associations between ROCI scores and these theoretically related measures. Moreover, the ROCI significantly predicted relationship dissatisfaction and depression over and above common OCD symptoms, relationship ambivalence, and other mental health and relationship insecurity measures.

Doron et al. (2012) proposed several mechanisms that may make relationship-centered OC symptoms particularly disabling. For instance, they suggested that symptoms such as repeated doubting about one's feelings towards a partner or the “rightness” of a relationship may destabilize the relational bond (e.g., “I can't trust her/him to stay with me”), increase fears of abandonment, promote relationship distress, and challenge mutual trust. In addition, continuous preoccupation with a partner's love may increase clinging and dependent behaviors resulting in maladaptive relationship dynamics (e.g., hierarchical relationships). Thus, relationship-centered OC symptoms can compromise satisfactory intimate relationships that are an important resource for individuals' resilience and wellbeing.

### 3. Partner-focused obsessive-compulsive symptoms

Relationship-centered OC symptoms may be particularly detrimental to relationship quality. Yet, OC symptoms can affect relationships in additional ways. As intimate relationships progress, more attention is paid to one's partner's real or imagined faults (Hatfield & Sprecher, 1986; Sprecher & Metts, 1999). In fact, accepting that one's partner is less-than-perfect may be one of the most challenging aspects in the development of a long-term stable relationship (Murray & Holmes, 1993). It seems that forming a more balanced and realistic assessment of one's relationship partner, including their perceived flaws and deficits, is a necessary element in long-term relational involvements (Thompson & Holmes, 1996). For some individuals, however, preoccupation with the perceived deficits of their partner becomes increasingly time consuming, distressing, and a significant cause of dyadic distress (e.g., Josephson & Hollander, 1997).

One example is Mike, a 28-year-old married man, who arrived at our clinic and described the following problem: “I am very unsettled. I am constantly preoccupied with my wife's emotional imbalance. She overreacts to every minor conflict or challenge she encounters at work. Every time it happens I think to myself ‘what kind of mother is she going to be, she is not balanced enough, I will not be able to live like this’. It takes me weeks to get over it and stop thinking about it, but then it happens again and again. I keep thinking about it all the time. It really distresses me. I know

all of her good qualities and I know she loves me. I know I am overreacting, but I just can't let it rest”.

For Jennifer, a 25-year-old successful business woman, difficulties with her husband's potential to succeed are the main issue of preoccupation: “I can't explain it really, I know it is not really important, but how is he going to succeed in life if he doesn't have the passion and the motivation to succeed? I can't stop thinking he is a looser, and it just won't work. Then, I start obsessing about who will provide for me and the children, as he won't be able to. I reassure myself all the time that it is my problem, but every time he talks about his job or his interests I try to assess whether he's got what it takes to make it in this world. I love him and I think he will make an excellent father, and when I think about it rationally I don't think it's an issue; it's just my fears of what will be. But still, it depresses me a lot and it really hurts our relationship”.

Mike and Jennifer exemplify a type of relationship-related OC phenomenon seen in the clinic that involves intense preoccupation with one's partner's perceived deficits and alleged flaws. Perceived partner flaws often relate to physical features (e.g., “his ‘crooked’ nose”; see Josephson & Hollander, 1997 for such a case example), social qualities (e.g., “he is not social enough”, “she does not have what it takes to succeed in life”), or personality attributes such as morality, intelligence, or emotional stability (e.g., “he is not intelligent enough”, “he is not emotionally stable”). As seen in these examples, preoccupation with one's partner's alleged faults may be associated with disabling personal and dyadic distress, interfering with the individual's social, occupational, and individual functioning.

### 4. The cognitive substrate of partner-focused OC phenomena

Cognitive behavioral models stipulate the central role of dysfunctional appraisals of internal or external stimuli in the development and maintenance of OCD related disorders. According to such models (e.g., Rachman, 1997; Storch, Abramowitz, & Goodman, 2008; Wilhelm, Buhlmann, Cook, Greenberg, & Dimaitre, 2010; Wihlem & Neziroglu, 2001), naturally occurring phenomena become chronic preoccupation as a result of catastrophic misinterpretations of such stimuli. In the case of OCD, individuals catastrophically interpret commonly occurring intrusive thoughts as indicating danger that the individual is responsible for averting (Rachman, 1997; Salkovskis, 1985). Similarly, in the case of body dysmorphic disorder (BDD), an OCD related disorder, individuals catastrophically misinterpret visual input, esthetic features and minor flaws in their own appearance, as well as the consequences of such flaws (e.g., “people will be disgusted of me”; Wilhelm et al., 2010; Veal, 2004).

Cognitive biases such as perfectionism and threat overestimation increase the likelihood of such catastrophic interpretations in OCD and related disorders (Obsessive Compulsive Cognitions Working Group, 2005; Shafran & Mansell, 2001; Storch et al., 2008). These interpretations, in turn, increase selective attention towards the potentially distressing stimuli (Obsessive Compulsive Cognitions Working Group, 1997; Veal, 2004). Moreover, ineffective affect regulation strategies such as repeated checking and reassurance seeking paradoxically exacerbate the frequency and impact of such preoccupations.

Partner-focused obsessive-compulsive phenomena may involve similar cognitive processes. Specifically, cognitive biases found to be associated with OCD related disorders may influence the perception of the partner's attributes and, consequently, the relationship experience. For instance, perfectionist tendencies may lead to extreme preoccupation with specific features of a romantic partner's personality or appearance (e.g., “she is not moral enough”, “her nose is too big”). Threat overestimation may

bias individuals' interpretations of the severity and consequences of these perceived deficits (e.g., "he is extremely unstable, hence he will never be able to provide for our family"). Finally, the tendency to overestimate the importance of mere thought occurrences (Clark & Purdon, 1993) may increase the likelihood of suppressing negative thoughts about the partner, thereby increasing their occurrence (Rachman, 1997).

Individuals who attribute importance to the romantic domain but feel inadequate or insecure in this domain may be especially vulnerable to the cognitive biases described above (Doron & Kyrios, 2005; Doron, Sar-El & Mikulincer, 2012). This, in turn, may lead to intense relational distress and anxiety, and may lead to the adoption of extreme measures aimed at reducing distress, such as repeated checking (e.g., "Does he/she have the same flaw?", "How does he behave in social situations?"). Such intrusions may also lead individuals to avoid situations wherein perceived partner deficits could be viewed by others and social comparison processes are likely to be triggered (e.g., with other couples).

Our clinical experience suggests that it is not uncommon for partner-focused OC symptoms to be associated with relationship-centered OC symptoms. In fact, doubts regarding the relationship often co-occur with preoccupation regarding the negative attributes of relationship partners. Like relationship-centered OC symptoms, partner-focused OC symptoms are experienced as less wanted and more unacceptable than common relationships worries, and often contradict one's overall evaluation of the partner and the relationship experience (e.g., "He loves me and he is good to me, but I can't get rid of the thought that he is not intelligent enough"). Like in other forms of OCD, such preoccupations tend to be perceived by the individual as exaggerated or irrational, and often result in severe anxiety and repetitive neutralizing behaviors that impair the affected individual's daily life and relationship quality (Josephson & Hollander, 1997). Unfortunately, to date, no programmatic research has been conducted on partner-focused OC symptoms and their associations with relationship-centered OC symptoms. Moreover, we need a reliable and valid measure tapping partner-focused OC symptoms in order to study their prevalence, underlying cognitive-affective processes, personality and relational antecedents, and consequences for psychological functioning, mental health, and relationship quality. The current studies are designed to begin to fill this empirical gap.

## 5. Study 1

The main goal of Study 1 was to construct a self-report measure tapping OC symptoms relating to one's relationship partner – the Partner-Related Obsessive-Compulsive Symptoms Inventory (PROCSI) – and to examine its reliability and factor structure. Items were generated in an effort to represent obsessions (i.e., preoccupations and doubts) and neutralizing behaviors (i.e., checking) focused on certain qualities of a relationship partner. Based on clinical experience with OCD clients presenting with partner-focused OC phenomena, we identified six relevant partner qualities – physical appearance, sociability, morality, emotional stability, intelligence and competence – and included them in the PROCSI. A second goal of Study 1 was to assess the construct validity of the PROCSI by examining its associations with other theoretically related constructs, such as relationship-centered OC symptoms, typical OC symptoms and beliefs, negative affect, low self-esteem, relationship dissatisfaction, and attachment insecurity.

As commonly practiced in OCD studies, our sample was drawn from the general community. Like clinically diagnosed

individuals, nonclinical individuals tend to engage in compulsive behaviors to alleviate distress, (e.g., Muris, Harald, & Clavan, 1997). Furthermore, taxometric studies of OCD (e.g., Haslam, Williams, Kyrios, McKay, & Taylor, 2005) have found that OCD symptoms and OC-related beliefs are best conceptualized as continuous-dimensional rather than categorical.

### 5.1. Method

#### 5.1.1. Generation of items

The first two authors (GD, DD), drawing on their extensive clinical experience treating individuals with OCD, generated a pool of 34 items based on interviews with OCD patients. The face validity of these items was assessed in relation to the six hypothesized partner-focused OC categories. Items inquired about various obsessive thoughts and compulsive behaviors focused on the qualities of one's partner. Participants were asked to rate the extent to which such thoughts and behaviors described their experiences with regard to their relationship partner on a 5-point scale ranging from 0 (*not at all*) to 4 (*very much*). In addition, seven reversed items were created in order to disrupt response patterns, thereby increasing the overall number of items to 41. Participants who were not in a relationship at the time of the study were asked to refer to their thoughts and behaviors in previous relationships.

Items were originally written in Hebrew, and then translated into English by the first and third authors (GD, OS). The English items were translated back to Hebrew by an independent researcher not associated with the project. This translation was very similar to the original version, confirming high congruence between the Hebrew and English versions.

#### 5.1.2. Participants

The sample consisted of 385 Israeli participants from the general population (225 women ranging in age from 17 to 67 years, *Mdn*=34; and 160 men ranging in age from 18 to 75, *Mdn*=38) who were recruited via *Midgam.com*, an Israeli online survey platform. Out of these participants, 333 were in an intimate relationship at the time of the study, 48 were single at the time of the study, and four did not reveal their relationship status. The median relationship length was 60 months. Participants' education ranged from 9 to 24 years (*Mdn*=14). Participants completed an online informed consent form in accordance with the University Institutional Review Board. They were requested to complete the study in one session (as the website allows one entry per participant) and were reimbursed 20 NIS (around \$5) for their time.

#### 5.1.3. Materials and procedure

The study was administered online using the web-based survey platform *www.midgam.com*. Responses were saved anonymously on the server and downloaded for analysis. All participants completed the 41 PROCSI items in Hebrew. In addition, 185 of the participants completed Hebrew versions of the Obsessive-Compulsive Inventory (OCI-R; Foa et al., 2002), the short form of the Obsessive Beliefs Questionnaire (OBQ-20; Moulding et al., 2011), the short form of the Depression Anxiety Stress Scales (DASS-21; Antony, Bieling, Cox, Enns, & Swinson, 1998; Clara, Cox, & Enns, 2001; Henry & Crawford, 2005), the Single-Item Self-Esteem Scale (SISE; Robins, Hendin, & Trzesniewski, 2001), the Relationship Assessment Scale (RAS; Hendrick, Dicke, & Hendrick, 1998), the short form of the Experiences in Close Relationships scale (ECR-12; Wei, Russell, Mallinckrodt, & Vogel, 2007) and the Relationship Obsessive-Compulsive Inventory (ROCI; Doron et al., 2012).

The Obsessive-Compulsive Inventory (OCI-R; Foa et al., 2002) is an 18-item self-report questionnaire assessing OCD symptoms. Participants were asked to rate the degree to which they were bothered or distressed by OCD symptoms in the past month on a 5-point scale ranging from 0 (*not at all*) to 4 (*extremely*). The OCI-R assesses OCD symptoms across six factors: (1) washing, (2) checking/doubting, (3) obsessing, (4) mental neutralizing, (5) ordering, and (6) hoarding. Previous data suggested that the OCI-R possesses good internal consistency for the total score (alphas ranging from .81 to .93 across samples), although internal consistency was less strong for certain subscales in nonclinical participants (.34 for mental neutralizing and .65 for checking; Foa et al., 2002). Test-retest reliability has been found to be adequate (.57–.91 across samples; Foa et al., 2002). In our study, the internal consistencies of the subscales (Cronbach's alphas) ranged from .67 to .86. The internal consistency for the total scale was .90.

The short form of the Obsessive Beliefs Questionnaire (Moulding et al., 2011) is an abbreviated version of the 44-item Obsessive Beliefs Questionnaire-Revised (Obsessive Compulsive Cognitions Working Group, 2005), a self-report measure of pan-situational cognitions associated with OCD, which was developed collaboratively by many of the prominent cognitive researchers of OCD. The 20-item OBQ loads on four domains represented in four subscales: (1) responsibility, consisting of 5 items concerning the responsibility for bad things happening; (2) threat overestimation, consisting of 5 items about preventing harm from happening to oneself or others; (3) perfectionism/uncertainty, consisting of 5 items reflecting high standards, rigidity, concern over mistakes and feelings of uncertainty; and (4) importance/control of thoughts, consisting of 5 items concerning the consequences of having intrusive distressing thoughts and the need to rid oneself of intrusive thoughts. Participants rated all items on a 7-point scale ranging from 1 (*disagree very much*) to 7 (*agree very much*). All subscales of the 44-item OBQ have been shown to relate strongly to OCD-symptom measures, as well as to measures of anxiety, depression and worry (Obsessive Compulsive Cognitions Working Group, 2005; Tolin, Worhunsky, & Maltby, 2006). The internal consistencies of the subscales in our sample (Cronbach's alphas) ranged from .76 to .85. The internal consistency of the scale as a whole was .91.

The DASS (Lovibond & Lovibond, 1995) is a self-report questionnaire listing negative emotional symptoms. The scale is divided into three subscales: depression, anxiety and stress. In this study we used the short version of the DASS (Antony et al., 1998; Clara et al., 2001; Henry & Crawford, 2005), which contains 21 items (7 items for each scale). The Depression scale assesses dysphoria, hopelessness, devaluation of life, self-deprecation, lack of interest/involvement, anhedonia, and inertia (e.g., "I couldn't seem to experience any positive feeling at all"). The Anxiety scale assesses autonomic arousal, skeletal muscle effects, situational anxiety, and subjective experience of anxious affect (e.g., "I was worried about situations where I might panic and make a fool of myself"). The Stress scale is sensitive to levels of chronic non-specific arousal. It assesses difficulty relaxing, nervous arousal, and being easily upset/agitated, irritable/over-reactive and impatient (e.g., "I found it hard to wind down"). Participants rated the extent to which they experienced each symptom over the past week on a 4-point scale ranging from 0 (*did not apply to me at all*) to 3 (*applied to me very much, or most of the time*). The DASS scales have been shown to have high internal consistency and to yield meaningful discriminations in a variety of settings (Lovibond & Lovibond, 1995). The internal consistencies of the scales (Cronbach's alphas) in the current sample ranged from .84 to .90.

The Single-Item Self-Esteem Scale (SISE; Robins et al., 2001) requires participants to rate on a 9-point scale ranging from 1 (*not*

*very true for me*) to 9 (*very true for me*) the extent to which the sentence "I have a high self-esteem" describes them. The SISE has been found to have high test-retest reliability, criterion validity coefficients above .80 (*Mdn* = .93 after correcting for unreliability) with the Rosenberg Self-Esteem Scale (RSE), and a similar pattern of construct validity coefficients as the RSE with 35 different constructs (Robins et al., 2001). Using longitudinal data, Robins et al. (2001) estimated the reliability of the SISE to be .75.

The Relationship Assessment Scale (RAS; Hendrick et al., 1998) includes 7 items assessing relationship satisfaction (e.g., "To what extent are you satisfied with your relationship?", "To what extent is this relationship good compared to most?"). Participants rated all items on a 5-point scale ranging from 1 (*not much*) to 5 (*very much*). The internal consistency (Cronbach's  $\alpha$ ) of the scale in our sample was .92.

The short form of the Experiences in Close Relationships scale (Wei et al., 2007) is an abbreviated version of the 36-item Experiences in Close Relationships inventory (ECR; Brennan, Clark, & Shaver, 1998). The scale assesses attachment anxiety and avoidance. It includes 12 items, 6 assessing attachment anxiety (e.g., "my desire to be very close sometimes scares people away") and 6 assessing attachment avoidance (e.g., "I want to get close to my partner, but I keep pulling away"). Participants rated the extent to which each item was self-descriptive of their thoughts, feelings, and behaviors in romantic relationships on a 7-point scale ranging from 1 (*disagree strongly*) to 7 (*agree strongly*). In our sample, internal consistencies were .71 for the 6 items assessing anxious attachment, and .59 for the 6 items assessing avoidant attachment. Upon examination of corrected item-total correlations, one item was removed from the anxiety subscale ("I do not often worry about being abandoned") and one was removed from the avoidance subscale ("I turn to my partner for many things, including comfort and reassurance"). These items were not related to their subscale score, and excluding them increased reliability (Cronbach's  $\alpha$  of .79 for the anxiety subscale and .65 for the avoidance subscale).

The Relationship Obsessive-Compulsive Inventory (ROCI; Doron et al., 2012) is a self-report measure of obsessions and compulsions centered on one's romantic relationship. The scale includes 12 items loading on three relational dimensions: feelings towards one's partner (e.g., "I continuously reassess whether I really love my partner"), one's perception of partner's feelings (e.g., "I continuously doubt my partner's love for me"), and one's appraisal of the "rightness" of the relationship (e.g., "I check and recheck whether my relationship feels right"). Participants rated the extent to which such thoughts and behaviors described their experiences in intimate relationships on a 5-point scale ranging from 0 (*not at all*) to 4 (*very much*). All subscales, as well as the total score including all 12 items, have been shown to relate strongly to measures of OCD symptoms, measures of anxiety, depression and stress, and relationship measures (Doron et al., 2012). The internal consistencies of the subscales in our sample (Cronbach's alphas) ranged from .84 to .89. The internal consistency of the entire scale was .93.

## 5.2. Results and discussion

### 5.2.1. Item reduction

In order to create a measure suited for clinical applications, we set out to reduce the number of items to 24 items (four items for each of the six subscales). Two main criteria were used for retaining an item in the revised scale: good content validity and adequate scale reliability. Moreover, we attempted to include an equal number of obsession items (i.e., doubts and preoccupation) and compulsion items (i.e., checking) in each subscale. Reversed items were discarded.

First, we identified within each subscale pairs of items that had similar wording and were highly correlated ( $r > .45$ ; Abramowitz, Huppert, Cohen, Tolin, & Cahill, 2002; Rapee, Craske, Brown, & Barlow, 1996). Such items were considered redundant, and the item with the lower corrected item-total correlation was removed. This process eliminated a total of 3 items. Second, corrected item-total correlations were recalculated for the remaining 31 items within their respective subscales. Subsequent item reduction proceeded under empirical and substantive considerations. Namely, each subscale was reduced to four items (two compulsion items and two obsession items) by removing items with lower corrected item-total correlations. The final scale included 24 items across six subscales, each relating to a specific partner quality (see items wording in Table 2).

5.2.2. Confirmatory factor analysis

In order to confirm the hypothesized six-factor structure of the PROCSI, we specified a standard CFA model in which each PROCSI subscale was represented by a latent factor with four indicators. Within each latent factor, errors associated with items assessing the same OC phenomenon (compulsions, obsessions) were allowed to covary. The rationale behind this a priori specification decision was that compulsion items (e.g., “I keep examining whether my partner acts in a strange manner”) should be more closely related to other compulsion items than to obsession items (e.g., “I am bothered by doubts about my partner’s emotional stability”), even when concerning the same partner characteristic. A similar error structure was found for the ROCI (Doron et al., 2012), which also includes compulsion and obsession items within each subscale.

This model was examined via AMOS version 19.0 (Maximum Likelihood estimation) and produced conflicting fit indices. Specifically, the standardized root mean-square residual (SRMR) equaled .049, falling within the range commonly regarded as indicating acceptable fit (SRMR < .08; Hu & Bentler, 1999). In contrast, the comparative fit index (CFI) equaled .906 and the root mean square error of approximation (RMSEA) equaled .084, both falling outside the range commonly regarded as indicating acceptable fit (CFI > .95, RMSEA < .08; Hu & Bentler, 1999). In order to examine whether these indices were impacted by the inherent positive skew of the PROCSI, a square root transformation was performed on the items in order to increase normality. Analysis on the transformed data yielded slightly better fit indices, but still below the recommended range (CFI = .911, RMSEA = .08).

Further post-hoc examination of the model indicated that errors associated with items that appeared in succession in the original 41-item scale were correlated. The 24-item scale included five such item pairs. Errors associated with items that did not appear in succession in the original 41-item scale were largely independent. Hence, rather than being spurious correlations, successive error correlations were most likely order artifacts, possibly enhanced by the online method by which the PROCSI was administered. Most importantly, fit indices were negatively impacted by these correlated errors. Indeed, allowing the five successive error pairs to covary significantly improved the fit of the model [ $\Delta\chi^2(5)=218.21, p < .001$  for the raw data], as well as most approximate fit indices. Thus, when the order artifact was introduced into the model, it fit the data fairly well. Goodness-of-fit indices for this respecified six-factor model (Model 1) are presented in Table 1. Item loadings are presented in Table 2.

Although Model 1 seemed to fit the data fairly well, inter-factor correlations were relatively high (see Table 3). This posed a challenge to the discriminant validity of the factors. Hence, a second model was specified, with one second-order factor predicting all six first-order factors (Model 2). Goodness-of-fit indices

**Table 1**  
PROCSI confirmatory factor analyses: fit indices (N=385).

	df	$\chi^2$	AIC	BIC	CFI	SRMR	RMSEA	RMSEA.90 CI	
								Low	High
<b>Raw data</b>									
Model 1	220	613.60***	773.60	1089.86	.939	.045	.068	.062	.075
Model 2	229	692.77***	834.77	1115.45	.928	.051	.073	.066	.079
<b>Normalized (square root transformation)</b>									
Model 1	220	541.88***	701.88	1018.14	.948	.044	.062	.055	.068
Model 2	229	596.99***	738.99	1019.68	.940	.048	.065	.058	.071

Note: Model 1: Six factors; Model 2: One second-order factor and six first-order factors. Both models had identical error structures. AIC=Akaike Information Criterion, BIC=Bayes Information Criterion, CFI=Comparative Fit Index, SRMR=Standardized Root Mean square Residual, RMSEA=Root Mean Square Error of Approximation.

\*\*\*  $p < .001$ .

**Table 2**  
Maximum likelihood estimates of item loadings (standardized regression weights) for the Partner-Related Obsessive-Compulsive Symptoms Inventory (PROCSI).

<b>Appearance</b>		
When I am with my partner I find it hard to ignore her physical flaws		.71
I am constantly bothered by thoughts regarding the flaws in my partner's physical appearance		.73
Every time I'm reminded of my partner I think about the flaw in his/her appearance		.77
I feel an uncontrollable urge to compare my partner's physical flaws with those of other men/women		.79
<b>Sociability</b>		
I repeatedly evaluate my partner's social functioning		.69
I am troubled by thoughts about my partner's social skills		.75
Thoughts about my partner's poor functioning in social situations bother me on a daily basis		.78
I keep trying to compensate for my partner's social deficiencies		.86
<b>Morality</b>		
I am constantly bothered by doubts about my partner's morality level		.76
The thought that my partner is not a "good and moral" person bothers me on a daily basis		.81
I keep looking for evidence that my partner is moral enough		.86
I'm constantly examining my partner's morality level		.90
<b>Emotional stability</b>		
I find it hard to dismiss the thought that my partner is mentally unbalanced		.60
I find it difficult to control my tendency to compare my partner's emotional responses to those of other men/women		.72
I am bothered by doubts about my partner's emotional stability		.69
I keep examining whether my partner acts in a strange manner		.91
<b>Intelligence</b>		
I am constantly questioning whether my partner is deep and intelligent enough		.71
I often seek reassurance (from friends, family, etc.) about whether my partner is smart enough		.62
I can't stop comparing my partner's intelligence level to that of other men/women		.84
The thought that my partner is not intelligent enough bothers me greatly		.84
<b>Competence</b>		
I keep comparing my partner's ability to "achieve something" in life to that of other men/women		.84
I am extremely preoccupied with assessing my partner's ability to "make something of himself/herself"		.84
When I think of my partner I wonder whether he/she is the sort of person who can succeed in the modern world		.79
I keep looking for evidence of my partner's occupational success		.68

for this model indicated acceptable fit, though information criteria (i.e., AIC and BIC) indicated poorer fit compared with Model 1 (see Table 1). Based on these results we propose that the

**Table 3**  
Means, standard deviations, inter-correlations, and scale reliabilities for the six PROCSI subscales.

	1	2	3	4	5	6
1. Appearance	.83	.67***	.64***	.75***	.82***	.77***
2. Sociability	.57***	.84	.64***	.84***	.74***	.75***
3. Morality	.55***	.60***	.89	.76***	.66***	.59***
4. Emotional stability	.63***	.70***	.64***	.84	.76***	.81***
5. Intelligence	.70***	.68***	.60***	.62***	.83	.85***
6. Competence	.67***	.66***	.53***	.66***	.75***	.87
M	.43	.82	.47	.55	.66	.69
SD	.63	.84	.75	.76	.78	.83

Note: Latent-factors correlations (obtained through CFA on raw data) are above the diagonal. Averaged-scores correlations (obtained through averaging the items of each subscale and testing the correlations between the resulting scores) are below the diagonal. Values on the diagonal are Cronbach's alphas.

\*\*\*  $p < .001$ .

PROCSI can be coded either as a six-factor scale or a one-factor scale. The more specific six-factor coding might be useful for clinical applications, whereas the one-factor coding might be more useful for empirical investigations.

5.2.3. Descriptive statistics

Means and standard deviations of the six PROCSI subscales are presented in Table 3. Of note is that 6.2% of the participants rated 3 or above (on a 0–4 scale) on at least 33% of the 24 PROCSI items, indicating that relatively severe partner-focused OC symptoms exist even within the general population.

5.2.4. Reliability and construct validity

Total scores for the six PROCSI subscales were created by averaging out the relevant items. As can be seen in Table 3, Cronbach's alphas for the six subscales were acceptable, indicating appropriate internal consistency of these scales. In addition, a PROCSI total score was created by averaging out all items, with a Cronbach's  $\alpha$  of .95. Averaged scores were also created for the OCI-R subscales and total scale, the OBQ subscales and total scale, the three DASS scales (depression, anxiety, and stress), the ROCI, the RAS and the ECR anxiety and avoidance subscales.

Construct validity was examined in three steps. First, the correlations between the PROCSI total and subscales scores and demographic variables were examined. The PROCSI scores were not significantly correlated with gender, age and relationship length. Education level (number of years), however, was negatively and significantly associated with all PROCSI scores. Because these correlations were rather weak ( $r$ s ranging from  $-.15$  to  $-.22$ , all  $p$ s  $< .05$ ) we did not control for education level in subsequent analyses.

Second, the correlations between the PROCSI total and subscales scores and established measures of OCD, mental health, and relationship-related insecurities were examined. PROCSI scores were moderately correlated with OCD symptoms and beliefs (see Table 4), indicating that the PROCSI captures a theoretical construct relatively distinct from general OCD. PROCSI scores were also moderately correlated with depression, anxiety, stress, low self-esteem, low relationship satisfaction, attachment anxiety, and attachment avoidance (see Table 5). The moderate to high correlations of PROCSI scores with the ROCI total score indicated that although partner-focused OC phenomena are highly related to relationship-centered OC phenomena, they are not subsumed by them.

**Table 4**  
Correlations of PROCSI subscales with OCI-R and OBQ subscales ( $N=183$ ).

	APP	SOC	MOR	ES	INT	COM	TOT
OCI-R scores							
Checking	.26***	.36***	.37***	.31***	.23**	.31***	.37***
Obsessions	.30***	.37***	.35***	.32***	.32***	.36***	.40***
Contamination	.25**	.26***	.30***	.25***	.22**	.24***	.30***
Ordering	.17*	.30***	.24***	.26***	.19**	.22**	.28***
Neutralizing	.31***	.29***	.27***	.31***	.22**	.32***	.34***
Hoarding	.21**	.28***	.25***	.24***	.23**	.28***	.30***
Total	.33***	.42***	.39***	.37***	.31***	.38***	.44***
OBQ scores							
Overestimation	.28***	.32***	.35***	.37***	.25***	.31***	.37***
Perfectionism/uncertainty	.18*	.24**	.23**	.24**	.14	.24**	.25**
Thoughts imp.	.29***	.28***	.33***	.37***	.19**	.24***	.34***
Responsibility	.12	.19**	.21**	.16*	.13	.13	.19*
Total	.25**	.30***	.33***	.33***	.21**	.27***	.34***

Note: OCI-R=Obsessive-Compulsive Inventory; OBQ=Obsessive Beliefs Questionnaire; APP=PROCSI appearance; SOC=PROCSI sociability; MOR=PROCSI morality; ES=PROCSI emotional stability; INT=PROCSI intelligence; COM=PROCSI competence; TOT=PROCSI total score.

\*  $p < .05$ .

\*\*  $p < .01$ .

\*\*\*  $p < .001$ .

**Table 5**  
Correlations of PROCSI subscales with Mental Health and Relationship Measures ( $N=185$ ).

	APP	SOC	MOR	ES	INT	COM	TOT
DASS ( $N=183$ )							
Depression	.33***	.37***	.45***	.44***	.38***	.41***	.47***
Anxiety	.31***	.26***	.36***	.33***	.30***	.34***	.38***
Stress	.28***	.29***	.38***	.35***	.30***	.32***	.38***
ECR							
Anxiety	.38***	.36***	.36***	.37***	.39***	.39***	.45***
Avoidance	.23**	.28***	.26***	.32***	.32***	.33***	.35***
ROCI total	.51***	.56***	.66***	.57***	.55***	.56***	.68***
RAS	-.24**	-.33***	-.34***	-.39***	-.37***	-.37***	-.41***
(N=155)							
SISE	-.40***	-.39***	-.30***	-.37***	-.31***	-.35***	-.42***

Note: DASS=Depression Anxiety Stress Scales; ECR=Experiences in Close Relationships scale; ROCI=Relationship Obsessive-Compulsive Inventory; RAS=Relationship Assessment Scale; SISE=Single-Item Self-Esteem Scale; APP=PROCSI appearance; SOC=PROCSI sociability; MOR=PROCSI morality; ES=PROCSI emotional stability; INT=PROCSI intelligence; COM=PROCSI competence; TOT=PROCSI total.

\*\*  $p < .01$ .

\*\*\*  $p < .001$ .

Finally, two hierarchical regressions were performed in order to assess the incremental predictive value of the PROCSI in predicting general distress (i.e., depression) and relationship-related distress (i.e., relationship dissatisfaction). The PROCSI total score significantly predicted depression and relationship (dis)satisfaction, over-and-above other mental health and relationship insecurity measures (see Tables 6 and 7). In both cases, adding the PROCSI total score to the model reduced the unique effect of the ROCI total score on the outcome variable. In the case of depression, the effect of the ROCI total score was reduced to a non-significant value once the PROCSI total score was entered into the model. In fact, the PROCSI was the only OCD measure that was a significant unique predictor of depression. Overall, these findings indicated that the relationship between the PROCSI and affective and relationship outcomes exists above and beyond the effects of other OCD, mental health, and relationship measures. It should, however, be noted that the

**Table 6**  
Standardized regression coefficients (betas) for Relationship Satisfaction (RAS) regressed on OCI-R, DASS, Single-Item Self-Esteem, ECR, ROCI, and PROCSI (N=153).

	Model 1	Model 2	Model 3
OCI-R	-.02	.04	.09
DASS depression	-.49***	-.33**	-.27*
DASS anxiety	.18	.14	.15
DASS stress	-.02	.01	-.06
SISE	.09	.00	-.05
ECR anxiety	.00	.01	.06
ECR avoidance	.02	.06	.06
ROCI total		-.47***	-.29**
PROCSI total			-.35***
$\Delta R^2$	.18***	.15***	.06**

Note: OCI-R=Obsessive-Compulsive Inventory; DASS=Depression Anxiety Stress Scales; SISE=Single-Item Self-Esteem Scale; ECR=Experiences in Close Relationships scale; ROCI=Relationship Obsessive-Compulsive Inventory; PROCSI=Partner-Related Obsessive-Compulsive Symptoms Inventory.

\*  $p < .05$ .  
\*\*  $p < .01$ .  
\*\*\*  $p < .001$ .

**Table 7**  
Standardized regression coefficients (betas) for DASS depression regressed on DASS anxiety and stress, OCI-R, ROCI, and PROCSI (N=182).

	Model 1	Model 2	Model 3
DASS anxiety	.36***	.34***	.33***
DASS stress	.52***	.49***	.50***
OCI-R	-.06	-.08	-.10
SISE	-.13**	-.10*	-.08
ROCI total		.14**	.07
PROCSI total			.12*
$\Delta R^2$	.69***	.01**	.01*

Note: OCI-R=Obsessive-Compulsive Inventory; DASS=Depression Anxiety Stress Scales; SISE=Single-Item Self-Esteem Scale; ROCI=Relationship Obsessive-Compulsive Inventory; PROCSI=Partner-Related Obsessive-Compulsive Symptoms Inventory.

\*  $p < .05$ .  
\*\*  $p < .01$ .  
\*\*\*  $p < .001$ .

PROCSI effect on relationship satisfaction was much larger than its effect on depression. Perhaps this was because the effect of partner-focused OC phenomena on the relationship is more proximate, whereas their effect on general mental health is more distal.

**6. Study 2**

Study 1 provided support for the internal consistency and construct validity of the PROCSI. In Study 2, our goal was to examine the test-retest reliability of the PROCSI. In addition, we attempted to examine more systematically the pathways linking between relationship-centered and partner-centered OC phenomena.

**6.1. Method**

**6.1.1. Participants**

Study 2's sample consisted of 229 Israeli participants from the general population (111 women ranging in age from 18 to 65 years,  $Mdn=41$ , and 118 men ranging in age from 18 to 65,  $Mdn=40$ ), who participated in two data collection waves. Participants were recruited via *Midgam.com*. All participants were in an intimate relationship at the time of the study. The median relationship length was 111.5 months. Participants' education ranged from 10 to 22

years ( $Mdn=14$ ). Participants completed an online informed consent form in accordance with university institutional review board. They were requested to complete each data collection wave in one session (as the website allows one entry per participant) and were reimbursed 20 NIS (around \$5) for their time.

**6.1.2. Materials and procedure**

The study was administered online using the web-based survey platform *www.midgam.com*. Responses were saved anonymously on the server and downloaded for analysis. In the first data collection wave, participants completed Hebrew versions of the PROCSI, the ROCI (Doron et al., 2012), the OCI-R, (Foa et al., 2002), the DASS-21 (Antony et al., 1998; Clara et al., 2001; Henry & Crawford, 2005), the OBQ-20 (Moulding et al., 2011), the ECR-12 (Wei et al., 2007), and the Dysmorphic Concerns Questionnaire (DCQ; Oosthuizen, Lambert, & Castle, 1998). In the second data collection wave, which took place 9 weeks after the first one, participants completed again the PROCSI and the ROCI.

The Dysmorphic Concerns Questionnaire (DCQ; Oosthuizen et al., 1998) is a self-report measure consisted of 7 items assessing dysmorphic and appearance related concerns and beliefs (e.g., "Have you ever spent a lot of time worrying about a defect in your appearance or bodily functioning?"). Participants rated each item on a 4-point scale ranging from 1 (*not at all*) to 4 (*more than most people*). The DCQ has demonstrated good internal consistency and strong associations with depression, distress, work impairment and social impairment (Oosthuizen et al., 1998). Moreover, the DCQ has been shown to correlate strongly with the Body Dysmorphic Disorder Examination (BDDE; Rosen & Reiter, 1996), a semi-structured clinical interview assessing body dysmorphic disorder, indicating good construct validity (Jorgensen, Castle, Roberts, & Groth-Marnat, 2001). In the current sample, the scale showed good internal consistency (Cronbach's  $\alpha=.89$ ).

Cronbach's alphas for the PROCSI total score in the current sample were high in both measurement waves (.95 and .96 respectively). Cronbach's alphas for the ROCI total score were also high (.92 in both waves). High Cronbach's alphas were also found for the OCI-R total score ( $\alpha=.92$ ), the OBQ total score ( $\alpha=.92$ ), and the DASS depression, anxiety and stress scores (alphas of .89, .88 and .88 respectively). In contrast, Cronbach's alphas for ECR anxiety and avoidance subscales were unusually low (.71 and .43 respectively), but significantly improved after the removal of one reversed item from the anxiety subscale and three reversed items from the avoidance subscale (.83 and .76 respectively). These items had item-total correlations close to zero, possibly due to their positive wording (Wei et al., 2007).

**6.2. Results and discussion**

**6.2.1. Test-retest reliability**

The correlation between the PROCSI total score at Time 1 and the PROCSI total score at Time 2 was high ( $r=.77, p < .001$ ), indicating good test-retest reliability. This high correlation also implied that partner-focused OC phenomena are quite stable over time. The test-retest reliability of the ROCI total score was also fairly high ( $r=.69, p < .001$ ).

**6.2.2. Longitudinal associations**

In order to examine whether partner-focused OC phenomena predict change in relationship-centered OC phenomena and vice versa, two hierarchical regressions were performed with ROCI and PROCSI total scores at Time 2 as predicted variables (see Tables 8 and 9). All Time 1 measures were entered as predictors in both regressions, with Time 1 measures of the predicted variable entered at Step 1, process variables entered at Step 2 (i.e., ECR,

**Table 8**  
Standardized regression coefficients (betas) for ROCI at Time 2 regressed on OCI-R, DASS, DCQ, ECR, OBQ and Time 1 ROCI and PROCSI (N=229).

	Model 1	Model 2	Model 3	Model 4
ROCI wave 1	.69***	.69***	.65***	.49***
ECR anxiety		.11	.08	.05
ECR avoidance		-.10	-.12	-.14*
OBQ		-.06	-.09	-.10
OCI-R			-.05	-.09
DASS depression			.06	.04
DASS anxiety			-.03	-.04
DASS stress			.11	.13
DCQ			.07	.05
PROCSI wave 1				.31***
ΔR <sup>2</sup>	.47***	.01	.02	.04***

Note: OCI-R=Obsessive-Compulsive Inventory; DASS=Depression Anxiety Stress Scales; DCQ=Dysmorphic Concerns Questionnaire; ECR=Experiences in Close Relationships; OBQ=Obsessive Beliefs Questionnaire; ROCI=Relationship Obsessive-Compulsive Inventory; PROCSI=Partner-Related Obsessive-Compulsive Symptoms Inventory.

\* *p* < .05.

\*\*\* *p* < .001.

**Table 9**  
Standardized regression coefficients (betas) for PROCSI at Time 2 regressed on OCI-R, DASS, DCQ, ECR, OBQ and Time 1 ROCI and PROCSI (N=229).

	Model 1	Model 2	Model 3	Model 4
PROCSI wave 1	.77***	.77***	.71***	.64***
ECR anxiety		.06	.01	-.01
ECR avoidance		-.06	-.08	-.07
OBQ		-.01	-.05	-.06
OCI-R			-.03	-.04
DASS depression			.12	.08
DASS anxiety			.01	.01
DASS stress			-.00	.01
DCQ			.15**	.15**
ROCI wave 1				.14*
ΔR <sup>2</sup>	.59***	.00	.03*	.01*

Note: OCI-R=Obsessive-Compulsive Inventory; DASS=Depression Anxiety Stress Scales; DCQ=Dysmorphic Concerns Questionnaire; ECR=Experiences in Close Relationships; OBQ=Obsessive Beliefs Questionnaire; ROCI=Relationship Obsessive-Compulsive Inventory; PROCSI=Partner-Related Obsessive-Compulsive Symptoms Inventory.

\* *p* < .05.

\*\* *p* < .01.

\*\*\* *p* < .001.

OBQ), symptom variables entered at Step 3 (i.e., DASS, OCI-R, DCQ), and Time 1 PROCSI or ROCI total scores entered at Step 4.

As can be seen in Table 8, the PROCSI total score at Time 1 positively predicted the ROCI total score at Time 2, above and beyond the ROCI total score at Time 1 and all other Time 1 measures. Similarly, the ROCI total score at Time 1 positively predicted the PROCSI total score at Time 2, above and beyond the PROCSI total score at Time 1 and all other Time 1 measures (see Table 9). These results seem to indicate that partner-focused and relationship-centered obsessions and compulsions are involved in a reciprocal relationship, in which one exacerbates the other over time. Obsessions and compulsions regarding one's partner seem to fuel obsessions and compulsions regarding one's relationship and vice versa. It should, however, be noted that the PROCSI predicted exacerbation of relationship-centered OC phenomena much better than the ROCI predicted exacerbation of partner-focused OC phenomena. This suggests that the direction of causality is mostly from partner-focused to relationship-centered OC phenomena. The opposite effect was relatively weak (see Table 9).

Two other measures significantly predicted Time 2 scores above and beyond Time 1 scores (see Tables 8 and 9). First, attachment avoidance negatively predicted relationship-centered OC phenomena (ROCI score). This was probably due to the decreased emotional dependence of avoidant individuals on romantic relationships. Second, dysmorphic concerns about oneself (DCQ) positively predicted partner-focused OC phenomena (PROCSI score). This seems to indicate that obsessing about one's own perceived flaws and obsessing about one's partner's perceived flaws tend to go hand in hand.

## 7. General discussion

The main goal of this research was to extend previous findings on the links between OCD and close relationships by exploring an additional facet of relationship-related OC phenomena – partner-focused obsessive-compulsive symptoms. With this aim in mind, we constructed the Partner-Related Obsessive-Compulsive Inventory (PROCSI), a 24-item scale assessing the severity of OC symptoms relating to one's partner's perceived flaws in six domains: physical appearance, sociability, morality, emotional stability, intelligence and competence. Findings indicated that the PROCSI can be coded as a six-factor measure or a one global-factor measure. The PROCSI was found to be internally consistent, had good test-retest reliability, and showed theoretically-coherent significant but moderate associations with existing measures of OCD symptoms and related cognitions, negative affect, low self-esteem, and relationship variables. Moreover, the PROCSI significantly predicted relationship dissatisfaction and depression, over and above relationship-centered OC symptoms and other mental health and relationship insecurity measures. Thus, our findings indicated that the PROCSI has good validity and reliability and that it captures a distinct theoretical construct that has unique predictive value.

As hypothesized, moderate to high correlations were found between partner-focused OC symptoms and relationship-centered OC symptoms. Consistent with our clinical experience, these two relationship-related OC phenomena seem to be associated. Moreover, longitudinal analyses revealed a reciprocal association between the PROCSI and the ROCI, showing that both partner-focused OC symptoms at Time 1 predicted subsequent changes in relationship-centered OC symptoms, and relationship-centered OC symptoms at Time 1 predicted subsequent changes in partner-focused OC symptoms. Obsessing about partners' faults may heighten uncertainty, doubts, and preoccupation regarding the relationship itself and one's feelings towards his or her partner. These heightened relationship-centered obsessions and compulsions may, in turn, further increase one's vigilance towards his or her partner's perceived flaws.

Our findings suggest that partner-focused OC symptoms may involve processes that are specific to this type of relationship-related OC phenomena. Specifically, the only additional significant unique predictor of the PROCSI (but not the ROCI) was a measure of dysmorphic body concerns (DCQ). Hyper-attention to one's own perceived flaws in appearance and catastrophic misinterpretation of such flaws may reflect a general predisposition to detect perceived deficits and overestimate their consequences, not only in the self, but also in relationship partners. Indeed, this proposal is consistent with Josephson and Hollander's (1997) case discussions of BDD by proxy.

Our findings also indicate small to moderate associations between the PROCSI and OC-related cognitive beliefs, such as overestimation of threat, intolerance of uncertainty/perfectionism, and importance of thought control. This is consistent with cognitive theories of OCD and related disorders showing that

particular stimuli (e.g., seeing one's partner) can trigger intrusive thoughts, images or urges (e.g., "my partner's nose is too big") that are negatively appraised (e.g., "everyone is thinking that my partner is ugly", "It will be horrible to live with such a person") and can lead to neutralizing behaviors (e.g., reassurance seeking and checking).

Other relationship-related cognitive biases, such as overestimation of the disastrous consequences of leaving an existing relationship (e.g., "separation from one's partner would lead to irreversible damage") and the catastrophic consequences of remaining in a less than perfect relationship (e.g., "If I maintain a relationship I am not sure about, I will be miserable forever"), may also play an important role in exacerbating partner-focused OC symptoms (Doron et al., 2012). For instance, believing that leaving a relationship partner would have catastrophic consequences may increase fears of entrapment, making any intrusive experience regarding the partner's deficits more threatening. The attribution of importance to such intrusions would increase the attention afforded to them, the distress they elicit, and the reliance on dysfunctional neutralizing behaviors (e.g., thought suppression attempts).

Like *social allergies* (hypersensitive annoyance or disgust towards specific partner behaviors; Cunningham, Shamblen, Barbee, & Ault, 2005), partner-focused OC symptoms may be triggered by repeated exposure to "flawed behaviors" of the partner (e.g., incompetence in social situations). Due to their repetitive nature, such behaviors would activate memories of similar prior incidents and associated negative affect, increasing future attention to such flaws and associated neutralizing behaviors. Finally, co-occurring relationship-centered OC symptoms and preoccupation with one's own deficits may further strengthen and maintain partner-focused obsessions and compulsive behaviors.

Attachment insecurities have been suggested to play an important role in the maintenance and development of OCD (Doron & Kyrios, 2005; Doron, Moulding, Kyrios, Nedeljkovic, Mikulincer, & Sar-El, 2012) and relationship-related OC symptoms (Doron et al., in press, 2012). More specifically, attachment insecurities were suggested to exacerbate sensitivity to intrusive thoughts by disrupting functional coping with experiences that challenge highly important self-domains (Doron, Moulding, Kyrios, Nedeljkovic, & Mikulincer, 2009). Therefore, addressing attachment insecurities, such as fear of abandonment and difficulties in trusting others, may be particularly relevant when dealing with partner-focused OC symptoms.

To our knowledge, this is the first systematic research of partner-focused OC symptoms. In the two studies presented, we used community cohorts. Such individuals experience OC-related beliefs and symptoms. They may, however, differ from clinical patients in the type and severity of OCD symptoms and in symptom-related impairment. Future research would benefit from studying the links between partner-focused OC symptoms, relationship-centered OC symptoms, more common OCD presentations, mood variables, and relationship variables among clinical participants. It is also important to note that our design was correlational, and therefore one should be cautious when drawing causal inferences from our findings.

Notwithstanding these potential limitations and pending replication of the results with a clinical cohort, the current findings have important theoretical and clinical implications. The construction of a short measure assessing partner-focused OC symptoms enables more systematic research of this previously unexplored phenomenon, its correlates, and associated impairments. Our newly developed measure easily and quickly assesses the severity of partner-focused obsessions, checking, and reassurance seeking behaviors, and has the potential to increase clinical awareness of

patients with such clinical presentations. When dealing with partner-focused OC symptoms, clinicians may consider assessing relationship-centered OC symptoms, body dysmorphic symptoms, attachment insecurities, and perceptions of self (Doron & Moulding, 2009). In addition to common CBT techniques used to address OCD symptoms (e.g., exposure and response prevention, cognitive reconstruction), we believe that challenging relationship insecurities (e.g., fear of abandonment, distrust) and maladaptive relationship dynamics may increase therapeutic efficacy when dealing with partner-focused OCD symptoms. In sum, findings from our studies may prove to be an initial step for further refinement of OCD theory and treatment.

## Author notes

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