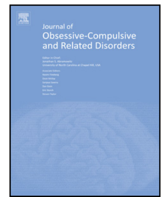
Journal of Obsessive-Compulsive and Related Disorders 24 (2020) 100500

Contents lists available at ScienceDirect

Journal of Obsessive-Compulsive and Related Disorders

journal homepage: www.elsevier.com/locate/jocrd



“I just can't trust my partner”: Evaluating associations between untrustworthiness obsessions, relationship obsessions and couples violence

Or Brandes, Avital Stern, Guy Doron*

School of Psychology, Interdisciplinary Center (IDC), Herzliya, Israel

A B S T R A C T

Relationship obsessive–compulsive disorder (ROCD) is a dimension of obsessive–compulsive disorder (OCD) focusing on close and intimate relationships. ROCD may focus on the relationship itself (i.e., relationship-centered) or on the perceived flaws of the relationship partner (i.e., partner-focused). Partner-focused obsessions have been shown to center on domains such as intelligence, appearance, sociality, emotional regulation, competence and morality. However, clinical experience suggests partner-focused obsessions may center on an additional domain – the romantic partner's unreliability/trustworthiness. The present investigation reports on the development and evaluation of the Obsessive Distrust Inventory (ODIS), an 8-item scale that assesses the severity of ROCD symptoms centering on the perceived un/reliability of one's romantic partner. Factor analysis supports a one internally consistent factor. The ODIS also showed the expected associations with OCD, ROCD and obsessive jealousy symptoms, as well as other mental health and relationship measures. Moreover, ODIS scores significantly predicted depression, anxiety and relationship violence, over-and-above common mental health and relationship measures. Obsessive distrust may be an important theme of partner-focused ROCD symptoms that requires identification and specialized treatment.

1. Introduction

Relationship obsessive–compulsive disorder (ROCD) is a dimension of obsessive–compulsive disorder (OCD) focusing on close and intimate relationships (Doron, Derby, Szepsenwol, & Talmor, 2012a, 2012b; Doron, Derby, & Szepsenwol, 2014). ROCD symptoms may occur in various relationship contexts (e.g., romantic and partner-child; Doron, Derby, & Szepsenwol, 2017) and may focus on the relationship itself (i.e., relationship-centered ROCD symptoms) or the perceived flaws of the relationship partner (i.e., partner-focused ROCD symptoms). Obsessive preoccupations with the perceived flaws of the relationship partner have been shown to center on domains such as intelligence, appearance, sociality, emotional regulation, competence and morality (Szepsenwol, Shachar & Doron, 2016). Clinical experience suggests, however, that obsessive doubts and preoccupations with the perceived untrustworthiness or unreliability of the partner (i.e., obsessive distrust) may be an additional domain of partner-focused ROCD symptoms. Obsessive distrust is associated with common compulsive behaviors associated with ROCD (e.g., checking and testing the partner's competencies and evaluating one's feelings towards the partner), as well as compulsive behaviors similar to obsessive jealousy (e.g., checking the partners' things and behaviors). In this research, we systematically examined obsessive distrust as an additional dimension of partner-focused ROCD symptoms. We constructed and evaluated a measure evaluating obsessive distrust and assessed the associations between obsessive distrust, other ROCD symptoms, jealousy and relationship violence. ROCD research has focused on two related yet conceptually distinct symptom presentations (Szepsenwol, Shahar, & Doron, 2016). The first, involves doubts and preoccupation centered on perceived suitability of the relationship itself, such as the strength of one's feelings toward their partner, the “rightness” of the relationship and the partner's feelings toward oneself (Doron et al, 2012b, 2014). The second presentation, coined partner-focused ROCD symptoms, involves intense preoccupation with perceived deficits in one's partner, such as appearance, intelligence, social qualities and morality (Doron et al., 2012a). This presentation of partner-focused ROCD symptoms is similar to what has been referred to in the literature as Body Dysmorphic Disorder by Proxy (Josephson & Hollander, 1997). Partner-focused ROCD symptoms, however, were shown to pertain to a wider range of obsessional themes beyond physical appearance (Doron et al., 2012a; 2014). Partner-focused ROCD symptoms may come in the form of thoughts, images or urges (Doron & Derby, 2017). Such intrusions pertain to the perceived qualities of the relationship partner (e.g., “S/he is not smart enough”; “Her/his body is not slim enough”) and may contradict individuals' personal values and/or subjective experience of the relationship (Doron & Szepsenwol, 2015). For instance, individuals with partner-focused symptoms may be preoccupied with a particular feature of their partner's character (e.g., humor) or appearance (body proportions) to which they otherwise would attribute minimal importance. Partner-focused intrusions may, therefore, be perceived as

* Corresponding author.
E-mail address: gdoron@idc.ac.il (G. Doron).

https://doi.org/10.1016/j.jocrd.2019.100500
Received 9 June 2019; Received in revised form 14 September 2019; Accepted 5 December 2019
Available online 09 December 2019
2211-3649/ © 2019 Elsevier Inc. All rights reserved.

unwanted or unacceptable, causing feelings of guilt and shame (Doron et al., 2014). Partner-focused compulsions involve a wide range of behaviors aimed at alleviating the significant distress caused by unwanted intrusions. These behaviors include repeated comparisons of the partner to previous partners or potential alternative partners, analyzing the "pros and cons" of the partner qualities, reassuring oneself that the partner is suitable and may become increasingly distressing and time-consuming. Paradoxically, these compulsive behaviors worsen the frequency and impact of such preoccupations (Doron & Szepsenwol, 2015). Indeed, partner-focused ROCD symptoms were found to be associated with severe personal and relational consequences including decreased relational functioning, reduced sexual satisfaction and lower mood (Doron, Derby, Szepsenwol, Nahaloni, & Moulding, 2016; Doron et al 2012a, 2014). Our clinical experience with ROCD clients suggests that an additional domain of partner-focused ROCD symptoms may be partner's perceived unreliability. In such cases, ROCD clients tend to doubt their partner's honesty, accuracy or capacity to perform consistently well in a variety of life domains. These doubts often lead to compulsive "checking on" their partners' activities increasing the likelihood of dyadic stress and conflict. For instance, Mona (a pseudo name), 33 year-old female, working in public relations and recently married, described being preoccupied with her partner's perceived flaws since the beginning of their relationship (8 year ago). She then developed severe and continuous doubts regarding the "rightness" of the relationship. She recalls: "It started from being preoccupied with my partner's intelligence. I felt that all his reactions to other peoples' comments were childish and unintelligent. I also felt that he was slow and clumsy in his movements. It was extremely embarrassing. I couldn't stop thinking, 'he is not smart enough fro me' and 'he is too clumsy for me'. I've strated asking my friends for reassurance that it's me and not him. I've alsotried to contradict every negative thought I had about him . For example, I contradicted the thought 'he is so slow' with a thought 'he is like everyone, I just expect too much of him'. The fact that I couldn't trust him, however, really drove me crazy. It begun from small things such as having to check whether he is honest with me about the prices of things he bought. Then, I started checking about his whereabouts during the day, who was he seeing and what was he doing. The thought 'If he is not honest, maybe he is also unfaithful' then popped into my head. Since then, this thought never left my mind. At that stage, I felt I couldn't rely on his honesty, his faithfulness or on his ability to do things properly. I begun interrogating him about his day in excruciating detail. These preoccupations then turned into continuous doubts regarding my love for him and whether he was the right person for me. Thoughts like 'If I think all these things about him, I must not really love him' bothered me all throughout the day. Now, I'm at a stage whereby I continuously doubt whether I'm in the right relationship and I'm tormented by my inability to trust him in anything he does. I avoid letting him do house chores or taking care of our child. When I do let him (take care of the child), I secretly follow and check on him". As can be seen in the example above, preoccupation with the partner's reliability often coincides with preoccupations with other perceived flaws of the partner (i.e., intelligence) and may be associated with the development of relationship-centered ROCD symptoms (e.g., doubts regarding relationship "rightness", Szepsenwol et al., 2016). As often occurs in ROCD symptoms, the main goal of compulsive behaviors in obsessive distrust is to assess and/or diminish distress associated with doubts regarding partners' suitability. Our clinical experience suggests that obsessive distrust is also often associated with partner-value self-contingencies (i.e., self-esteem that is over dependent on the partner's perceived value; (Doron & Szepsenwol, 2015(Trak & Inozu, 2019).Like Mona, clients with obsessive distrust often describe feelings of being embarrassed with their partner's unreliability. Importantly, when preoccupation with the partner's perceived unreliability centers on the romantic domain, obsessive distrust may be associate with behaviors similar to the ones found in obsessive jealousy. These include intense interrogations regarding partners' whereabouts, interactions and social media activities, as well as inspections of their partners' personal belongings. However, compulsive behaviors in obsessive jealousy often takes place in a triadic sphere, aimed to attenuate distress related to perceived threat of potential romantic attraction between one's partner and a perceived rival (Kingham & Gordon, 2004; Rodriguez, DiBello, Overup & Neighbors, 2015). In contrast, obsessive distrust takes place in a dyadic sphere (i.e., my "flawed" partner and I). Moreover, obsessive distrust goes beyond the infidelity realm, and includes fear of partner's unreliability in a variety of life domains such as honesty, accuracy and capacity to perform daily chores. For Mona, such preoccupation started with distrust regarding her partner's capacity of handling everyday chores, moved to doubts regarding her partner's faithfulness and more recently focused on her partner's incapacity of providing basic safety or nurture to their children. The latter was associated with compulsive checking on the partner's day-to-day caretaking activities (e.g., feeding, sleeping and playing) and, in some cases, may lead to the partner's complete exclusion from daily caretaking of the child. Obsessive distrust may seem quite similar to other worries regarding the romantic partner, as seen in generalized anxiety disorder. However, these two phenomena are differentiated in both content and form (Doron, Derby, et al., 2014). Obsessive distrust as a form of ROCD symptoms, by definition, focuses on one's current feelings towards the partner. In contrast, romantic worries often relates to future consequences of real situations (e.g., "what will I do if I break up with my girlfriend?"). Like other forms of obsessions, obsessive distrust is experienced as more unwanted, intrusive, and unacceptable than normal worries and appears to be more strongly resisted. Clients describe preoccupations and doubts "popping into their head". These intrusions are often perceived as exaggerated, having slight or no realistic basis, and as contradicting a person's strong feelings towards a partner. Obsessive distrust therefore is less self-congruent, more likely to be associated with neutralizing efforts, and is perceived as less rational than other worries regarding the romantic partner. Furthermore, whereas worries commonly appear in verbal format, obsessive distrust come in a variety of forms, including images, thoughts and urges (Doron, Derby, et al., 2014).

1.1. The current studies

We propose that distrust may become an obsessive focal point of partner-focused ROCD symptoms. In such cases, obsessive-compulsive symptoms, such as pathological doubts, checking and reassurance-seeking behaviors, may center on partner's unreliability or untrustworthiness, in an attempt to bolster certainty regarding the "rightness" of the relationship or the suitability of the relationship partner. To gain a better understanding of obsessive distrust, we conducted two studies. In Study 1, we constructed the Obsessive Distrust Inventory (ODIS), a brief self-report measure aimed at assessing the severity of obsessive distrust phenomena. The items were based on our extensive clinical experience with ROCD patients. We assessed the inventory's psychometric properties, discriminant and convergent validity. In Study 2, we examined associations between the ODIS measure and other mental health and relationship measures. We also examined the incremental predictive validity of the ODIS, showing that ODIS can predict mood and violent behaviors above and beyond other demographic, mental health and relationship measures.

2. Study 1

The goal of Study 1 was to examine the factor structure of the obsessive distrust inventory (ODIS), a scale specifically designed to assess obsessive distrust in romantic relationships. We also examined how the ODIS relates to common OCD symptoms (e.g., contamination, symmetry), self-esteem and measures of general distress (e.g., depression, anxiety and stress). Finally, we examined the unique contribution of the ODIS to the prediction of depression, anxiety and stress beyond the

contribution of demographic variables, common OCD symptoms and self-esteem. Items were generated in an effort to represent obsessions (e.g., preoccupation and doubts) and neutralizing behaviors (e.g., checking and reassurance seeking) related to distrust concerns. In accordance with common practice in studies of OCD, the sample used in the present study consisted of non-clinical participants (Abramowitz et al., 2014).

2.1. Method

2.1.1. Generation and reduction of items

We generated a pool of 15 items based on clinical experience with ROCD patients. These items inquired about various obsessive thoughts (e.g., "I'm preoccupied with the thought that my partner can't be trusted") and compulsive behaviors (e.g., "I look for evidence that my partner is a trustworthy person") related to obsessive distrust phenomena in intimate relationships. Participants were asked to rate the extent to which such thoughts and behaviors described their experience with their current partner on a 5-point scale ranging from 0 (not at all) to 4 (very much). Pairs of items that had similar wording and were highly correlated ($r > 0.45$; Abramowitz, Huppert, Cohen, Tolin, & Cahill, 2002; Rapee, Craske, Brown, & Barlow, 1996) were considered redundant, and the two items with the lower corrected item-total correlation were removed. This process eliminated a total of 7 items. The final scale, therefore, included 8 items (see Table 1).

2.1.2. Participants

The sample included 132 Israeli students (85 women ages 18 to 33, $M = 26.1$, $SD = 3$; and 47 men ages 20 to 39, $M = 27.6$, $SD = 3$) who were recruited by personal request and via social networks. All participants were in a relationship at the time of the study (64.4% were living with their partner, 25% were married). Relationship duration ranged from four months to 12 years ($M = 40$ months, $SD = 28$). Participants completed an online informed consent form in accordance with university IRB standards.

2.1.3. Materials and procedure

The study was administered online using the web-based survey platform www.qualtrics.com. Responses were saved anonymously on the server and downloaded by the first author for analysis. All participants completed Hebrew versions of the Obsessive Distrust Scale (ODIS), the Obsessive-Compulsive Inventory (OCI-R; Foa et al., 2002), the Depression, Anxiety and Stress Scale (DASS; Antony, Bieling, Cox, Enns, & Swinson, 1998), and the Single-Item Self-Esteem Scale (SISE; Robins, Hendin, & Trzesniewski, 2001). The Obsessive Distrust Scale (ODIS) is a new self-report measure of obsessions relating to one's perceived ability to trust his/her intimate partner. The 8-item questionnaire was designed to include the following aspects of obsessive distrust phenomena: Doubts (e.g., "I have doubts weather my partner is a trustworthy person"), preoccupations (e.g., "I'm preoccupied with the thought that my partner can't be trusted"), checking (e.g., "I continuously check whether I can trust my partner") and reassurance seeking behaviors ("e.g., "I look for reassurance (from friends, family etc.) that my partner can be relied upon"). Rating were made on a scale ranging from 0 (not at all) to 4 (very much). The internal consistency of the scale (Cronbach's α) in the current sample was 0.96. The Obsessive-Compulsive Inventory (OCI-R; Foa et al., 2002) is an 18-item self-report questionnaire. 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 (Cronbach's α ranged from 0.81 to 0.93 across samples). Also, test–retest reliability has been found to be adequate (0.57–0.91 across samples; Foa et al., 2002). In our study, the measure was used as a whole. Cronbach's α for the total measure was 0.93. The Depression, Anxiety and Stress Scale (DASS; Lovibond & Lovibond, 1995) is a self-report questionnaire listing negative emotional symptoms and is divided into three subscales measuring depression, anxiety and stress. In this study we used the short version of the DASS (Antony et al., 1998), which contains 21 items, 7 items for each scale. 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 yield meaningful discriminations in a variety of settings (Lovibond & Lovibond, 1995). The internal consistencies of the scales (Cronbach's α) in the current sample ranged from 0.88 to 0.91. Single-Item Self-Esteem Scale (SISE; Robins et al., 2001). Participants rated the extent to which the sentence "I have a high self-esteem" was self-descriptive on a 9-point scale, ranging from not very true for me (1) to very true for me (9). The SISE has been found to have high test–retest reliability and strong criterion validity (Robins et al., 2001). Robins et al. (2001) also reported correlations between the SISE and the Rosenberg Self-Esteem scale (RSE; Rosenberg, 1965), ranging from 0.74 to 0.80. Disattenuated correlations were near unity (range 0.91–0.99), suggesting the two measures share almost all of their reliable variance. Moreover, the SISE and the RSE had nearly identical correlations with 37 different criteria variables (e.g., domain-specific self-evaluations, self-evaluative biases, social desirability, and the Big Five personality dimensions).

Table 1
Obsessive Distrust Scale (ODIS): items and factor loadings.

1.	I have doubts weather my partner is a trustworthy person	0.85
2.	I'm preoccupied with the thought that my partner can't be trusted	0.86
3.	I look for reassurance (from friends, family etc.) that my partner can be relied upon	0.79
4.	I find it hard to distract myself from thinking about my ability to rely on my partner	0.87
5.	I'm troubled by doubts regarding my ability to trust my partner	0.90
6.	The question of whether I can trust my partner bothers me	0.93
7.	I continuously check whether I can trust my partner	0.93
8.	I look for evidence that my partner is a trustworthy person	0.92

2.2. Results & discussion

2.2.1. Exploratory factor analysis

All 8 items were subjected to a factor analysis with Varimax rotation. No item showed low loading or cross loading, thus, all items included in the analysis. According to the criterion of eigenvalue > 1, all 8 items were grouped into one factor which explained 78% of the total variance (Eigenvalue = 6.25). All items loaded between 0.79 and 0.93 on the primary factor (see Table 1). Cronbach's α = 0.96.

2.2.2. Correlations

Correlations between the ODIS scores and demographic measures (e.g., gender, age, duration of relationship in months and years of education) were examined. Significant negative correlation was found only with years of education ($r = -.27$, $p < 0.01$). Correlations between the ODIS scores and established mental health measures (e.g., OCD symptoms, Depression, Anxiety and Stress and self-esteem) were also examined. As expected, significant positive correlations were found with most of the measures except the self-esteem (see Table 2).

2.2.3. Regressions

The incremental predictive value of the ODIS total score in predicting depression, anxiety and stress was assessed with three hierarchical regressions. Supporting the unique contribution of the ODIS to the prediction of depression and anxiety symptoms, ODIS scores significantly predicted depression and anxiety over and above other demographic variables, OC symptoms and self-esteem (see Table 3).

Table 2
Correlations of the ODIS with mental health measures (N = 111).

	ODIS
DASS Depression	.40**
DASS Anxiety	.40**
DASS Stress	.28**
OCI-R	.30**
Self-Esteem	-.12

Note: DASS = Depression, Anxiety and Stress Scale, OCI-R = Obsessive Compulsive inventory.
**$p < 0.01$.

3. Study 2

In Study 2, we further assessed the construct validity for the ODIS. This was done by examining how the ODIS relates to ROCD symptoms (i.e., relationship-centered and partner-focused ROCD symptoms), jealousy, attachment insecurities and commitment. We also reassessed the links between the ODIS, depression and common OCD symptoms. In addition, we examined the unique contribution of the ODIS to the prediction of depression beyond the contribution of gender, age, common OC symptoms and relationship factors (i.e., jealousy, commitment, and attachment insecurities). Finally, we examined the unique contribution of the ODIS to the prediction of relationship violence beyond the contribution of mental health and relationship factors.

3.1. Method

3.1.1. Participants

The sample included 125 Israeli community participants (87 women ages 20 to 51, M = 27.5, SD = 4.5; and 38 men ages 21 to 37, M = 28.7, SD = 4) who were recruited by personal request and via social networks. All participants were in a relationship at the time of the study (76.8% were living with their partner, 48% were married). Relationship duration ranged from four months to 12 years (M = 50 months, SD = 34). Participants completed an online informed consent form in accordance with university IRB standards.

3.1.2. Materials and procedure

The study was administered online using the web-based survey platform www.qualtrics.com. Responses were saved anonymously on the server and downloaded by the first author for analysis. All participants completed Hebrew versions of the Partner-Related Obsessive-Compulsive Symptom Inventory (PROCSI; Doron et al., 2012b), the Relationship Obsessive-Compulsive Inventory (ROCI; Doron et al., 2012a), the Obsessive Distrust (ODIS), the Obsessive-Compulsive Inventory (OCI-R; Foa et al., 2002), The Revised Conflict Tactics Scale (CTS-2; Straus, 1996), the depression sub-scale of the Depression, Anxiety and Stress Scale (DASS; Antony et al., 1998), a Short Form of the Experience in Close Relationships Questionnaire (ECR-R; Wei, Russell, Mallinckrodt, & Vogel, 2007), the Multidimensional Jealousy Scale (MJS; Pfeiffer & Wong, 1989), and the Investment Model Scale (Rusbult, Martz, & Agnew, 1998). The Conflict Tactics Scales (CTS; Straus, 1996) is one of the most widely used instrument in research on family violence. The full questionnaire includes 78-items which measures the ways partners in romantic relationships engage in psychological and physical attacks on each other. The questionnaire is divided into five subscales: Negotiation (e.g., “Explained side of argument”), Psychological aggression (e.g., “Insulted or swore in partner”), Physical Assault (e.g., “slapped partner”), Sexual Coercion (e.g., “Used force to make partner have sex”), and Injury (e.g., “Partner was cut or injury”). The items regard one's behavior, as well to his/her partner's behavior. In the current study, we used the short version of the Revised Conflict Tactics Scales (CTS2; Straus & Douglas, 2004) which included 20 items (4 items for each subscale). The subjects are asked to indicate how many times they engaged in the behaviors described in the items in order to settle a conflict with their partner. Rating were made on a scale ranging from 1 (more than 20 times in the past year) to 8 (This has never happened). Subscales were calculated according to Straus and Douglas (2004) instructions. The Experience in Close Relationships Questionnaire –Revised (ECR-R; Wei et al., 2007) is a self-report measure for assessing attachment styles in adults. The ECR-R assesses two dimensions of attachment: Anxiety (e.g., “I'm afraid that I will lose my partner's love”) and Avoidance (e.g., “I am nervous when partners get too close to me”). The questionnaire includes 12 items, a 6-item subscale measures each dimension. Rating were made on a scale ranging from 1 (strongly disagree) to 7 (strongly agree). The internal consistencies of the scales (Cronbach's α) in the current sample was 0.79 for the Anxiety scale and 0.84 for the Avoidance scale. The Investment Model Scale (Rusbult et al., 1998) is an instrument designed to measure four predictors of relationships persistence: Commitment level, Satisfaction level, Quality of Alternatives and Investment Size. In the current study the commitment subscale was used. This subscale includes seven items, for example “I want our relationship to last for a very long time” and “I feel very attached to our relationship – very strongly linked to my partner”. Rating were made on a scale ranging from 0 (Do Not Agree At All) to 8 (completely Agree). The internal consistency of the scale (Cronbach's α) in the current sample was 0.88. The Multidimensional Jealousy Scale (MJS; Pfeiffer & Wong, 1989) is a self-report measure for assessing romantic jealousy. The 24-item questionnaire is divided into three subscales, matching the three dimensions

Table 3
Regression coefficients for DASS depression, anxiety and stress regressed on demographic measures, OCI-R, Self-Esteem and ODIS (N = 106).

	DASS Depression			DASS Anxiety			DASS Stress		
	B	T	Δ*R*2	*B*	t	Δ*R*2	*B*	t	Δ*R*2
Step 1			.43			.46			.44
Gender	.01	.14		.02	.26		.13	1.61	
Age	-.07	-.72		-.02	-.18		-.04	-.45	
Education	-.08	-.91		-.18	−2.17*		-.07	-.84	
Duration	.07	.80		.08	1.02		.04	.45	
OCI-R	.52	6.73***		.57	7.51***		.54	6.94***	
Self-Esteem	-.26	−3.26**		-.19	−2.48**		-.21	−2.70**	
Step 2			.04			.03			.01
ODIS	.23	2.83**		.19	2.35*		.09	1.02	

Note: Duration = duration of relationship in months, Education = years of education, DASS = Depression, Anxiety and Stress Scale, OCI-R = Obsessive Compulsive inventory.
*$p < 0.05$.
**$p < 0.01$.
***$p < 0.001$.

of romantic jealousy: cognitive ("I suspect that X may be attracted to someone else"), emotional ("X is flirting with someone of the opposite sex"), and behavioral ("I call X unexpectedly, just to see if s/he is there"). X is referred to a person with whom the subject has a strong romantic relationship. In the cognitive subscale rating were made on a scale ranging from 1 (All the time) to 7 (Never), In the emotional subscale rating were made on a scale ranging from 1 (very pleased) to 7 (Very upset), and in the behavioral subscale rating were made on a scale ranging from 1 (Never) to 7 (All the time). The internal consistencies of the scales (Cronbach's ɑ) in the current sample ranged from 0.82 to 0.90. The Partner-Related Obsessive-Compulsive Symptom Inventory (PROCSI; Doron et al., 2012b) is a 28-item self-report measure for assessing obsessions and compulsions relating to one's partner's perceived flaws in six categories: Physical appearance (e.g., "When I am with my partner I find it hard to ignore her physical flaws"), Sociability (e.g., "I repeatedly evaluate my partner's social functioning"), Morality (e.g., "I keep looking for evidence that my partner is moral enough"), Emotional stability (e.g., "I am bothered by doubts about my partner's emotional stability"), Intelligence (e.g., "I am constantly questioning whether my partner is deep and intelligent enough"), and Competence (e.g. "I keep looking for evidence of my partner's occupational success"). Rating were made on a scale ranging from 0 (Not At All) to 4 (Very Much). The internal consistencies of the scales (Cronbach's ɑ) in the current sample ranged from 0.75 to 0.90. The Relationship Obsessive-Compulsive Inventory (ROCI; Doron et al., 2012a) is a 14-item self-report measure. It assesses the extent to which a person might experience obsessions and compulsions centered on his/her romantic relationship. The inventory includes three subscales: Love for the partner (e.g., "I feel that I must remind myself over and over again why I love my partner"), Relationship "rightness" (e.g., "I check and recheck whether my relationship feels 'right'"), and Being loved by the partner (e.g., "I keep asking my partner whether she/he really loves me"). Rating were made on a scale ranging from 0 (not at all) to 4 (very much). The internal consistencies of the scales (Cronbach's ɑ) in the current sample ranged from 0.64 to 0.86.

3.2. Results and discussion

3.2.1. Tests of validity

First, correlations between the ODIS and demographic variables were examined. No significant correlations were found. Second, In order to examine whether the ODIS captures a theoretical construct distinct from other relationship and mental health measures, we conducted additional correlation analyses between the ODIS score and established ROCD measures, relationship variables (jealousy and attachment), OCD and mood measures. As expected, moderate-large correlations were found between the ODIS and the total scores of the PROCSI ($r = 0.59$) and the ROCI ($r = 0.63$). Supporting the distinctness of the obsessive distrust construct, small-moderate positive correlations were found between the ODIS and attachment anxiety ($r = 0.34$) and small-moderate negatively correlations were found between the ODIS and relationship commitment ($r = -0.28$). The ODIS also showed small correlations with the behavior ($r = 0.22$) and cognitive ($r = 0.31$) subscales of the Multidimensional Jealousy Scale (MJS). No significant links were found between the ODIS and the MJS emotional subscale or attachment avoidance. Replicating our findings from Study 1, significant moderate correlations were found with depression and OCD symptoms (see Table 4).

The incremental predictive value of the ODIS total score in predicting depression was then assessed by hierarchical regressions. The ODIS significantly predicted depression over and above other mental health and relationship measures (see Table 5). These findings indicated that the ODIS has unique predictive value, which is not subsumed by existing scales.

The incremental predictive value of the ODIS total score in predicting aspects of relationship violence toward a partner was assessed by four hierarchical regressions. As seen in Table 6, the ODIS predicted physical assault over and above other mental health and relationship measures.

The incremental predictive value of the ODIS total score in predicting aspects of relationship violence by a partner was assessed by four hierarchical regressions. As seen in Table 7, the ODIS predicted sexual coercion over and above other mental health and relationship measures.

Table 4
Correlations of the ODIS with relationship measures, depression and OCD symptoms.

		ODIS
PROCSI (*N* = 114)	Total	.59**
ROCI (*N* = 113)	Total	.63**
MJS (*N* = 113)	Cognitive	.31**
	Emotional	.07
	Behavior	.22*
ECR (*N* = 112)	Anxiety	.34**
	Avoidance	.15
IMS (*N* = 113)	Commitment	-.28**
DASS (*N* = 112)	Depression	.42**
OCI-R (*N* = 112)	Total	.29**

Note: PROCSI = Partner-Related Obsessive-Compulsive Symptom Inventory, ROCI = Relationship Obsessive-Compulsive Inventory, MJS = Multidimensional Jealousy Scale, ECR = Experience in Close Relationships, IMS = Investment Model Scale, DASS = Depression, Anxiety and Stress Scale, OCI-R = Obsessive Compulsive inventory.
*$p < 0.05$.
**$p < 0.01$.

Table 5
Regression coefficients for DASS depression regressed on age, gender, MJS, ECR-R, commitment, OCI-R and ODIS (*N* = 110).

	β	t	Δ*R*2
Step 1			.39
Age	-.02	−0.21	
Gender	-.04	−0.39	
MJS Cognitive	.05	0.75	
MJS Emotion	-.21	−2.43*	
MJS Behavior	.25	2.53*	
ECR anxiety	.29	3.22**	
ECR avoidance	-.11	−1.32	
Commitment	-.20	−2.34*	
OCI-R Total	.33	3.88***	
Step 2			.04
ODIS	.23	2.50**	

Note: MJS = Multidimensional Jealousy Scale, ECR = Experience in Close Relationships, OCI-R = Obsessive-Compulsive Inventory, ODIS = Obsessive Distrust.
*$P < 0.05$.
**$P < 0.01$.
***$p < 0.001$.

4. General discussion

The aim of this paper was to extend previous research of ROCD phenomena by exploring an additional domain of partner-focused obsessive preoccupation. More specifically, the goal of the current studies was to evaluate the consequences of obsessive preoccupations with partner's perceived unreliability and untrustworthiness. In order to do this, we constructed the obsessive distrust inventory (ODIS), an 8-item scale that assesses the severity of ROCD symptoms centered on the perceived un/reliability of one's romantic partner. The ODIS was found to be internally consistent and showed expected significant small to

Table 6
Regression coefficients for relationship violence toward a partner regressed on age, gender, MJS, ECR-R, commitment, OCI-R, DASS depression and ODIS ($N = 108$).

	Physical Assault			Psychological aggression			Sexual Coercion			Injury		
	B	t	Δ*R2*	*B*	t	Δ*R2*	*B*	t	Δ*R2*	*B*	t	Δ*R2*
Step 1			.08			.08			.16			.06
Age	-.17	−1.54		.11	1.00		-.18	−1.72		-.14	−1.23	
Gender	-.16	−1.43		-.10	-.92		-.13	−1.25		-.10	-.85	
MJS Cognitive	-.08	-0.67		-.19	−1.56		-.29	−2.65**		-.13	−1.07	
MJS Emotion	-.02	−0.18		.01	.12		-.09	-.89		-.01	-.07	
MJS Behavior	-.00	−1.56		.00	.00		-.06	-.13		.05	.37	
ECR anxiety	-.00	−0.03		.15	1.25		-.12	−1.07		-.10	-.82	
ECR avoidance	.03	0.29		.02	.19		-.00	-.04		-.05	-.50	
Commitment	.05	0.49		-.01	-.19		-.19	−1.89		.04	.37	
OCI-R Tot	-.17	−1.56		-.02	-.18		-.00	-.03		-.11	−101	
Depression	.21	1.73		.00	.00		-.01	-.12		.16	.16	
Step 2			.10			.00			.02			.01
ODIS	.39	3.50***		.07	.57		.17	1.46		.14	1.19	

Note: MJS = Multidimensional Jealousy Scale, ECR = Experience in Close Relationships, OCI-R = Obsessive-Compulsive Inventory, ODIS = Obsessive Distrust.
**$P < 0.01$.
***$p < 0.001$.

moderate associations with general OCD, mood, anxiety and stress symptoms (Study 1). Supporting our proposal that obsessive distrust may be construed as an additional domain of partner-focused ROCD symptoms, results from Study 2 showed moderate to large size correlations between the ODIS and ROCD measures (the ROCI and PROCSI scales). Consistent with previous findings showing ROCD symptoms are associated with significant distress over and above more common OCD symptoms (Doron et al., 2012b, 2016, 2012a; Melli, Bulli, Doron, & Carraresi, 2018). Regression analyses showed the ODIS explained unique variance of depression (Study 1 & Study 2) and anxiety symptoms when controlling for demographic variables and general OCD symptoms (Study 1). Moreover, our findings suggest that obsessive distrust symptoms were uniquely associated with relationship violence towards the partner (i.e., physical assault) and with being a victim of violence by the partner (i.e., sexual coercion) over-and-above demographic, mental health and relationship measures. As expected, the ODIS showed small to moderate links with related relationship measures indicating that the ODIS captures a relatively distinct theoretical construct. Higher ODIS scores were associated with attachment anxiety, lower relationship commitment and higher levels of cognitive and behavioral jealousy. Correlations with attachment anxiety, commitment and jealousy also suggests that obsessive distrust may take place within a complicated negative relationship climate, based on a variety of aspects that goes beyond the specific distrust phenomena. Repeated doubting about one's ability to trust their partner may directly destabilize the relationship bond, escalating other existing fears and doubts, resulting in increased relationship distress. In addition, the specific theme of the symptoms (i.e., lack of trust) may compound both individual and couple distress by affecting relationship structure. For instance, continuous preoccupation with partner's trustworthiness may increase suspiciousness, anger, frustration, negative attributions and/or distance toward the partner, and in extreme cases, violence towards the relationship partner. Being constantly preoccupied with the partner's unreliability may also engender feelings of guilt and shame increasing the likelihood of being a victim of partner violence. Moreover, for the "suspected" partner, being involved with a partner that continuously doubts one's reliability, may decrease self-efficacy, increase fear of abandonment, and be associated with continuous attempts to prove their credibility. Such a relationship structure may promote withdrawal and rejecting behaviors from both sides. Given that worry and obsessions have several common features (Freeston, Ladouceur, Gagnon, & Thibodeau, 1993; Turner, Beidel, & Stanley, 1992) that leads to frequent confusion between these two phenomena, it is important to emphasize that the ODIS questionnaire address obsessive preoccupation about perceived unreliability of the partner rather than rumination or worries. Specifically, the ODIS items focus on one's current feeling toward the partner, rather than future consequences of real situations that typically appear in other anxiety disorders. The ODIS questionnaire also includes compulsive behaviors more typically associated with ROCD symptoms than general worry. Future research would benefit from

Table 7
Regression coefficients for relationship violence by a partner regressed on age, gender, MJS, ECR-R, commitment, OCI-R, DASS depression and ODIS ($N = 108$).

	Physical Assault			Psychological aggression			Sexual Coercion			Injury		
	B	t	Δ*R2*	*B*	t	Δ*R2*	*B*	t	Δ*R2*	*B*	t	Δ*R2*
Step 1			.21			.10			.06			.09
Age	-.19	−1.87		-.11	−1.00		.04	.33		-.08	-.70	
Gender	-.35	−3.43***		-.14	−1.30		-.07	-.62		-.18	−1.64	
MJS Cognitive	-.09	-.88		-.13	−1.14		-.12	−1.06		-.18	−1.58	
MJS Emotion	-.11	−1.11		-.12	−1.14		.10	.93		-.07	-.61	
MJS Behavior	.05	.45		.12	.96		-.04	-.33		.08	-.65	
ECR anxiety	-.10	-.93		.10	.86		.10	.83		.00	.50	
ECR avoidance	.09	.89		-.02	-.22		.01	.11		-.02	-.19	
Commitment	.01	.13		-.02	-.22		-.09	-.85		.07	.63	
OCI-R Total	.05	.48		-.07	-.66		.10	.87		-.12	−1.19	
Depression	.10	.87		.07	.54		-.07	-.52		.12	.96	
Step 2			.00			.02			.15			.00
ODIS	.06	.09		.19	1.64		.48	4.31***		.07	.60	

Note: MJS = Multidimensional Jealousy Scale, ECR = Experience in Close Relationships, OCI-R = Obsessive-Compulsive Inventory, ODIS = Obsessive Distrust.
***$p < 0.001$.

assessing the relationship and unique contribution of the ODIS to ROCD phenomena over and above general worry. Although consistent with the proposed model, some limitations of the current studies should be addressed. First, we used two nonclinical community cohorts. Although nonclinical participants experience OC-related beliefs and symptoms, they may differ from clinical patients in the type and severity of OCD symptoms, as well as in symptom-related impairment. Future research would benefit from studying the links between obsessive distrust phenomena, obsessive jealousy, more common OCD presentations, mood variables and relationship variables among clinical participants. Second, it is important to note that our design was cross-sectional and correlational, and therefore one cannot derive any causal inference from the findings. Despite these potential limitations and pending replication of the results with a clinical cohort, the studies' findings have important clinical implications. Our preliminary investigation of distrust obsessions, checking and reassurance seeking behaviors has the potential to increase clinical awareness of patients with such clinical presentations, thereby reducing misdiagnosis of this disabling phenomenon. Obsessive distrust symptoms should be dealt with differently from other jealousy disorders based on low self-esteem or fear of abandonment. When dealing with obsessive distrust symptoms, one may consider adapting cognitive and behavioral interventions that have been suggested for ROCD patients (Doron & Derby, 2017). Indeed, obsessive distrust commonly occurs with other ROCD symptoms. Clinical formulation of obsessive distrust would benefit from being understood in the context of ROCD symptoms and other self-vulnerabilities previously associated with ROCD (Doron & Derby, 2017; Doron, Szepsenwol, Karp, & Gal, 2013).Conceptualizing preoccupation with the partner's unreliability as an additional preoccupation with the partner's flaws (e.g., appearance or intelligence) may facilitate identification of processes underlying such symptoms (e.g., partner-value self-contingencies, extreme or catastrophic beliefs about relationships; Doron & Derby, 2017). Treatment should include assessment and information gathering, psycho-education and challenging of maladaptive thinking patterns and partner-value self-contingencies. Evidenced based mobile applications designed to help challenge ROCD related beliefs and self-vulnerabilities (e.g., GGRO; Roncero, Belloch, & Doron, 2018; 2019) may be a useful tool as homework tasks. Exposure Response Prevention (ERP), other behavioral experiments and interventions such as imagery rescripting may be very useful in this therapeutic process. Behavioral experiments may include the client communicating his/her expectations to the partner regarding a specific task, reaching agreement on a specific plan of action and testing its success. ERP tasks may include scripts related to feared scenarios (e.g., finding yourself dealing with adverse consequences after letting the partner be responsible for important task or the partner interacting with an attractive other) or gradual exposure to "triggering" situations (e.g., leaving the partner with the kids) without the habitual compulsive response (e.g., spying or repeatedly calling the partner). Importantly, the correlations between obsessive distrust and relationship violence suggests that level of relational conflict should be carefully assessed and contingency plans made for incidents of couple's conflict. Appropriate communication and conflict resolution skills should be taught and practiced. In this context, including the partner in periodic therapeutic sessions is often useful (Doron & Derby, 2017). Such sessions promote partner's involvement, provide the therapist with an additional perspective of the couple's dynamics, allows for communication/conflict resolution training and facilitate the implementation of conflict contingency plans. Involving the partner also facilitate the planning and undertaking of behavioral experiments and ERP exercises, particularly including the reduction of partner accommodation behaviors.

5. Conclusion

Obsessive distrust may be an additional, complex and disabling form of partner-focused ROCD symptoms. This previously unexplored phenomena focused on the perceived un/reliability of one's romantic partner may be uniquely associated with negative mood symptoms and relationship violence. We hope the obsessive distrust inventory (ODIS) developed to assess obsessive distrust symptoms may promote systematic research of this phenomenon, its correlates, and associated impairments.

Declaration of competing interest

All authors declare that they have no conflicts of interest.

References

Abramowitz, J. S., Fabricant, L. E., Taylor, S., Deacon, B. J., McKay, D., & Storch, E. A. (2014). The relevance of analogue studies for understanding obsessions and compulsions. *Clinical Psychology Review, 34*(3), 206–217.

Abramowitz, J. S., Huppert, J. D., Cohen, A. B., Tolin, D. F., & Cahill, S. P. (2002). Religious obsessions and compulsions in a non-clinical sample: The Penn Inventory of Scrupulosity (PIOS). *Behaviour Research and Therapy, 40*(7), 824–838.

Antony, M. M., Bieling, P. J., Cox, B. J., Enns, M. W., & Swinson, R. P. (1998). Psychometric properties of the 42-item and 21-item versions of the Depression Anxiety Stress Scales in clinical groups and a community sample. *Psychological Assessment, 10*(2), 176–181.

Doron, G., & Derby, D. (2017). Assessment and treatment of relationship-related OCD symptoms (ROCD): A modular approach. In J. S. Abramowitz, D. McKay, & E. A. Storch (Eds.). *The Wiley handbook of obsessive compulsive disorders* (pp. 547–573). .

Doron, G., Derby, S. O., Nahaloni, E., & Moulding, R. (2016). Relationship obsessive compulsive disorder (ROCD): Interference, symptoms and maladaptive beliefs. *Frontiers in Psychiatry, 7*, 58–67.

Doron, G., Derby, D. S., & Szepsenwol, O. (2014). Relationship obsessive compulsive disorder (ROCD): A conceptual framework. *Journal of Obsessive-Compulsive and Related Disorders, 3*, 169–180.

Doron, G., Derby, D., & Szepsenwol, O. (2017). "I can't stop thinking about my child's flaws": An investigation of parental preoccupation with their children's perceived flaws. *Journal of Obsessive-Compulsive and Related Disorders, 14*, 106–111.

Doron, G., Derby, D. S., Szepsenwol, O., & Talmor, D. (2012a). Flaws and all: Exploring partner-focused obsessive-compulsive symptoms. *Journal of Obsessive Compulsive and Related Disorders, 1*, 234–243.

Doron, G., Derby, D., Szepsenwol, O., & Talmor, D. (2012b). Tainted Love: Exploring relationship-centered obsessive compulsive symptoms in two nonclinical cohorts. *Journal of Obsessive-Compulsive and Related Disorders, 1*, 16–24.

Doron, G., Mizrahi, M., Szepsenwol, O., & Derby, D. (2014). Right or flawed: Relationships obsessions and sexual satisfaction. *The Journal of Sexual Medicine, 11*, 2218–2224.

Doron, G., & Szepsenwol, O. (2015). Partner-focused obsessions and self-esteem: An experimental investigation. *Journal of Behavior Therapy and Experimental Psychiatry, 49*, 173–179.

Doron, G., Szepsenwol, O., Karp, E., & Gal, N. (2013). Obsessing about intimate-relationships: Testing the double relationship-vulnerability hypothesis. *Journal of behavior therapy and experimental psychiatry, 44*(4), 433–440.

Foa, E. B., Huppert, J. D., Leiberg, S., Langner, R., Kichic, R., Hajcak, G., et al. (2002). The obsessive– compulsive inventory: Development and validation of a short version. *Psychological Assessment, 14*, 485–496.

Freeston, M. H., Ladouceur, R., Gagnon, F., & Thibodeau, N. (1993). Beliefs about obsessional thoughts. *Journal of Psychopathology and Behavioral Assessment, 15*(1), 1–21.

Josephson, S. C., & Hollander, E. (1997). Body dysmorphic disorder by proxy. *Journal of Clinical Psychiatry, 58*(2), 86–87.

Kingham, M., & Gordon, H. (2004). Aspects of morbid jealousy. *Advances in Psychiatric Treatment, 10*(3), 207–215.

Lovibond, P. F., & Lovibond, S. H. (1995). The structure of negative emotional states: Comparison of the depression anxiety stress scales (DASS) with the beck depression and anxiety inventories. *Behavior Research and Therapy, 33*(3), 335–343.

Melli, G., Bulli, F., Doron, G., & Carraresi, C. (2018). Maladaptive beliefs in relationship obsessive compulsive disorder (ROCD): Replication and extension in a clinical sample. *Journal of Obsessive-Compulsive and Related Disorders, 18*, 47–53.

Pfeiffer, S. M., & Wong, P. T. (1989). Multidimensional jealousy. *Journal of Social and Personal Relationships, 6*(2), 181–196.

Rapee, R. M., Craske, M. G., Brown, T. A., & Barlow, D. H. (1996). Measurement of perceived control over anxiety-related events. *Behavior Therapy, 27*(2), 279–293.

Robins, R. W., Hendin, H. M., & Trzesniewski, K. H. (2001). Measuring global self-esteem: Construct validation of a single-item measure and the Rosenberg Self-Esteem Scale. *Personality and Social Psychology Bulletin, 27*(2), 151–161.

Rodriguez, L. M., Dibello, A. M., Øverup, C. S., & Neighbors, C. (2015). The price of distrust: Trust, anxious attachment, jealousy, and partner abuse. *Partner abuse, 6*(3), 298–319.

Roncero, M., Belloch, A., & Doron, G. (2018). A novel approach to challenging OCD related beliefs using a mobile-app: An exploratory study. *Journal of Behavior Therapy and Experimental Psychiatry, 59*, 157–160.

Roncero, M., Belloch, A., & Doron, G. (2019). Can brief, daily training using a mobile app help change maladaptive beliefs? Crossover randomized controlled trial. *JMIR mHealth and uHealth, 7*(2), e11443.

Rosenberg, M. (1965). Rosenberg self-esteem scale (RSE). Acceptance and commitment

therapy. *Measures package, 61*, 52.
Rusbult, C. E., Martz, J. M., & Agnew, C. R. (1998). The investment model scale: Measuring commitment level, satisfaction level, quality of alternatives, and investment size. *Personal Relationships, 5*(4), 357–391.
Straus, M. (1996). The revised conflict tactics scales (CTS2). *Journal of Family Issues, 17*, 283–316.
Straus, A. S., & Douglas, E. M. (2004). A short form of the Revised Conflict Tactics Scales, and typologies for severity and mutuality. *Violence & Victims, 19*(5), 507–520.
Szepsenwol, O., Shahar, B., & Doron, G. (2016). Letting it linger: Exploring the longitudinal effects of relationship-related obsessive-compulsive phenomena. *Journal of Obsessive-Compulsive and Related Disorders, 11*, 101–104.
Trak, E., & Inozu, M. (2019). Developmental and self-related vulnerability factors in relationship-centered obsessive compulsive disorder symptoms: A moderated mediation model. *Journal of Obsessive-Compulsive and Related Disorders, 21*, 121–128.
Turner, S. M., Beidel, D. C., & Stanley, M. A. (1992). Are obsessional thoughts and worry different cognitive phenomena? *Clinical Psychology Review, 12*(2), 257–270.
Wei, M., Russell, D. W., Mallinckrodt, B., & Vogel, D. L. (2007). The experiences in close relationship scale (ECR)-short form: Reliability, validity, and factor structure. *Journal of Personality Assessment, 88*(2), 187–204.