BRIEF REPORT

Self-Discrepancies Among Individuals with a History of Depression: The Role of Feared Self-Guides

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Abstract This study examined self-discrepancies, selfguide expectancies, and self-guide importance in vulnerability to depression using a remitted depression design. Results indicated that individuals with past episodes of depression exhibited greater actual-feared self-guide congruence compared to their never depressed counterparts. In other words, previously depressed individuals viewed their actual selves as closer to what they feared becoming compared to individuals without a history of depression. Further, individuals with past episodes of depression believed that they would be more likely to embody feared self-guides in the future compared to their never depressed counterparts. These findings remained significant after statistically controlling for differences in current depressive symptoms. Our findings suggest that feared self-guides may play an important role in vulnerability to episodes of depression.

Keywords Depression · Self-discrepancy theory · Vulnerability · Remission design · Motivation · Feared self

Self-discrepancy theory (SDT) is a model of self-relevant cognitions or self-guides that operate as goals used to govern self-regulation (Higgins and Bargh 1987; Higgins 1996). According to SDT, there are three domains of the self: the ideal, ought, and actual self; and individuals form self-guides in the ideal and ought domains that they aim to attain. Ideal self-guides refer to cognitive reference points that individuals hope and aspire to become, whereas ought

C. Vergara-Lopez · J. E. Roberts (⊠) Department of Psychology, University at Buffalo, The State University of New York, Buffalo, NY 14260, USA e-mail: robertsj@buffalo.edu self-guides are cognitive reference points that individuals perceive they should embody, according to self-defined roles and obligations. Higgins and Bargh (1987) proposed that individuals experience emotional distress when their actual self (i.e., the traits they perceive they actually possess) is incongruent with their ideal or ought self-guides. In addition, Markus and Nurius' (1986) research raises the possibility of another domain of the self, the feared self. Feared self-guides would serve as cognitive reference points for traits that an individual wants to avoid having. In this case, congruence between feared self-guides and the perceived actual self would lead to emotional distress. Consistent with this hypothesis, Carver et al. (1999) found that individuals who describe their actual self as closer to their feared self-guides report higher levels of negative affect.

Traditional cognitive models of depression emphasize and nomothetically define negative cognitive content (i.e., cognitions that are deemed as "depressogenic"; e.g., Beck 1987). In contrast, SDT emphasizes the degree of discrepancy between traits individuals perceive they possess (actual self) and those that they aim to attain (ideal and ought self-guides) in the generation of emotional distress. In other words, SDT emphasizes an idiographic approach in defining what individuals perceive as distressing by focusing on the individuals' evaluations of their actual self relative to their self-guides. In this model, the content of self-guides is irrelevant as a predictor of emotional distress. Instead, the degree of perceived mismatch between the actual self and self-guides is thought to be critical for emotional outcomes. Consequently, linking SDT with depression is a theoretically attractive framework that provides a different understanding on how cognitions contribute to the onset and maintenance of depression relative to traditional cognitive models. According to SDT, discrepancies between the perceived actual self and specific self-guides are differentially related to emotional distress. For example, previous research has found that discrepancies between the perceived actual self and ideal self-guides are associated with state feelings of dejection (which researchers have equated with depression; e.g., Boldero and Francis 2000), whereas discrepancies between the perceived actual self and ought self-guides are associated with anxious agitation (Scott and O'Hara 1993; Strauman 1989). However, researchers have recently questioned the hypothesis that particular self-discrepancies lead to specific emotional responses and instead suggest that all self-discrepancies (e.g., actual-ideal, actual-ought) contribute to general distress that is not unique to depression (Phillips and Silvia 2010; Rodebaugh and Donahue 2007).

Although there is considerable past research demonstrating the role of self-discrepancies in the generation of dysphoric affect (Cornette et al. 2009; Higgins and Bargh 1987; Higgins 1996; Papadakis et al. 2006; Roelofs et al. 2007), their role in clinical depression has not been adequately investigated. The few studies that have investigated self-discrepancies in depressed individuals find greater actual-ideal self discrepancies among individuals with acute depression relative to never depressed controls (Fairbrother and Moretti 1998; Strauman 1989). However, counter to the idea that self-discrepancies play a role in vulnerability to depression, Fairbrother and Moretti (1998) found that individuals with a past episode of depression did not differ from never depressed individuals. This type of "remission design" helps determine whether characteristics act as state dependent effects of depression versus trait-like vulnerabilities to depression (Just et al. 2001). The remitted depression design addresses confounds that may be caused by state negative affect (see Haeffel et al. 2005; Pedersen et al. 2009; Teasdale and Dent 1987, for examples). Fairbrother and Moretti's negative findings raise the possibility that ideal self-discrepancies are associated with acute negative affect and current depressive symptoms, but are not associated with trait vulnerability to depression. This study did not examine discrepancies between the actual self and feared self-guides, which may be particularly salient in vulnerability to depression given that depression prone individuals are believed to be highly sensitive to aversive experiences and have strong avoidance motivation (Fowles 1994; Hopko et al. 2003; Kasch et al. 2002). It may be depression prone individuals are hypervigilant to signals of punishment and aim to avoid punishment. Further, expectations for attaining self-guides in the future and the importance of the self-guide have not been investigated. Expectations about achieving self-guides are relevant given that depression prone individuals make negative predictions about the future (Miranda and Mennin 2007) and tend to view aversive outcomes as more likely to occur (Dickson and MacLeod 2006). Furthermore, given the central role of avoidance motivation in depression, depression prone individuals may view feared self-guides as more important compared to less vulnerable individuals.

The present study aimed to investigate the role of feared self-guides among individuals with a history of depression. Using a remitted depression design that compared previously depressed to never depressed individuals, we hypothesized that congruence between the actual self and feared self-guides are associated with trait vulnerability to depression. Although previous studies suggest that ideal and ought self-discrepancies are related to acute dysphoric affect, there is evidence to indicate that these self-discrepancies are not related to depression vulnerability (Fairbrother and Moretti 1998). Therefore, we examined discrepancies in actual-ideal and actual-ought self-guides to provide a point of comparison to previous research on self-guides. Further, on an exploratory basis, we examined expectations for attaining self-guides in the future and the importance of self-guides. Expectations about achieving self-guides and the perceived importance of these guides have not been previously investigated in the SDT literature.

Methods

Participants were 83 undergraduates from a large university in the northeastern US who completed two different sessions. Participants were recruited via phone/email and participation was voluntary in partial fulfillment of course requirements. Participants' age ranged from 18 to 27 years (mean = 19.5, SD = 1.9) and matched on age, gender, and ethnicity. Eighty-two participants self identified as heterosexual and 1 identified as bisexual. The majority of participants identified as Caucasian (51.8%), 20.5% as Asian, 13.5% as African American, 8.4% as bi-racial, and 5.8% as Hispanic. A total of 43 (19 male) participants met criteria for a previous major depressive episode (MDE), and 40 (17 male) participants never met criteria for major depressive disorder (MDD). Participants were excluded from the study if they met criteria for a current depressive episode and past history of or current manic or hypomanic episode. Other data from this sample focusing on temperament and goal setting have been previously published (Vergara and Roberts 2011).

Measures

Depression

The Patient Health Questionnaire-9 (PHQ-9) (current and lifetime) was used to screen for current and lifetime MDD

(Cannon et al. 2007; Spitzer et al. 1999). The Beck depression inventory-II (BDI-II; Beck et al. 1996) was used to assess for current depressive symptomatology. The miniinternational neuropsychiatric interview (MINI; Sheehan et al. 1998), a structured clinical interview designed to assess criteria for major axis I psychiatric disorders classified in DSM-IV and ICD-10, was used to determine diagnostic group.

Self-Discrepancies

The revised Selves Questionnaire (Carver et al. 1999), which is an ideographic measure of self relevant goals or guides, was used to assess self discrepancies. This measure provides participants with detailed instructions on the definition of ideal, ought, and feared self-guides. For each of these self-guides, participants were required to list seven of their own self-guides that matched the instruction set. Participants were then asked to rate how similar they thought they presently were to each of the ideal, ought, and feared self-guides they listed using a scale ranging from 1 (I am just like this trait) to 7 (I am the opposite of this trait). Thus, participants generated their own reports on how discrepant they perceived their actual self from their ideal, ought, and feared self-guides. Further, participants were also instructed to rate their expectations for the likelihood that these self-guides would be attained in the future and how important they perceived each self-guide to be using a 7 point Likert scale. Scores for self-discrepancies, expectations, and importance were created by summing the ratings participants provided for each of the seven self-guides across the three self-domains (ideal, ought, and feared).

By definition, previously depressed individuals have had experience with an episode of depression. Thus, we were concerned that previously depressed individuals would report depression symptoms as feared self-guides that they wanted to avoid. This is an issue because our independent and dependent variables would contain the same information. To address this potential confound, we coded all feared self-guides that met DSM-IV MDD symptom criteria and removed them from analyses. These included characteristics such as "worthless", "fatigued", "unmotivated", and being viewed as a "loser" (i.e., self views of worthlessness). A total of 30 feared self-guides were removed and these were reported by 23 participants (44% were previously depressed).

Procedure

Over 2,666 participants from the undergraduate Introductory Psychology subject pool were screened for a past history of depression using the PHQ-9 (current and lifetime). Of these participants, 372 screened positive for a past episode of depression and 2,213 screened negative for a lifetime history. Once potential subjects voluntarily agreed to participate in the study, they were scheduled for two sessions. The first session involved a structured diagnostic interview (MINI plus-mood disorder module). The MINI was conducted by a graduate level student clinician who interviewed a total of 178 individuals. Of those interviewed participants, 43 individuals were confirmed to meet criteria for a past episode of depression and 40 were confirmed to have never met criteria for depression. The second session involved completion of self-report measures in small groups.

Results

Hypotheses were tested with one-way analysis of variance (ANOVA) in R 2.9.1 (R Foundation for Statistical Computing, 2009). Separate analyses were run for each dependent variable, and depression history (previously depressed vs. never depressed) was the between-subjects factor. Previously depressed individuals typically report higher current depressive symptoms compared to never depressed individuals. Therefore, current depressive symptoms were included as a covariate in follow-up models to rule out state effects of current dyphoric modo.¹

¹ Miller and Chapman (2001) raise concerns about use of ANCOVA to control group differences when groups were not based on random assignment. In particular, Miller and Chapman make the case that it is inappropriate to covary out conceptually substantive variance from two groups who by definition differ on the covariate. To do so, leaves variance in the dependent variable that reflects a phenomenon that either does not exist in nature, is no longer conceptually meaningful or that is conceptually distinct from the phenomenon of interest. The issue then is whether or not current depressive symptoms reflect "essential variance" in the history of depression variable that cannot be removed without substantively altering the construct. In other words, are elevated current depressive symptoms a fundamental component of having once met lifetime criteria for major depression? Is the history of depression variable no longer substantively meaningful after removing variance related to current symptoms?

If current symptoms are an essential feature of past depression, it would be inappropriate to treat them as a covariate, just as it would be inappropriate to covary out variance related to current symptoms from an analysis comparing individuals who meet criteria for current MDD versus those who do not. However, given that depression typically involves a fluctuating course that includes well periods with minimal or no symptoms, we believe that our use of an ANCOVA to handle group differences in current depressive symptoms is appropriate. Indeed this is the same logic used in prospective studies investigating predictors of change in depression over time. Such studies typically treat baseline depressive symptoms as a covariate because these are strongly predictive of future symptoms (the dependent variable) and are usually correlated with the variables that are being tested as predictors of change in depression.

Table 1 Group means and standard deviations

	Previou	sly depressed	Never depressed		
1. BDI	15.3	8.0	8.1	6.4	
2. Ideal self-discrepancies	32.4	8.0	34.3	6.6	
3. Ought discrepancies	33.0	6.3	34.0	5.5	
4. Feared congruence	25.0	6.5	19.4	5.8	
5. Ideal expectancies	40.5	6.3	41.2	6.5	
6. Ought expectancies	39.2	5.5	40.6	5.7	
7. Feared expectancies	19.6	7.8	14.7	6.7	
8. Ideal importance	46.0	4.3	45.1	6.0	
9. Ought importance	44.6	5.8	44.7	5.8	
10. Feared importance	37.6	11.9	36.4	10.9	

BDI Beck depression inventory

Distributions of the outcome variables were examined prior to analysis to verify the assumption of normality. The following variables showed significant skew: perceived likelihood of achieving ideal (-.87), ought (-.72), and feared (.78) self-guides in the future and importance of ideal (-1.43), ought (-1.02), and feared (-1.12) selfguides. These dependent variables were transformed using Box Cox Powers (Box and Cox 1964), which reduced skew to non-significant levels.

Preliminary Analyses

There were no statistically significant differences in mean age, t (81) = .02, P = .98, ethnicity/race [Caucasians compared to all other racial groups]; χ^2 (1, N = 83) = .96, P = .33, or gender, χ^2 (1, N = 83) = .00, P = .95, across the groups. As seen in Table 1, previously depressed

Table 2 Means, standard deviations, and correlation matrix

individuals reported more current symptoms of depression than never depressed individuals, t(78) = 4.99, P < .001, M = 15.3 versus 8.1, on the BDI. The mean of the nontransformed BDI for the full sample was 11.8. As seen in Table 2, symptoms of depression were positively correlated with actual-ideal and actual-ought self-guide discrepancies and with congruence with feared self-guides. More symptomatically depressed individuals reported perceiving their actual selves as being more discrepant from ideal and ought guides, and more congruent with feared guides, relative to less depressed individuals. Likewise, symptoms of depression were negatively correlated with expectations for attaining ideal and ought self-guides, and positively correlated with expectations for attaining feared self-guides. More symptomatically depressed individuals reported lower expectations for attaining ideal and ought self-guides and higher expectations for attaining feared self-guides. In contrast, symptoms of depression were not significantly correlated with ratings of the importance of ideal, ought, and feared self-guides.

Group Differences in Self-Discrepancies for Ideal, Ought, and Feared Self-Guides

ANOVAs indicated no statistically significant group differences for actual-ideal self-guide discrepancies, F(1,81) =1.43, P = .24, $\eta^2 = .02$, or actual-ought self-guide discrepancies, F(1,81) = .06, P = .44, $\eta^2 = 0$. In contrast, previously depressed individual reported higher scores on actual-feared self-guide congruence, F(1,81) = 16.40, P < .01, M = 24.9 versus 19.4, $\eta^2 = .17$, compared to never depressed individuals. ANCOVAS that included current

	Mean	SD	1	2	3	4	5	6	7	8	9	10
1. BDI	1.6	0.2	1.00	.44**	.39**	.45**	26**	42**	.35*	.14	02	.17
2. Ideal discrepancies	33.3	7.3		1.00	.73**	33**	.70**	.57**	27*	.26*	.12	12
3. Ought discrepancies	33.4	5.9			1.00	29**	.54**	.76**	22*	.26*	.30**	02
4. Feared congruence	22.8	6.9				1.00	26*	28*	.71**	.01	01	.19
5. Ideal expectancies	21,798.6	7,986.6					1.00	.68**	40**	.52**	.36**	01
6. Ought expectancies	12,709.7	4,128.2						1.00	33**	.37**	.56**	.11
7. Feared expectancies	1.7	0.1							1.00	13	14	20
8. Ideal importance	491,411,736.0	214,276,789.0								1.00	.63**	.35**
9. Ought importance	8,872,411.0	3,822,141.0									1.00	.35*
10. Feared importance	1,550.3	739.4										1.00

Ideal and ought discrepancies were reversed scored such that higher scores reflect greater discrepancy/less congruence, and the following variables were transformed using Box Cox Powers (Box and Cox 1964). Ideal, ought and feared expectancies, ideal, ought and feared importance, and BDI

BDI Beck depression inventory

* P < .05

** P < .01

depressive symptoms as a covariate, yielded similar null results for both ideal self-discrepancies, F(1,80) = .66, P = .42, $\eta^2 = 0$, and ought self-discrepancies, F(1,80) = .79, P = .38, $\eta^2 = 0$, whereas the group effect remained statistically significant for feared self-guide congruence, F(1,80) = 6.08, P < .05, $\eta^2 = .06$.

Group Differences in Expectations of Attaining Ideal, Ought, and Feared Self-Guides

ANOVAs indicated no statistically significant group differences in expectations of attaining ideal self-guides, F(1,80) = .45, P = .50, $\eta^2 = 0$, or ought self-guides, F(1,81) = 1.50, P = .22, $\eta^2 = .02$. In contrast, previously depressed individuals reported higher expectations that feared self-guides would be attained in the future, F(1,81) =11.52, P < .01, M = 19.6 versus 14.6, $\eta^2 = .12$, compared to never depressed individuals. ANCOVAS that included current depressive symptoms as a covariate, yielded similar null results for expectations of ideal self-guides, F(1,79) =.33, P = .57, $\eta^2 = 0$, and ought self-guides, F(1,80) = .23, P = .31, $\eta^2 = 0$, whereas the the group effect remained statistically significant for feared self-guide expectations, F(1,80) = 4.35, P < .05, $\eta^2 = .05$.

Group Differences in Perceived Importance of Ideal, Ought, and Feared Self-Guides

ANOVAs indicated no statistically significant group differences in importance of ideal self-guides, F(1,80) = .17, P = .68, $\eta^2 = 0$, ought self-guides, F(1,80) = .01, P = .91, $\eta^2 = 0$, or feared self-guides, F(1,80) = .45, P = .50, $\eta^2 = 01$. ANCOVAS that included current depressive symptoms as a covariate, yielded similar null results for ideal self-guides, F(1,79) = .04, P = .83, $\eta^2 = 0$, ought self-guides, F(1,80) = .00, P = .93, $\eta^2 = 0$, and feared self-guides, F(1,79) = .00, P = .92, $\eta^2 = 0$.

Discussion

The literature on SDT suggests that discrepancies between the perceived actual self and ideal and ought self-guides place individuals at risk for emotional distress. The current study sought to expand SDT by investigating the role of feared self-guides, expectations of attaining self-guides in the future, and the perceived importance of self-guides in relation to clinical depression using a remitted depression design. Our results indicated that previously depressed individuals viewed their actual selves as closer to what they most feared becoming and reported greater expectancies of becoming like their feared self-guides relative to individuals without a history of depression. These findings suggest that feared self-guides may be an important cognitive risk factor to depression.² In contrast, there were no group differences on actual-ideal and actual-ought self-discrepancies, expectations of attaining ideal and ought self-guides in the future, or on the importance of any type of self-guide. Importantly, these effects were not simply due to elevated subclinical depression symptoms among previously depressed individuals because depression symptoms were entered as a covariate in follow-up analyses. Furthermore, these results were not driven by depression content in the feared self-guides because we excluded these self-guides from the analyses.³

Although prior work on SDT suggests that actual-ideal and actual-ought self-discrepancies contribute to the generation of depressive affect (e.g., Boldero and Francis 2000) and are elevated among individuals suffering from acute episodes of clinical depression (Strauman 1989), only one previous study examined self discrepancies as a possible trait vulnerability to depression using a remission design (Fairbrother and Moretti 1998). Consistent with Fairbrother and Moretti (1998), our study failed to find any evidence that previously depressed individuals have greater actual-ideal or actual-ought discrepancies compared to never depressed persons. In contrast to history of past depression, we found that current subclinical depressive symptoms were positively correlated with actual-ideal and actual-ought self-guide discrepancies, as well as with actual-feared self-guide congruence. Further, depressive symptoms were correlated with lower expectations for attaining ideal and ought self-guides, and higher expectations for the attaining feared self-guides. Together our findings suggest that actual-ideal and actual-ought self discrepancies and expectancies act as state markers of acute depressive symptoms and emotional distress, but do

² Vergara and Roberts (2011) examined temperament and goal setting among individuals with and without a past history of depression in this same sample. Results indicated that previously depressed individuals reported greater numbers of avoidance goals and higher scores on the behavioral activation system (BAS). In order to provide a stringent test of the current hypotheses, we included number of avoidance goals and BAS as covariates. Results were similar to those reported above. In particular, previously depressed individuals reported higher scores on actual-feared self-guide congruence, F(1,79) = 14.06, P < .01, $\eta^2 = 15$, and higher expectations that feared self-guides would be attained in the future, F(1,79) = 8.90, P < .01, $\eta^2 = .10$, compared to never depressed individuals.

³ When feared self-guides that met DSM-IV MDD symptom criteria were not removed from analyses, previously depressed individuals reported higher scores on actual-feared self-guide congruence, F(1,81) = 10.53, P < .01, $\eta^2 = 12$, and higher expectations that feared self-guides would be attained in the future, F(1,81) = 8.63, P < .01, $\eta^2 = 10$, compared to never depressed individuals. Similar null results to those reported in the text were found when examining group differences in importance of feared self-guides, F(1,80) = .03, P = .85, $\eta^2 = 0$.

not function as trait-like vulnerabilities to depression, whereas feared-self congruence and expectancies function as a trait-like vulnerability that potentially increase risk for depressive episodes.

The present study suggests that cognitive representations of negative, undesirable or feared characteristics (feared self-guides), relative to representations of positive characteristics (ideal and ought self-guides) that individuals aspire to attain, may be particularly problematic for depression prone individuals. However, it remains for future research to determine the nature of the problematic feature(s) of feared self-guides. It may be that specific types of feared self-guides that are generated, the appraisal of the actual self, or some combination of both are the key problematic features. For example, do depression prone individuals tend to generate feared self-guides that are difficult to avoid (such as fearing to be imperfect)? Or is it that they tend to generate self-guides that are similar to those of less vulnerable individuals, but appraise their actual selves in a more negative way? In addition, future research needs to examine the mechanism by which viewing one's actual self as congruent with feared selfguides contributes to the manifestation of depressive episodes. One possibility is that such congruence serves as a signal of impending punishment, which could elicit anticipation of negative consequences, or it can signal current punishment. Punishment tends to evoke fear-like responses such as freezing (i.e., behavioral shutdown), helplessness, and loss of motivation, which in turn may play a role in the onset of depressive episodes. In a related manner, it may be that behavioral efforts at avoiding the feared self results in restricting one's life such that that it reduces positive reinforcement and minimizes pursuit of one's positive goals (ideal self) and values (see Jacobson et al. 2001). These lines of thinking are consistent with the idea that depression prone individuals are sensitive to aversive punishing experiences (Fowles 1994; Hopko et al. 2003).

We acknowledge several limitations. Although using a remission depression design and controlling for depressive symptoms helps disentangle confounds between acute depression and trait vulnerability, these data are correlational in nature and a third variable could account for the current findings. Further, this design does not discriminate whether the results observed are due to depression vulnerability or due to residual effects of having experienced previous depressive episodes (i.e., scar hypothesis; Just et al. 2001). It is possible that the experience of depressive episodes has a lasting effect on actual-feared self congruence that persists during remission. Future research should examine if feared self congruence and expectancies prospectively predict the development of depressive symptoms and episodes, as well as if they predict the persistence of depressive episodes. Secondly, while the current study examined clinically diagnosable depression, it did so in the context of a non-clinical college student sample and findings may not be generalizable to community and clinical members suffering from depression. Third, we did not exclude individuals with other co-morbid disorders raising the question of the specificity of our findings. For example, it may be that there was an elevated rate of anxiety disorders among the previously depressed group and it was this comorbidity that accounted for their greater actualfeared self congruity and expectancies. Despite limitations, this study raises the possibility that the feared self plays an important role in vulnerability to clinical depression. It suggests that greater attention to negative self-guides could help advance work on SDT accounts of vulnerability to depressive disorders.

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