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Self-Compassion, Self-Esteem, and Irrational Beliefs

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Abstract Assumptions associated with Rational-Emotive Behavior Therapy (REBT) suggest that self-compassion, but not self-esteem, should be incompatible with irrational beliefs and with the emotional disturbances that they produce. In this study, 184 university students responded to a self-compassion scale along with measures of irrational beliefs, self-esteem, depression, and anxiety. As expected, self-compassion correlated negatively with irrationality, predicted better mental health, and explained inverse connections of self-esteem with irrational beliefs. In support of REBT, the irrationality of low frustration tolerance also partially mediated the inverse self-compassion relationship with anxiety. Other findings for self-esteem and for the irrational belief of self-worth, nevertheless, suggested complexities for the REBT conceptual framework. These data most importantly confirmed self-compassion as part of what REBT would describe as an effective personal philosophy.

Keywords Anxiety · Depression · Irrational beliefs · Self-compassion · Self-esteem

Beginning with the work of Albert Ellis in the 1950's, Rational Emotive Behavior Therapy (REBT) began as the first cognitive therapy (David et al. 2005) and has been effective in treating a wide range of psychological disorders, including, for example, social anxiety (DiGiuseppe et al. 1990), social phobia (Mersch et al. 1991), obsessive-compulsive disorder (Emmelkamp and Beens 1991), and symptoms of schizophrenia (Shelley et al. 2001). REBT has also proven to be at least as effective as medication in alleviating major depression (Macaskill and Macaskill 1996) and dysthymic disorder (Wang et al. 1999). Meta-analyses document the general efficacy of REBT (Engels et al. 1993; Lyons and Woods 1991).

Mental health as described within the REBT conceptual framework has far-reaching philosophical implications. Ellis (1994), for instance, applauds the assertion of the Stoic philosopher Epictetus that people "are disturbed not by things, but by views they take of them" (Ellis 1994, p. 64). In conformity with this basic idea, REBT proposes an A-B-C model of psychopathology in which "Activating" (A) life events produce problematic emotional "Consequences" (C) only through the mediation of irrational "Beliefs" (B). REBT adds a "D" to the causal sequence when a therapist "Disputes" the client's irrationalities. Therapeutic success then follows as the client adopts an "E, an Effective New Philosophy, or sound set of preferential Beliefs" (Ellis 1994, p. 79). Ellis (2005) explains, "When clients retain their Rational Beliefs (RBs) and Dispute their Irrational Beliefs (IBs), and when they strongly (emotionally) act against them, they tend to wind up with answers that include Effective New Philosophies" (p. 267).

Within effective personal philosophies, Ellis (2005) recommends unconditional self-acceptance, but rejects self-esteem. "Self-acceptance," he argues, "means that the individual fully and unconditionally accepts herself whether or not she behaves intelligently, correctly, or competently and whether or not other people approve, respect or love her" (Ellis 2005, p. 38). Acceptance of one's own self without conditions secures the stability of an effective philosophy that can weather the vicissitudes of life. Self-esteem, in contrast, theoretically rests

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upon an often inaccurate and unstable global rating of the self in comparison to others. For Ellis (2005), the presumed mental health advantages of self-esteem are a "myth" (Ellis 2005).

Ellis (2005) finds support for his interpretation of unconditional self-approval in an array of religious and philosophical resources. Among these are Buddhist beliefs that emphasize compassion not only for others, but also for the self. Dryden (2013) extends this insight by identifying similarities between Buddhist self-compassion and the REBT interpretation of unconditional self-acceptance. The overall implication is that self-compassion should be part of what REBT would describe as an effective personal philosophy. The creation of scales for measuring self-compassion make it possible to test that possibility (Neff 2003a, 2003b; Raes et al. 2011).

Self-Compassion

Research interest in self-compassion has foundations in Buddhist perspectives. Neff (2004) emphasizes, for instance, that "in the Buddhist tradition it is stressed that an individual must have compassion for the self in order to have the emotional resources available to give compassion to others" (p. 28). Such self-compassion "involves being troubled by and open to one's own suffering, not avoiding or disconnecting from it, generating the desire to alleviate one's suffering and to heal oneself with kindness," and it also "involves offering nonjudgmental understanding of one's pain, inadequacies and failures, so that one's experience is seen as part of the larger human experience" (Neff 2003a, p. 87).

In terms reminiscent of Ellis (2005), this promotion of self-compassion also includes a skepticism about self-esteem (Neff 2003a, 2004). The basic argument is that self-esteem in the West is not based upon an unconditional appreciation of the intrinsic worth of all persons. Self-esteem, instead, represents a favorable assessment of the self in comparison to others and to various standards of dignity and ability. Self-esteem is consequently fragile given the unavoidable imperfections of all human beings relative to such standards. Research in fact demonstrates that high self-esteem displays associations with a broad range of psychosocial dysfunctions, including, for example, narcissism, poor empathy, deprecation of others, prejudice, aggression, and distorted self-knowledge (see Neff 2004 for a review). In contrast, self-compassion predicts better psychosocial adjustment while avoiding the liabilities associated with high self-esteem (Neff 2003b; Neff et al. 2007; Neff and Vonk 2009).

Self-Compassion and REBT

In short, conceptual arguments and empirical evidence suggest that self-compassion more than self-esteem should be compatible with the assumptions of REBT. The present project tested that possibility in three ways. First, procedures examined relationships of self-compassion and self-esteem with dispositional depression and anxiety (Costello and Comrey 1967). Simplest support for REBT would appear if only self-compassion correlated negatively with these two emotional disturbances. Such a straightforward outcome seemed unlikely, however, given that self-compassion and self-esteem correlate positively with each other (Neff and Vonk 2009) and negatively with both depression and anxiety (Neff 2003b; Ghorbani et al. 2012). Analysis of this issue, therefore, seemed to require statistical procedures that accounted for the covariance between self-compassion and self-esteem. Support for REBT would appear if self-compassion but not self-esteem displayed negative associations with depression and anxiety when both measures served as simultaneous predictors in multiple regression analyses.

Second, the REBT conceptual framework suggests that self-compassion, but not self-esteem should be incompatible with beliefs that REBT identifies as irrational (Ellis 1994). The Short Survey of Personal Beliefs records three of these beliefs (Watson et al. 2009). Self-worth appears in such claims as, "The way others evaluate me [friends, supervisor, teachers] is very important in determining the way I rate myself." Illustrating low frustration tolerance is the self-report, "I can't stand some of the things that have been done by my friends or members of my family." A representative expression of self-directed shoulds says, "I absolutely should not have made certain obvious mistakes in my life." Based on REBT, the prediction was that self-compassion but not self-esteem would display inverse associations with all three irrational beliefs in multiple regression procedures.

Third and finally, mediation analyses (Baron and Kenny, 1986) evaluated the possibility that self-compassion, but not self-esteem, would operate as part of an effective (E) personal philosophy as described within the A-B-C-D-E model of REBT. Support for this claim would appear if an incompatibility with irrational beliefs at least partially mediated negative relationships of self-compassion, but not self-esteem, with depression and anxiety. Such outcomes would suggest that at least some of the adjustment advantages of self-compassion reflect its ability to interfere with irrational beliefs in the interpretation of potentially disturbing activating (A) life events.

Hypotheses

In summary, this investigation evaluated self-compassion and self-esteem relative to the assumptions of REBT by testing three sets of hypotheses.

First, as simultaneous predictors in multiple regression procedures, self-compassion, but not self-esteem, should exhibit negative linkages with depression and anxiety.

Second, self-compassion, but not self-esteem, should also display inverse connections with self-worth, low frustration tolerance, and self-directed shoulds in multiple regression analyses.

Third, self-worth, low frustration tolerance, and self-directed shoulds should at least partially mediate relationships of self-compassion, but not of self-esteem, with lower depression and anxiety.

Method

Participants

Participants included 184 undergraduates enrolled in Introductory Psychology classes at a state university in the southeastern United States. These 89 men and 95 women had an average age of 19.2 years (*SD* = 1.5). The sample was 75.5% White, 13.6% Black, 4.9% Hispanic, 2.7% Asian, and 3.3% other.

Measures

Participants received the four sets of psychological scales listed below.

Self-Esteem Ten statements made up the well-established Rosenberg (1965) Self-Esteem Scale (Sinclair et al. 2010). A representative expression of self-esteem said, "I feel that I have a number of good qualities."

Depression and Anxiety This study used Costello and Comrey (1967) Depression and Anxiety Scales to assess traits rather than states that would reflect the on-going emotional consequences of an ineffective personal philosophy. Numerous studies have over the years documented their reliability and validity (e.g., Russell et al. 1980; Russell et al. 1984; Watson et al. 1989). Exemplifying the 14-item Depression Scale was the self-report "I feel sad and depressed." The Anxiety Scale included 9 items and appeared in such claims as, "I'm a restless and tense person."

Self-Compassion Assessment of self-compassion involved use of a shorter 12-item measure (Raes et al. 2011). Illustrating self-compassion was the statement, "I'm kind to myself when I'm experiencing suffering." A growing number of studies have documented the test-retest reliability, internal consistency, and validity of this instrument (e.g., Raes 2011; Neff and Germer 2013; Smeets et al. 2014).

Short Survey of Personal Beliefs Development of this 12-item scale rested upon the use of statements from the longer Survey of Personal Beliefs (Kassinove 1986), which is a frequently used index of REBT irrational beliefs (e.g., Muran et al. 1989; Muran and Motta 1993). This abbreviated scale is internally reliable; displays expected relationships with perfectionism, shame, guilt, depression, anxiety, neuroticism, and alexithymia; and contains the three factors examined in the present project (Watson et al. 2009). Indicative of the 6-item Self-Worth Scale was the assertion, "I often rate myself based upon my success at school or work, or upon my social achievements." Four statements described low frustration tolerance (e.g., "There are some things about people at work [or in school] that I just can't stand"). Two items defined self-directed shoulds (e.g., "I clearly should not make some of the mistakes I make").

Procedure

All procedures received approval by the university Institutional Review Board. Student participation in the project was voluntary, and all responding was confidential. Administration of scales occurred in a large classroom. All instruments appeared in a single questionnaire booklet that contained measures used in this and in one other project. Each scale presented 0 (strongly disagree) to 4 (strongly agree) response options. Participants entered reactions to all questionnaire statements on standardized forms, which optical scanning equipment later read into a computer data file. The scoring of each measure involved computation of the average response per item. Table 1 summarizes the internal reliabilities and descriptive statistics of all measures.

Statistical analyses began with an examination of correlations among measures. Multiple regression analyses then used self-compassion and self-esteem to predict each mental health and irrational belief measure. Mediation analyses then followed the conceptual framework of Baron and Kenny (1986) and rested upon the *Process* procedure described in Hayes (2013). Specifically, this procedure generated a 1000-sample bootstrap (i.e., generating 1000 samples by resampling with replacement from the current sample) for determining 95% confidence intervals that then could be used for testing the significance of regression coefficients.

Table 1 Internal reliability (α), Mean (M) and standard deviation (SD) of each measure

Measure	α	*M*	*SD*
Self-compassion	.79	2.09	0.63
Self-esteem	.89	2.71	0.79
Depression	.92	0.91	0.70
Anxiety	.84	1.62	0.77
Self-worth	.64	2.68	0.67
Low frustration tolerance	.60	2.30	0.78
Self-directed shoulds	.77	2.67	1.07

Results

Correlations among all measures appear in Table 2. Self-compassion and self-esteem correlated positively, $r = .58$, $p < .001$; and self-compassion also predicted lower depression, −.55, $p < .001$; anxiety, −.48, $p < .001$; self-worth, −.39, $p < .001$; and low frustration tolerance, −.28, $p < .001$. Similarly, negative correlations appeared for self-esteem with depression, −.72, $p < .001$; anxiety, −.49, $p < .001$; self-worth, −.19, $p < .01$; and low frustration tolerance, −.23, $p < .001$. Depression displayed direct linkages with anxiety, .45, $p < .001$, and low frustration tolerance, ,16, $p < .05$. Anxiety correlated positively with self-worth, .30, $p < .001$, and low frustration tolerance, .31, $p < .001$. Relationships among the three irrational beliefs were all positive. Specifically, self-worth correlated .38, $p < .001$, with low frustration tolerance and .20, $p < .01$, with self-directed shoulds. The linkage between these latter two irrational beliefs was .22, $p < .001$.

Multiple regression procedures used self-compassion and self-esteem as simultaneous predictors of those variables for which both scales displayed a significant relationship. Table 3 summarizes these results. Self-compassion contributed to the prediction of all these measures, including depression, $\beta = -.21$, $p < .01$; anxiety, −.30, $p < .001$; self-worth, −.41, $p < .001$; and low frustration tolerance, −.22, $p < .01$. For self-esteem, significant associations appeared only with depression, −.59, $p < .001$, and anxiety, −.32, $p < .001$.

For mediation to occur, the independent variable of a causal model must predict a proposed mediator (Baron and Kenny 1986). In this study, self-compassion and self-esteem were possible independent variables, but their direct covariance meant that it was necessary to examine the relationships of each with irrational beliefs after controlling for the other. In these analyses, only two results were significant. Self-compassion displayed a negative association with self-worth, $\beta = -.41$, $p < .001$, and with low frustration tolerance, $\beta = -.22$, $p < .05$. Mediation models, therefore, controlled for self-esteem and used self-compassion as the independent variable, self-worth and low frustration tolerance as simultaneous mediators, and depression and anxiety as dependent variables. Table 4 summarizes these results.

In line with hypotheses, low frustration tolerance reduced and thus mediated the negative linkage of self-compassion with anxiety. The direct effect after accounting for mediation remained statistically significant; so, this was a partial mediation effect. Surprisingly, self-worth suppressed rather than mediated the relationship between self-compassion and depression. A total effect of $B = -.23$ became a stronger direct effect of $B = -.32$. This unexpected outcome reflected the fact that a non-significant positive association of self-worth with depression, $\beta = .02$, $p = .75$, became a nonsignificant negative relationship when low frustration tolerance served as a simultaneous predictor, $\beta = -.04$, $p = .59$.

Table 3 Self-compassion and self-esteem as simultaneous predictors of depression, anxiety, self-worth, and low frustration tolerance

Measure	R^2	Self-compassion β	Self-esteem β
Depression	.54***	-.21**	-.59***
Anxiety	.30***	-.30***	-.32***
Self-worth	.15***	-.41***	.05
Low frustration tolerance	.08***	-.22**	-.10

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

Discussion

REBT suggests that unconditional acceptance of the self as made evident in self-compassion should help form an effective personal philosophy that interferes with irrational beliefs and the emotional disturbances that they theoretically produce (Ellis 2005; Dryden 2013). The conditionality of self-esteem makes its effectiveness suspect. Indeed, the idea that self-esteem promotes true mental health is deemed to be a "myth" (Ellis 2005; see also, Baumeister et al. 2008; Crocker and Park 2004; Hewitt 1998). This investigation most importantly offered support for this REBT interpretation of self-compassion, but also suggested complexities for its understanding of self-esteem.

Table 2 Correlations among self-compassion, self-esteem, depression, anxiety, and irrational beliefs

Measure	1.	2.	3.	4.	5.	6.	7.
1. Self-compassion	-	.58***	-.55***	-.48***	-.39***	-.28***	-.10
2. Self-esteem		-	-.72***	-.49***	-.19**	-.23***	-.05
3. Depression			-	.45***	.02	.16*	-.03
4. Anxiety				-	.30***	.31***	-.08
5. Self-worth					-	.38***	.20**
6. Low frustration tolerance						-	.22**
7. Self-directed shoulds							-

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

Table 4 Mediation of self-compassion effects on depression and anxiety by self-worth (SW) and low frustration tolerance (LFW)

Dependent variable	Indirect effect 95% confidence intervals			Total effect	Direct effect	ΔR^2
	Total Indirect	SW	LFT			
Depression	.09 (.02, .18)*	.10 (.03, .19)*	-.01 (−.06, .02)	-.23**	-.32***	.04**
Anxiety	-.09 (−.17, −.03)*	-.05 (−.13, .01)	-.04 (−.11, −.01)*	-.37***	-.28**	.04*

Analyses examined self-compassion after controlling for self-esteem and maintained the conventional focus on unstandardized regression coefficients, *B*. ΔR^2 values indicate the significance of the overall mediation model. Indirect effects represent the association between the independent variable and the mediator times the association between the mediator and the dependent variable. Tests of significance used 95% confidence intervals that were bias corrected and based upon 1000 bootstrap samples. Confidence intervals that do not include 0 identify a significant indirect effect at the .05 level. Total effects reveal the association of an independent variable with the dependent variable, whereas a direct effect describes this same relationship after accounting for the influence of mediators

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

Numerous self-compassion findings conformed with the assumptions of REBT. Self-compassion predicted lower depression and anxiety, and these associations occurred independent of its covariance with self-esteem. Even more importantly, self-compassion was incompatible with the irrational beliefs of self-worth and low frustration tolerance, and multiple regression analyses demonstrated that self-compassion explained the positive linkages of self-esteem with these two irrationalities. An adjustment benefit of self-esteem, therefore, was only apparent and instead reflected covariance with the more unconditional self-compassion. Low frustration tolerance also partially mediated the inverse connection of self-compassion with anxiety. Again, in clarifying his A-B-C-D-E model of therapy, Ellis (2005) argues, "When clients retain their Rational Beliefs (RBs) and Dispute their Irrational Beliefs (IBs), and when they strongly (emotionally) act against them, they tend to wind up with answers that include Effective New Philosophies" (p. 267). Hence, the implication was that self-compassion operated as a rational belief within an E that inhibited (i.e., disputed or correlated negatively with) the irrational Belief (B) of low frustration tolerance; and this inhibition at least partially prevented the disturbed emotional Consequence (C) of anxiety.

The demonstration that self-esteem no longer predicted irrational beliefs after accounting for self-compassion meant that irrational beliefs also could not mediate the inverse connections of self-esteem with depression and anxiety. Such results suggested that self-esteem in fact failed to fit within the REBT conceptualization of psychological adjustment and effective personal philosophies (Ellis 1994, Ellis 2005).

Self-esteem did display inverse linkages with depression and anxiety in multiple regressions in which self-compassion served as a simultaneous predictor. Self-esteem, therefore, did appear to have adaptive mental health implications. On the other hand, such data might merely reveal a failure of self-compassion to fully define an unconditional positive regard for the self. An Unconditional Self-Acceptance Scale operationalizes the REBT perspective on ideal self-functioning (Davies 2006), and self-esteem might no longer predict lower depression and anxiety if multiple regression procedures combined unconditional self-acceptance with self-compassion.

Deeper complexities appeared when mediation procedures revealed that self-worth suppressed rather than mediated the negative relationship of self-compassion with depression. This effect occurred because inclusion of low frustration tolerance in the analysis transformed the self-worth connection with depression from slightly positive to slightly negative. The implication, therefore, was that the supposed irrationality of self-worth relative to depression actually reflected a slight rationality that a covariance with low frustration tolerance obscured. A defense of REBT might argue instead that this very slight "rationality" actually reflected a defensive form of self-worth that irrationally inhibited depression.

Alternatively, this suppression effect and the multiple regression linkages of self-esteem with lower depression and anxiety might mean that the REBT interpretation of self-esteem is questionable. Perhaps the apparent mental health advantages of self-esteem are not always merely apparent. More nuanced conceptualizations of self-esteem might be necessary to explain when associations of self-esteem with adjustment can and cannot be dismissed as a "myth" (see e.g., Kohut 1977; Garcia et al. 2015; Watson 2005). This possibility may deserve research attention.

Finally, self-directed shoulds correlated positively with the two other irrational beliefs. These results supported both the validity of this scale and the REBT conceptualization of irrational beliefs. At the same time, however, self-directed shoulds did not correlate with self-compassion, self-esteem, depression, or anxiety. Whether self-directed shoulds has noteworthy mental health implications is, therefore, another important concern for future research.

Limitations

As with any investigation, limitations mean that caution is essential in interpreting results. Two issues were perhaps most noteworthy. First, college undergraduates made up the sample. Different results might follow with the examination of a more clinically relevant population. Second, all conclusions rested upon correlational data. This was true even of the mediation analyses that tested causal models of self-compassion relationships with emotional disturbance. Correlation cannot establish causation; so, the present data cannot say, for example, that self-compassion caused lower depression and anxiety. Definitive conclusions about causation will require the use of other research designs.

Conclusions

At the broadest level, this investigation confirmed that self-compassion may indeed operate as part of an effective (E) personal philosophy as defined within the A-B-C-D-E model of REBT. Such a conclusion has both basic and applied scientific implications. With regards to basic science, full confidence in the effectiveness of self-compassion will require additional studies that examine a broader range of mental health measures. In addition, future studies should examine whether unconditional positive regard and self-compassion in combination might yield outcomes that even more strongly support the REBT skepticism about self-esteem.

With regards to applied science, the present data pointed toward self-compassion as a goal for clients during REBT. Among other things, a therapeutic emphasis on self-compassion might facilitate development of reasonable arguments that "an individual must have compassion for the self in order to have the emotional resources available to give compassion to others" (Neff 2004, p. 28). Applied research that attempts to promote self-compassion as an independent variable in order to reduce irrational beliefs and psychological dysfunctions as dependent variables would also supply experimental evidence useful in making causal inferences about self-compassion as an effective personal philosophy.

Compliance with Ethical Standards All four authors declare that they have no conflicts of interest. All procedures performed in this study involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. Informed consent was obtained from all individual participants included in the study.

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