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The Interactive Effect of Cognitive Fusion and Experiential Avoidance on Anxiety, Depression, Stress, and Posttraumatic Stress Symptoms

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Abstract

Acceptance and Commitment Therapy, a popular transdiagnositic treatment approach, is based on the central tenant that human suffering develops and is exacerbated by psychological inflexibility. Cognitive fusion and experiential avoidance are two interrelated processes central to psychological inflexibility. Despite substantive theoretical rationale that these two processes impact one another's association with emotional distress and psychopathology, the interaction between cognitive fusion and experiential avoidance in relation to psychological distress has yet to be empirically examined in the extant literature. As such, we examined this interactive effect in relation to four indices of psychological distress (anxiety, depression, stress, and posttraumatic stress) in a large sample of community adults recruited via the internet (N = 955). The predicted interactive effect was found across all four symptom measures, with the significant positive association between cognitive fusion and symptom measures being strongest at higher levels of experiential avoidance. These results provide support for proposals that individuals with high cognitive fusion and high experiential avoidance may be particularly prone to experiencing psychological distress.

Keywords: anxiety; cognitive fusion; depression; experiential avoidance; posttraumatic stress

The Interactive Effect of Cognitive Fusion and Experiential Avoidance on Anxiety, Depression, Stress, and Posttraumatic Stress Symptoms

Transdiagnostic conceptual models and treatments are based on the idea that there are common factors that cut across related forms of psychopathology, such as emotional disorders (Barlow, Allen, & Choate, 2004; Mansell, Harvey, Watkins, & Shafran, 2008). The transdiagnostic approach has numerous advantages, including helping to clarify the extensive comorbidity that exists among emotional disorders (Brown, Campbell, Lehman, Grisham, & Mancill, 2001) and facilitating the development of efficacious treatment components that can be applied across a number of related pathological presentations. For example, Acceptance and Commitment Therapy (ACT), a popular transdiagnositic treatment approach, is based on the central tenant that human suffering develops and is exacerbated by psychological inflexibility (Hayes, Luoma, Bond, Masuda, & Lillis, 2006). Psychological inflexibility is marked by six interrelated processes (i.e., experiential avoidance, cognitive fusion, attachment to conceptualized self, lack of contact with the present-moment lack of values clarity, unworkable action). Of these processes, experiential avoidance (EA), has received the bulk of empirical attention (Chawla & Ostafin, 2007). EA represents a general unwillingness to stay in contact with unwanted inner experiences (e.g., thoughts, memories, bodily sensations) through the use of maladaptive avoidance strategies (Hayes, Wilson, Gifford, Follette, & Stroshal, 1996).

Although the avoidance of unwanted inner experiences may alleviate distress in the short-term, it paradoxically exacerbates distress over longer periods of time (e.g., Abramowitz & Moore, 2007; Bardeen, 2015; Campbell-Sills, Barlow, Brown, & Hofmann, 2006; Hodgson & Rachman, 1972). As such, EA has been suggested as a core vulnerability factor for emotional distress (Hayes et al., 1996). Consistent with this proposition, positive associations between EA

and constructs marked by emotional distress have been observed across a number of laboratory and correlational studies (see Chawla & Ostafin, 2007, for a review). Moreover, the use of longitudinal study designs has provided temporal evidence of EA as a risk factor for the development of emotional distress. For example, Kumpula, Orcutt, Bardeen, and Varkovitzky (2011) assessed EA and posttraumatic stress symptoms both prior to and following a potentially traumatic event and found that pre-event EA acted as a risk factor for elevations in posttraumatic stress symptoms at both one and eight months post-event.

Although all six of the processes of psychological inflexibility are interrelated, each process is thought to be more fundamentally linked to one process more than the others (Hayes, Strosahl, & Wilson, 2012). Specifically, three process pairs have been described in terms of the following response styles: 1) open/closed (experiential avoidance and cognitive fusion), 2) centered/decentered (attachment to conceptualized self and lack of contact with the present-moment), and 3) engaged/disengaged (lack of values clarity and unworkable action; Hayes et al., 2012). If any one of these process pairs is out of alignment, one is more likely to experience maladaptive outcomes. However, of these pairs, the open/closed domain, consisting of EA and cognitive fusion, is hypothesized to be the cornerstone of psychopathology (Hayes, Strosahl, & Wilson, 2012).

Cognitive fusion represents the phenomenon by which individuals believe the literal meaning of their thoughts instead of viewing them as transient internal states (e.g., the thought, *I am hopeless*, is equivalent to the psychological experience of hopelessness; Greco, Lambert, & Baer, 2008). Compared to the EA literature, far less research, to date, has examined relations between cognitive fusion and emotional distress. Nonetheless, empirical research has provided evidence that cognitive fusion is positively associated with anxiety and depression (Gillanders et

al., 2014), body dissatisfaction and eating disorder-symptomatology (Trindade, & Ferreira, 2014), health anxiety (Fergus, 2015), and anxiety sensitivity (Sole et al., in press). Such findings provide preliminary support for the potential transdiagnostic importance of cognitive fusion.

To date, examinations of cognitive fusion, EA, and indices of emotional distress have focused on main effects analyses. Thus, it remains unclear whether these two processes operate in tandem, as is proposed by Hayes et al. (2012). Importantly, Hayes et al., suggest that thoughts in and of themselves are not problematic. Instead, it is the combination of fusion with, and avoidance of, the thought that is problematic. From this perspective, cognitive fusion in the absence, versus presence, of EA may result in relatively lower levels of emotional distress. For example, an individual experiencing anxiety symptoms while giving a class presentation may still choose an approach strategy (continue giving the presentation rather than running out of the room) even though s/he may have the thought, "I'm going to pass out if I continue." In contrast, as is often seen in clinical practice, others may end the speech early, or withdraw from the class before giving the presentation. Such avoidance behaviors often generalize to a wide variety of social/evaluative situations, thus causing significant impairment and emotional distress. Based on this rationale, it may be particularly important to examine the relation between cognitive fusion and emotional distress at varying levels of EA to better understand when cognitive fusion may be more or less problematic.

Although there is theoretical rationale for cognitive fusion and EA working in concert in relation to emotional distress (Hayes et al., 2012), these two factors have primarily only been examined in isolation of one another. As described above, it is our position that main effects of cognitive fusion and EA might be qualified by an interactive effect. More specifically, we predict that the relation between cognitive fusion and symptoms of emotional disorders (i.e., anxiety,

depression, stress, posttraumatic stress) will be significantly stronger as EA scores increase. Thus, experiential willingness may buffer those who are prone to cognitive fusion from experiencing emotional distress. Evidence of the predicted patterns of relations across all four symptom measures will provide preliminary support for the potential transdiagnostic importance of the predicted interactive effect. Additionally, the hypothesized pattern of relations may have important implications in terms of assessment and treatment. In terms of putative risk factors, it may be especially important to identify, and offer primary prevention (e.g., brief acceptance-based interventions) to, those individuals who are high in both cognitive fusion and EA.

Methods

Participants and Procedure

Participants (N = 955: 301 males; 654 females) were recruited via Amazon Mechanical Turk (MTurk). MTurk is an online labor market where general population adults can be recruited to complete questionnaires in exchange for payment. MTurk samples tend to be more demographically diverse than American undergraduate samples (Buhrmester, Kwang, & Gosling, 2011) and a number of studies support the quality of data collected via MTurk (e.g., Behrend, Sharek, Meade, & Wiebe, 2011; Buhrmester et al., 2011; Paolacci, Chandler, & Ipeirotis, 2010; Shapiro, Chandler, & Mueller, 2013). In the present study, participation was restricted to MTurk workers with approval ratings above 95%. This method has been shown to increase the quality of data (Peer, Vosgerau, & Acquisti, 2014). Recruitment was limited to MTurk users located within the United Stated and over the age of 19. Participants completed informed consent and questionnaires using a secure online survey program from any computer with internet access. Only those participants who reported experiencing at least one potentially traumatic event (i.e., Criterion A of the Diagnostic and Statistical Manual of Mental Disorders

[DSM-5]; American Psychiatric Association [APA], 2013) completed a measure of posttraumatic symptoms (*n* = 887: 280 males; 607 females). Therefore, any reference hereafter to the PTSD Checklist-5-Civilian Version (PCL-5; Weathers, Blake et al., 2013) or posttraumatic stress symptoms is specific to this subsample. Participants were paid $1.50 upon study completion. This amount is consistent with precedence for paying MTurk workers in similar studies (Buhrmester et al., 2011). This study was approved by the local university-based institutional review board.

The full sample (*N* = 955) had an average age of 36.1 years (*SD* = 11.5) and 82% self-identified as White, 8% as Black, 5% as Asian, 0.9% as American Indian or Alaska Native, 0.1% as Native Hawaiian or other Pacific Islander, and 4% endorsed "other". Additionally, 7% of the sample reported being of Hispanic ethnicity. The subsample (*n* = 887) of participants who completed the PCL-5 (Weathers, Blake et al., 2013) had an almost identical demographic profile (*M* age = 36.2 years [*SD* = 11.6]; 83% White, 7% Black, 5% Asian, 0.9% American Indian or Alaska Native, 0.1% Native Hawaiian or other Pacific Islander, 4% endorsed "other" and 6% Hispanic).

Measures

Cognitive Fusion Questionnaire (CFQ). The 7-item CFQ (Gillanders et al., 2014) is a self-report measure that assesses cognitive fusion. CFQ items are rated on a 7-point scale (1 = *never true* to 7 = *always true*) based on the degree to which participants believe that each item pertains to them (e.g., "I get so caught up in my thoughts that I am unable to do the things that I most want to do"). The CFQ has demonstrated adequate psychometric properties, including internal consistency, retest reliability, and discriminant and convergent validity (Gillanders et al., 2014). Internal consistency for the CFQ total score in the full sample and trauma exposed

subsample was adequate (α = .95 for both groups).

Acceptance and Action Questionnaire-II (AAQ-II). The 7-item AAQ-II (Bond et al., 2011) is a self–report measure that assesses EA. AAQ-II items are rated on a 7-point scale (1 = *never true* to 7 = *always true*) based on the degree to which participants believe that each item pertains to them (e.g., ‘‘My painful experiences and memories make it difficult for me to live a life that I would value”). The AAQ-II has demonstrated adequate psychometric properties, including internal consistency, discriminant and convergent validity, and predictive validity over a one year time period (Bond et al., 2011). Internal consistency for the AAQ total scale score in the full sample and trauma exposed subsample was adequate (α = .94 for both groups).

Depression, Anxiety, and Stress Scale-21 item Version (DASS – 21). The DASS-21 (Lovibond & Lovibond, 1995) is a 21-item self-report measure that assesses depression, anxiety, and stress. DASS-21 items are rated on a 4-point scale (0 = *did not apply to me at all* to 3 = *applied to me very much, or most of the time*) based the degree to which each statement pertained to the participant in the past week. The DASS-21 scales have shown adequate psychometric properties in prior studies (e.g., Henry & Crawford, 2005; Lovibond & Lovibond, 1995), including evidence of strong convergent validity between the DASS-21-Depression scale and indices of depression symptoms, as well as between the DASS-21-Anxiety scale and indices of anxiety symptoms (Antony, Bieling, Cox, Enns, & Swinson, 1998). Internal consistency for the DASS-21 Depression, Anxiety, and Stress subscales was adequate in the full sample and trauma exposed subsample (Depression α = .91, Anxiety α = .84, and Stress = .90 in both samples).

Life Events Checklist for DSM-5 (LEC-5). The LEC-5 (Weathers, Litz et al., 2013) is an updated version of the original LEC, a psychometrically-sound self-report measure that assesses lifetime exposure to potentially traumatic events (Blake et al., 1990; Gray, Litz, Hsu, &

Lombardo, 2004). Participants are provided with a list of 17 potentially traumatic events (e.g., sexual assault, motor vehicle accident, combat). For each event, respondents are asked to indicate whether the event happened to them, they witnessed it, they learned about it, it was part of their job, they are unsure, or the event did not apply to them. From the events reported, participants are asked to identify the one event that currently bothers them the most and reference this event when completing the PTSD Checklist-5-Civilian Version (Weathers, Blake et al., 2013). Only those participants who reported experiencing at least one potentially traumatic event (APA, 2013) completed a measure of posttraumatic symptoms (n = 887).

PTSD Checklist-5-Civilian Version (PCL-5). The PCL-5 (Weathers, Blake et al., 2013) is an updated version of the PCL (Weathers, Huska, & Keane, 1991), a psychometrically-sound self-report measure of posttraumatic stress symptoms (e.g., Ruggiero, Del Ben, Scotti, & Rabalais, 2003; Weathers, Keane, & Davidson, 2001). Whereas the original PCL was designed to assess the 17 symptoms of PTSD as per the DSM-IV, The PCL-5 was adapted to assess the 20 symptoms of PTSD as per the DSM-5 (i.e., DSM-5 PTSD Criteria B, C, D, and E). Participants rate (0 = *not at all* to 4 = *extremely*) how much they have been bothered by each symptom in the past month in relation to the potentially traumatic event that they identified as most distressing on the LEC-5. Consistent with evidence suggesting that PTSD is not a discrete clinical syndrome, but rather a dimensional construct (e.g., Broman-Fulks et al., 2006; Forbes, Haslam, Williams, & Creamer, 2005; Ruscio, Ruscio, & Keane, 2002), PCL-5 items were summed to create an overall total score for use as continuous variable. Internal consistency for the PCL-5-C total score was adequate in the trauma-exposed subsample (α = .96).

Data Analytic Strategy

PROCESS (Hayes, 2013) was used to conduct four regressions to test the hypothesized

interactive effects. Predictor variables (i.e., cognitive fusion, EA) and an interaction term calculated as the product of the two predictor variables were entered simultaneously into the model. Each symptom variable (i.e., depression, anxiety, stress, posttraumatic stress) served as an outcome variable in one of the models. Simple slopes analysis was conducted via PROCESS (Hayes, 2013) to further examine significant interaction effects. Simple slopes analysis consists of constructing simple regression equations in which the relationship between the predictor variable and the outcome variable is tested at high (+1 *SD*), low (-1 *SD*), and mean (0 *SD*) levels of the moderating variable (i.e., EA). The significance of results, tested via PROCESS, is determined using confidence intervals; zero is not located within the confidence intervals of significant effects.

Results

Testing the Hypothesized Interaction

Depression. Descriptive statistics and bivariate correlations among the study variables are presented in Table 1. Cognitive fusion (*B* = .14, 95% CI [.110, .175], *p* < 001), EA (*B* = .23, 95% CI [.196, .262], *p* < 001), and the interaction term (*B* = .01, 95% CI [.005, .009], *p* < 001) were significantly associated with depression scores (R^2 = .59; *p* < .001). Follow-up simple slopes analysis revealed that the positive association between cognitive fusion and depression scores became significantly stronger as EA increased from low (-1*SD*; *B* = .07, 95% CI [.036, .109], *p* < 001) to mean (*B* = .14, 95% CI [.110, .175], *p* < 001) to high (+1*SD*; *B* = .21, 95% CI [.173, .254], *p* < 001) values (see Figure 1).

Anxiety. Cognitive fusion (*B* = .13, 95% CI [.096, .158], *p* < 001), EA (*B* = .11, 95% CI [.082, .144], *p* < 001), and the interaction term (*B* = .01, 95% CI [.004, .007], *p* < 001) were significantly associated with anxiety scores (R^2 = .40; *p* < .001). Follow-up simple slopes

analysis revealed that the positive association between cognitive fusion and anxiety scores became significantly stronger as EA increased from low (-1*SD*; *B* = .07, 95% CI [.035, .105], *p* < 001) to mean (*B* = .13, 95% CI [.096, .158], *p* < 001) to high (+1*SD*; *B* = .18, 95% CI [.145, .222], *p* < 001) values (see Figure 2).

Stress. Cognitive fusion (*B* = .20, 95% CI [.169, .236], *p* < 001), EA (*B* = .14, 95% CI [.105, .172], *p* < 001), and the interaction term (*B* = .01, 95% CI [.002, .006], *p* < 001) were significantly associated with stress scores (R^2 = .51; *p* < .001). Follow-up simple slopes analysis revealed that the positive association between cognitive fusion and stress scores became significantly stronger as EA increased from low (-1*SD*; *B* = .17, 95% CI [.127, .202], *p* < 001) to mean (*B* = .20, 95% CI [.169, .236], *p* < 001) to high (+1*SD*; *B* = .24, 95% CI [.198, .282], *p* < 001) values (see Figure 3).

Posttraumatic Stress. Cognitive fusion (*B* = .40, 95% CI [.262, .525], *p* < 001), EA (*B* = .68, 95% CI [.551, .816], *p* < 001), and the interaction term (*B* = .02, 95% CI [.014, .030], *p* < 001) were significantly associated with posttraumatic stress scores (R^2 = .43; *p* < .001). Follow-up simple slopes analysis revealed that the positive association between cognitive fusion and posttraumatic stress scores became significantly stronger as EA increased from low (-1*SD*; *B* = .16, 95% CI [.015, .313], *p* < 001) to mean (*B* = .39, 95% CI [.262, .525], *p* < 001) to high (+1*SD*; *B* = .62, 95% CI [.458, .789], *p* < 001) values (see Figure 4).

Discussion

Consistent with previous research, both cognitive fusion and EA exhibited significant positive associations with indices of emotional distress (i.e., anxiety, depression, posttraumatic stress). However, as predicted, these associations were qualified by a significant interaction effect for all four outcome variables. Specifically, the relation between cognitive fusion and our

four outcome variables became significantly stronger as EA scores increased. These significant associations were small in magnitude at low levels of EA and large in magnitude at high levels of EA, thus suggesting a potential buffering effect of experiential willingness on the relation between cognitive fusion and negative psychological outcomes.

Our findings are consistent with the theoretical foundations of ACT, in which the combination of cognitive fusion and EA is thought to exacerbate emotional distress (Bond et al., 2006; Hayes et al., 2012). The present pattern of associations is consistent with Hayes et al.'s (2012) suggestion that cognitive fusion, in-and-of-itself, may not be maladaptive. According to Hayes et al., (2012) cognitive fusion becomes maladaptive when one lacks alternatives to fusion that can be flexibly applied (e.g., cognitive defusion techniques). Similarly, some have argued that the use of avoidance to alleviate distress is not necessarily maladaptive (Bonanno & Burton, 2013). Instead, the degree to which avoidance is one's primary, or sole, source of regulation, which is applied rigidly across contexts, may determine when avoidance leads to maladaptive outcomes. Importantly, the present study suggests that the combination of high cognitive fusion and high EA may be particularly problematic.

In addition, the present findings highlight the need to move beyond basic associations to more accurately understand the conditions under which potential vulnerability factors are more or less likely to be associated with maladaptive outcomes. In regard to EA, a wealth of basic associations have been firmly established. Failure to move beyond these basic associations may lead one to draw spurious conclusions regarding vulnerability and protective factors. Instead, it will be important in moving forward in this area of research to examine more complex theoretically grounded models which should help clarify the complex interrelations among potential risk and resiliency factors, increase accuracy in predicting maladaptive outcomes, and

increase our ability to effectively treat clients based on the treatment implications of these more ecologically valid models. For example, the present results indicate that the combination of high cognitive fusion and low EA is associated with symptomatology that is in the minimal range across all four outcome variables. In contrast, high cognitive fusion and high EA was consistently associated with elevated distress. As such, the present results provide conceptual advancements regarding the potential interplay between cognitive fusion and EA in relation to anxiety, depression, stress, and posttraumatic stress.

Our cross-sectional study design precludes causal inferences regarding the relations among the variables of interest. Given our study design, it was not our intention to suggest that cognitive fusion precedes EA in a temporal chain of causality. We could have just as easily considered cognitive fusion as the moderator variable. A post-hoc examination found that the relationship between experiential avoidance and all outcome measures became increasingly stronger as cognitive fusion increased. This information is especially important in considering the implications of study results. Instead of suggesting that one should intervene at some point in a causal chain to reduce the likelihood of a maladaptive psychological outcome, our results emphasize that the aggregate effect of both high EA and cognitive fusion may be particularly detrimental in relation to psychological health. Further, our study highlights the need to use longitudinal and experimental research designs in future research to better understand the temporal relations among study variables.

Additional study limitations must be acknowledged. Our monomethod assessment procedure may have inflated the estimated relations among study variables. However, evidence suggests that the correlated measurement error that is often expected with monomethod assessment does not appear to result in spurious interactions; in fact, it may actually attenuate

them (Evans, 1985). Therefore, this limitation is not likely responsible for significant interaction effects observed in the present study. Because the PCL-C total scale score and the DASS-21 Depression, Anxiety, and Stress scale scores were used to be consistent with dimensional constructs (Forbes et al., 2005; Ruscio et al., 2002), it may be beneficial to assess for mood, anxiety, and trauma-related disorders, as per the DSM-5 (American Psychiatric Association, 2013) in future research. Moreover, assessing for Axis I pathology more broadly will be important in future research to determine the degree to which the noted interaction effect is transdiagnostic. Additionally, results of the present study should be replicated in clinical samples or in a sample with a larger number of individuals scoring on the higher end of the distribution of symptom scores to assure generalizability.

Also of note, although EA and cognitive fusion are often examined in relation to symptom measures (e.g., Abramowitz & Moore, 2007; Bardeen, 2015; Campbell-Sills et al., 2006; Fergus, 2015; Hodgson & Rachman, 1972; Kumpula et al., 2011; Sole et al., in press; Trindade, & Ferreira, 2014), outcome variables that are consistent with prescribed outcomes of interest from an ACT perspective (e.g., quality of life, values consistent living), should be examined in future research. It is also important to consider limitations regarding our assessment of EA. The AAQ-II (Bond et al., 2011) is the most widely used measure of EA; however, this measure has recently been criticized on the grounds that the AAQ-II may not be precisely measuring EA, but related constructs (e.g., psychological inflexibility, general distress; Wolgast, 2014). As such, the present results should be replicated in future research using alternative measures of EA (e.g., Brief Experiential Avoidance Questionnaire, Gamez et al., 2014). Additionally, although the observed interaction effects explained modest unique variance in symptom scores, the variance explained by these interactions fell well within a range considered

to be meaningful in Monte Carlo studies (i.e., at least 1%; Evans, 1985). Finally, it is important to consider that only two of the six processes of psychological inflexibility from the ACT model were examined in the present study. While the present findings are a step in the right direction toward better understanding the complex relations among these processes as they relate to emotional distress, more complex research designs, with assessment of additional domains of psychological inflexibility, are needed.

To our knowledge, the present study is the first to provide evidence that cognitive fusion and EA work in concert in relation to emotional distress. If future research continues to support the observed interactive effect, preemptive efforts to reduce EA may be beneficial among individuals prone to cognitive fusion. Individuals could be screened and identified using the CFQ (Gillanders et al., 2014) and AAQ-II (Bond et al., 2011) without substantial burden. Individuals high in cognitive fusion and high in EA could then be offered brief interventions that seek to decrease EA, as well as cognitive fusion, and increase experiential willingness (e.g., ACT [Hayes et al., 2006]; Mindfulness-Based Stress Reduction [Kabat-Zinn, 1990]).

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Table 1

Descriptive Statistics and Bivariate Correlations.

Variable	1	2	3	4	5	6
1. Cognitive Fusion	--	.76	.67	.57	.67	--
2. Experiential Avoidance	.76	--	.73	.58	.66	--
3. DASS-21-Depression	.67	.74	--	.73	.71	--
4. DASS-21-Anxiety	.58	.60	.72	--	.75	--
5. DASS-21-Stress	.67	.66	.70	.74	--	--
6. Posttraumatic Stress[1]	.57	.63	.64	.66	.65	--
Full Sample *M*	23.46	20.51	4.94	3.92	5.7	--
Full Sample *SD*	10.19	10.43	5.13	4.07	4.8	--
Subsample *M*	23.62	20.59	4.99	3.90	5.8	18.02
Subsample *SD*	10.07	10.40	5.14	4.04	4.8	17.28

Note. $N = 955$ (full sample above the diagonal). [1]$n = 887$ participants who reported experiencing a potentially traumatic event (below the diagonal). All *r*s significant at $p < .001$. DASS-21 = Depression, Anxiety, Stress Scale-21-item version; PCL-5 = Posttraumatic Stress Disorder Checklist-Civilian Version 5.

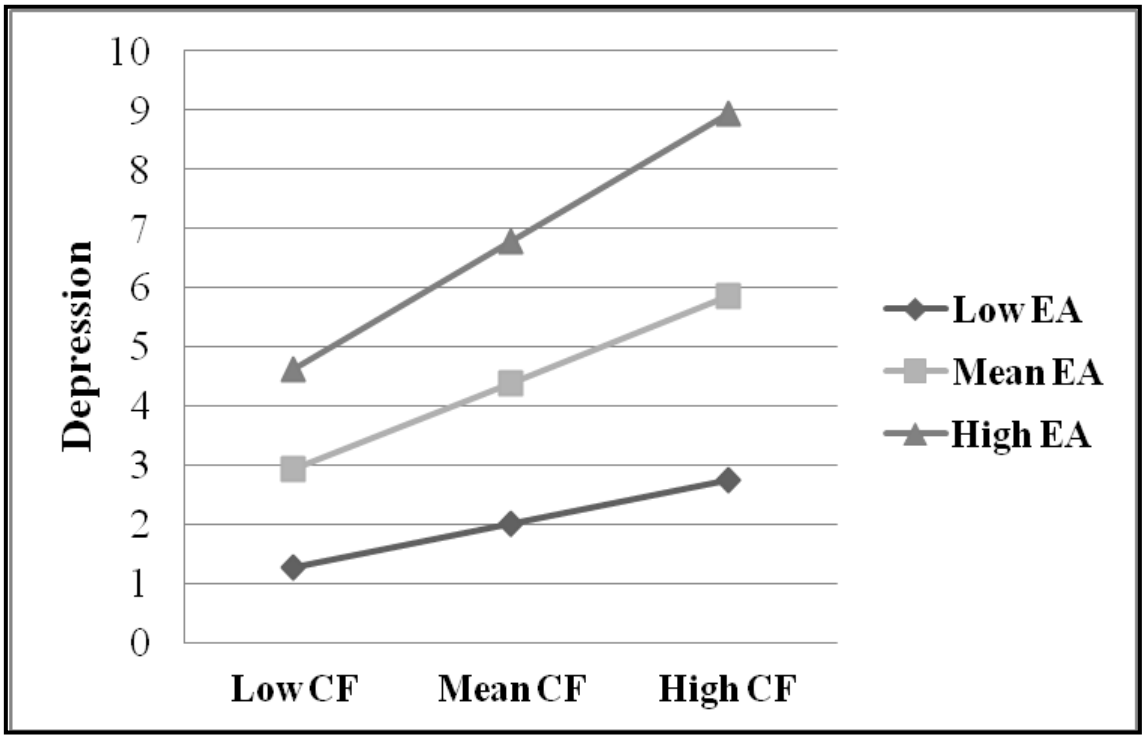

Figure 1. The interaction effect (cognitive fusion [CF] by experiential avoidance [EA]) in relation to depression symptoms.

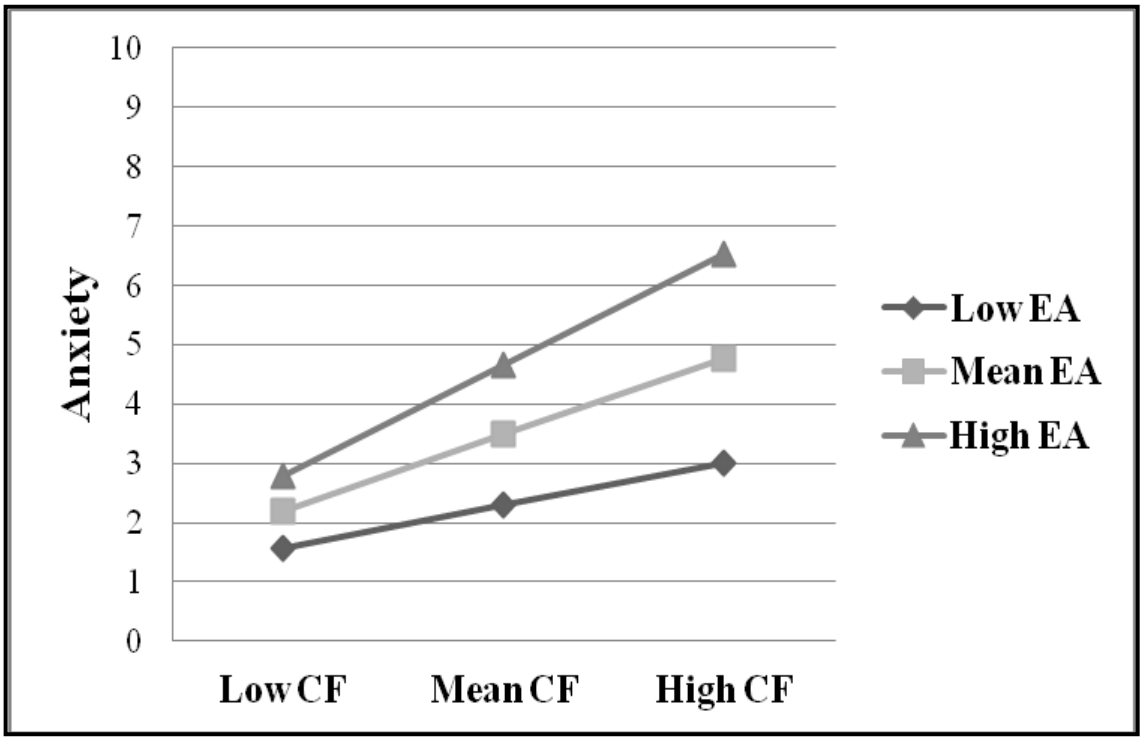

Figure 2. The interaction effect (cognitive fusion [CF] by experiential avoidance [EA]) in relation to anxiety symptoms.

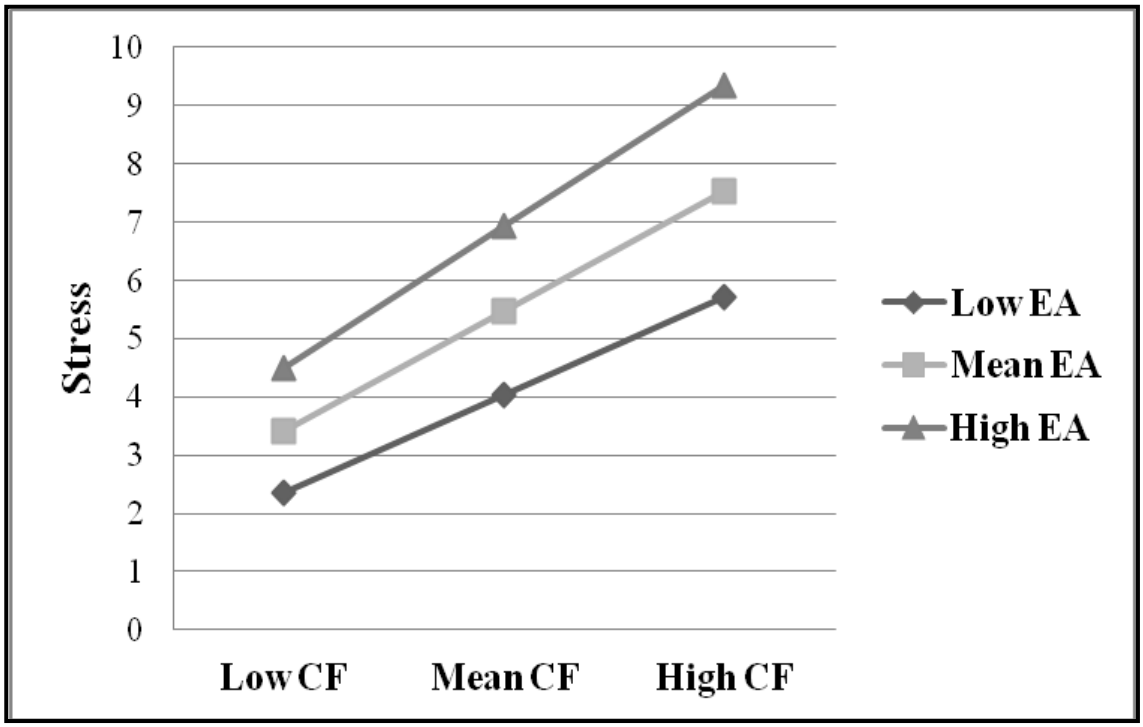

Figure 3. The interaction effect (cognitive fusion [CF] by experiential avoidance [EA]) in relation to stress.

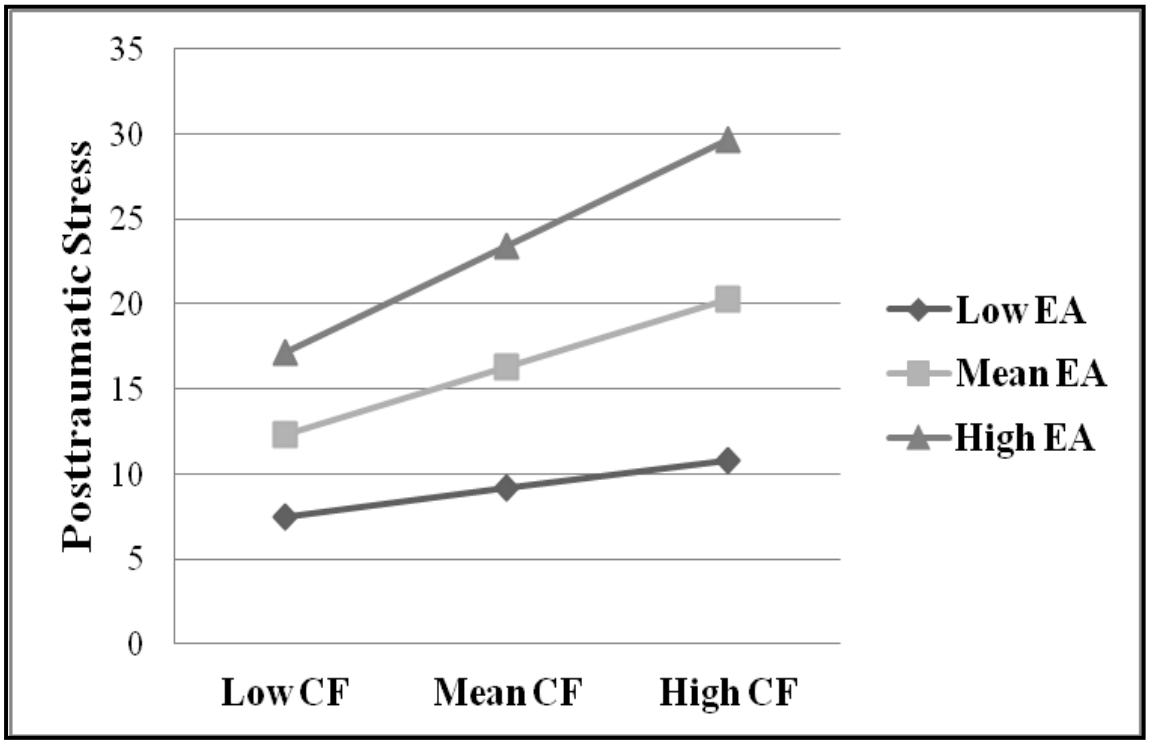

Figure 4. The interaction effect (cognitive fusion [CF] by experiential avoidance [EA]) in relation to posttraumatic stress symptoms.