The interaction of mindful awareness and acceptance in couples satisfaction

Jennifer Kraffta

Jack Haegera

Michael E. Levina

Utah State University

Author Note

a2810 Old Main Hill, Department of Psychology, Utah State University, Logan UT

The authors declare that they have no conflict of interest.

Correspondence concerning this article should be addressed to Jennifer Krafft, 2810 Old Main Hill, Department of Psychology, Utah State University, Logan UT 84322.

Email: jennifer.krafft@aggiemail.usu.edu

Abstract

Past studies indicate that the awareness and acceptance facets of trait mindfulness both independently predict relationship satisfaction. However, this study hypothesized that the combination of awareness and acceptance might be a stronger contributor to relationship functioning than either in isolation. Regression analyses were used to test whether mindful awareness and acceptance interact in predicting couples satisfaction in a sample of dating or married college students (n=138). Acceptance was positively associated with couples satisfaction, while awareness was unrelated. These two mindfulness facets interacted such that greater awareness was related to poorer satisfaction when acceptance was low, but was unrelated when acceptance was high. Conversely, greater acceptance was only related to greater satisfaction when awareness was moderate or high. These results suggest the combination of high awareness and low acceptance can be problematic for relationships, while at least moderate mindful awareness is needed for acceptance to be beneficial.

*Keywords*: mindfulness, awareness, acceptance, couples satisfaction, intimate relationships

The Interaction of Mindful Awareness and Acceptance in Couples Satisfaction

1. **Introduction**

A large body of evidence exists linking mindfulness to positive mental health outcomes (e.g. Khoury et al. 2013). One domain that has recently received more empirical attention is how mindfulness may affect romantic relationships. The capacity to be mindfully aware of ongoing experience and to relate to one’s experience in an non-judgmental way could significantly enhance couples’ functioning. Indeed, several survey studies have connected mindfulness to positive relationship satisfaction and adjustment (e.g., Jones et al. 2011; Khaddouma et al. 2015; Wachs and Cordova 2007). However, specific pathways connecting mindfulness to relationship satisfaction are not well understood.

One way to clarify how mindfulness contributes to relationship outcomes is by investigating specific facets of mindfulness. Mindfulness has been argued to have up to five major facets (i.e., describing, observing, acting with awareness, nonjudgmental, nonreactivity; Baer et al., 2006). However, a number of experts have come to consensus on mindfulness including two primary facets: attending to ongoing experience (i.e., awareness), and a nonjudgmental, accepting attitude towards these experiences (Bishop et al. 2004; Cardaciotto et al. 2008).

These mindfulness facets have unique functions and relations to outcomes. For example, some measures of the awareness facet of mindfulness are unrelated to problem areas or even linked to increased problems (e.g., observing subscale of the Five Facet Mindfulness Questionnaire [FFMQ]; Baer et al. 2006), while measures of the acceptance facet of mindfulness are fairly consistently related to positive outcomes (e.g. Baer et al. 2006; Cardaciotto et al. 2008). To better understand how mindfulness contributes to relationship outcomes it is important to study the unique effects of these specific facets. However, there has been only one study examining specific mindfulness facets in relation to couples satisfaction, which found only some measures of awareness and acceptance of internal experiences (i.e., FFMQ observing, FFMQ nonjudgmental) were significant predictors (Khaddouma et al. 2015).

Not only might facets of mindfulness have unique functions, but we hypothesize that they may interact in important ways. Theoretically, both high levels of awareness and acceptance of one’s experiences are necessary for mindfulness to be most beneficial (e.g. Fletcher & Hayes, 2005); being non-accepting and highly aware could lead to oversensitivity, excessive criticism of one’s partner, and higher use of maladaptive coping strategies like avoidance, while being accepting yet unaware could lead to missing opportunities for effective action.

Consistent with this theory, research has found significant interaction effects between mindful awareness and acceptance in predicting other problem behaviors. One study found that mindful acceptance (FFMQ nonreactivity) and mindful awareness (FFMQ observing) each moderated the relationship between the other facet and substance use. The results were such that observing was negatively correlated with alcohol use when nonreactivity was high, but positively correlated with alcohol use when nonreactivity was low (Eisenlohr-Moul et al. 2012). These findings support the hypothesis that being highly aware and taking an accepting stance towards experience is beneficial, while being highly aware and reacting immediately to change difficult internal experiences may be detrimental. Interactions between mindful awareness and acceptance also predict several other problem areas such as borderline personality disorder symptoms (Peters et al. 2013) and depression and anxiety (Desrosiers et al. 2014), supporting the hypothesis that awareness and acceptance are interdependent in their effects. However, studies have not investigated the possibility that facets of mindfulness interact to predict relationship outcomes.

The current study examined the relation between the awareness and acceptance facets of mindfulness in predicting couples satisfaction. We hypothesized that higher mindful awareness and higher acceptance of experiences would both contribute to greater couples satisfaction. We further hypothesized that acceptance and awareness would interact in predicting couples satisfaction, such that the effects of awareness and acceptance are greater when both are high. Past studies have primarily focused on how acceptance moderates the relationship of awareness to outcomes (e.g. Eisenlohr-Moul et al. 2012). However, we examined both acceptance and awareness as moderators when decomposing the interaction effect given that each facet may theoretically affect the function of the other (e.g. Fletcher & Hayes, 2005).

The results of this study may help inform mindfulness-based interventions for intimate relationships by clarifying which facets of mindfulness are most important in achieving couples’ outcomes and whether or not the effects of one facet depend on the other. If our hypotheses are supported, it would suggest that mindfulness-based interventions for couples can achieve the best results by increasing both mindful awareness and acceptance.

1. **Material and methods**
	1. **Participants and Procedures**

 This study used a sample of undergraduate college students, 18 years of age or older who participated in an online survey to receive course credit. The study included a sub-sample of 139 participants who reported being in a relationship (63.8% dating, 36.2% married) from a larger survey study examining predictors of mental health among students (total *n* = 339). Median relationship length was 1 year (M=2.4 years, SD=4.2). The sample of 139 participants was 60.9% female, ranging from 18 to 53 years old with a median age of 21 (M=22.59 years, SD=5.61). The sample was largely homogeneous in race (88.4% White, 2.9% American Indian/Alaska Native, 5.1% Asian, 0.7% Hawaiian/Pacific Islander, 0.7% Black, 3.6% Other) and ethnicity (only 6.6% Hispanic/Latino). Participants reported a mean score on the Couples Satisfaction Index (CSI; Funk and Rogge 2007) of 17.19 (SD=3.64), similar to previous samples (e.g. Funk and Rogge 2007). One participant was removed from the dataset for random responding based on a screening question (final *n* = 138).

 Participants were recruited through the online Sona platform for undergraduate research participation. Participants completed the survey online after providing informed consent. The survey included a number of other self-report measures assessing outcomes and predictors of mental health problems. The study was approved by the Institutional Review Board of the authors’ university.

**2.2 Measures**

*Philadelphia Mindfulness Scale (PHLMS)*. The PHLMS (Cardaciotto et al. 2008) is 20-item measure of trait mindfulness with two subscales assessing mindful awareness and acceptance of internal experiences. Items are rated on a 5-point scale, from 1 (*never*) to 5 (*very often*). Higher total scores indicate higher levels of awareness and acceptance. The PHLMS has demonstrated adequate reliability and validity (Cardaciotto et al. 2008). Internal consistency for the present sample was α=0.83 for awareness and α=0.86 for acceptance.

*Couples Satisfaction Index (CSI).* The 4-item version of the CSI (Funk and Rogge 2007) measured general relationship satisfaction. Items were rated on a 6-point scale, from 0 (not at all true) to 5 (completely true), except for the first item, which is rated from 0 (extremely unhappy) to 6 (perfect). Higher scores indicate greater relationship satisfaction. The 4-item version of the CSI has been found to be reliable and valid (Funk and Rogge 2007). Internal consistency for the present sample was α=0.93.

**2.3 Data Analysis Plan**

 Hierarchical linear regression tested for the main effects of each mindfulness facet as well as their hypothesized interaction effect. In the first step, awareness and acceptance were entered as predictors. The interaction term for awareness and acceptance was entered in the second step. The MODPROBE method was used to decompose the interaction (Hayes & Matthes, 2009). This approach calculates the effect of the moderating variable on the dependent variable at different levels (low, one SD below the mean; at the mean; and high, one SD above the mean) of the predictor variable. Analyses decomposing the interaction were run two ways; once with acceptance as the moderator and once with awareness as the moderator. Due to the low rate of missing data (2.2%), listwise deletion was employed for the regression analysis leaving a final sample of *n* =135.

1. **Results**
	1. **Preliminary Analysis**

Couples satisfaction was negatively skewed and leptokurtic, but had acceptable normality when using a squared transformation (skewness = -.71 and kurtosis = -.28). This sample had a mean score of 36.96 for awareness (SD=6.40) and 28.53 for acceptance (SD=7.51). Zero-order correlations indicated that acceptance and awareness were unexpectedly negatively associated (r=-.20, p=.02), such that higher acceptance related to lower awareness. This differs from past research finding these subscales are not significantly associated (Cardaciotto et al. 2008), although the correlation was small.

**3.2 Hierarchical Regression Analysis**

The first step of the hierarchical regression analysis examined the main effects of acceptance and awareness on couples satisfaction. This model was significant (*R*2=.09, *F*=6.90, *p*=.001), with higher acceptance predicting higher couples satisfaction (*b*=4.03, *p*=.001). However, awareness did not significantly predict couples satisfaction (*b*=-1.19, *p*=.42). The second step tested for an interaction effect between acceptance and awareness in predicting couples satisfaction. Again, the overall model was significant (*R*2=.12, *F*=6.00, *p*=.001), and a marginally significant interaction effect was found for acceptance and awareness (Δ*R*2=.03, p=.05) in predicting couples satisfaction.

 MODPROBE was used to decompose this interaction and identify the effects of the moderator variable at multiple levels of the independent variable: low (1 SD below the mean), at the mean, and high (1 SD above the mean). Both awareness and acceptance were tested as the moderator in accordance with the study hypotheses.

When examining acceptance as the moderator (Figure 1), higher levels of awareness actually predicted lower couples satisfaction, but only when acceptance was low (*b* =-4.24, *p* < .05). Awareness did not predict satisfaction when acceptance was at the mean (*b*=-1.65, p=.27) or high (*b* =.95, *p*=.60). Due to the small sample these analyses are based on a limited number of participants (n=21 below -1SD, n=52 between -1SD and the mean, n=35 between the mean and +1SD, and n=27 above +1SD on acceptance).

When switching to awareness as the moderator (Figure 2), higher levels of acceptance predicted greater couples satisfaction when awareness was high (*b* =5.38, *p*<.001), and when awareness was at the mean (*b*=3.28, p=.01). However, acceptance did not predict satisfaction when awareness was low (*b*=1.174, *p*=.53). Visual inspection of this moderation effect (Figure 2) again suggests that this relationship is due in part to the negative impact of low acceptance and high awareness on couples satisfaction. These estimations are also based on a small number of participants (n=14 below -1SD, n=44 between -1SD and the mean, n=49 between the mean and +1SD, and n=28 above +1SD on awareness).

1. **Discussion**

 This study examined the main effects and interaction of the awareness and acceptance facets of mindfulness on couples satisfaction. As predicted acceptance of internal experiences was positively associated with couples satisfaction. However, awareness was unexpectedly not related to couples satisfaction on its own and actually demonstrated a negative relationship with acceptance. The hypothesized interaction between awareness and acceptance in predicting couples satisfaction was also supported. Higher levels of acceptance were only significantly associated with increased couples satisfaction when awareness was moderate or high, suggesting some degree of mindful awareness might be needed for acceptance to be beneficial. Conversely, higher levels of awareness were actually associated with decreased couples satisfaction when acceptance was low, and even when acceptance was high, awareness did not predict positive couples satisfaction.

The unexpected finding that awareness alone does not predict couples satisfaction differs from past research on relationships (Khaddouma et al. 2015), but is consistent with some research in other problem areas (e.g. Baer et al. 2006). The interaction effect with acceptance may explain why awareness alone does not consistently predict good outcomes. When a person has high levels of awareness and is nonaccepting of their experience, they may be more reactive to unpleasant experiences and interactions with their partners, resulting in lower couples satisfaction. Nonetheless, it was surprising that even at high levels of acceptance, awareness did not predict satisfaction, suggesting at least in this sample that awareness is insufficient for enhancing relationships. This finding contrasts with other studies such as Eisenlohr-Moul et al. (2012), which found observing to be linked to lower heavy alcohol use when nonreactivity was high, suggesting that the value of awareness in the context of high acceptance may depend on the type of outcome. Continuing to improve mindful awareness may not benefit couples satisfaction after a minimum level of awareness is reached. Conversely, acceptance alone accounted for 9% of the variance in couples satisfaction, suggesting that targeting acceptance may be an effective way to improve relationship outcomes. This is consistent with the findings of Khaddouma et al. (2015) that the nonjudging facet of mindfulness is positively associated with couples satisfaction.

The significant negative relationship between acceptance and awareness was also unexpected as the two facets have not had a significant correlation in prior research (e.g. Cardaciotto et al., 2008.) It is possible that demographic differences (dating status, age, region) resulted in the current sample having a higher proportion of individuals who are both aware and nonaccepting of internal experience compared to prior research.

These results indicate that acceptance of internal experiences alone is not sufficient for positive relationship outcomes. Acceptance requires at least a moderate level of awareness to have a positive association with couples satisfaction. In other words, awareness may be a necessary condition for acceptance to be useful. However, of these two facets acceptance is the main force driving positive outcomes. These results add to a growing body of research indicating that facets of mindfulness interact in predicting psychological outcomes (Desrosiers et al. 2014; Eisenlohr-Moul et al. 2012; Peters et al. 2013) and extend this research to the domain of relationships.

As a whole, findings suggest it may be important to balance acceptance and awareness in conceptualizing and intervening on couples functioning. Since acceptance appears to drive the relationship between mindfulness and couples outcomes, it may be beneficial to emphasize mindfulness exercises that specifically target acceptance when working with couples. Yet, only teaching acceptance may be insufficient, as some level of mindful awareness might be needed to notice moments to practice acceptance strategies that enhance the relationship. Using instruments such as the PHLMS to assess awareness and acceptance independently during treatment may thus be beneficial. These results are also important to consider in the context of how mindfulness is implemented in the public. While mindfulness-based therapeutic interventions generally incorporate both awareness and acceptance, there are many other popular mindfulness resources available such as mindfulness apps, and it is unclear if they successfully train both awareness and acceptance.

This study has notable limitations. The sample size is small, leaving the MODPROBE analyses with limited power. No conclusions about causal or temporal relationships between mindfulness facets and relationship outcomes can be drawn due to the cross-sectional design. Experimental research that systematically manipulates the impact of mindfulness facets on relationships is needed. In addition, relying on individual rather than dyadic data limits our ability to capture the dynamics of couples relationships. This study also relied exclusively on self-report measures, which are subject to response bias. Using behavioral measures in future studies would help to draw clear conclusions. Finally, this sample is young and ethnically homogeneous. It is unclear if these results will generalize to older and more diverse populations, particularly given how relationships may change over the lifespan (e.g., awareness and acceptance might interact and function differently in older, longstanding relationships).

It would be beneficial to expand on this research by identifying mechanisms through which facets of mindfulness impact couples satisfaction. Recent studies have pointed to the ability to identify and communicate emotions (Wachs and Cordova 2007), anger reactivity (Wachs and Cordova 2007), and sexual satisfaction (Khaddouma et al. 2015) as mediators between mindfulness and relationship outcomes. However, it is unclear if these effects are driven by awareness, acceptance, or their combination. Research connecting facets of mindfulness to mediators could help clarify how mindfulness impacts relationships.

**4.1 Conclusions**

 This study replicates past findings that mindfulness is associated with couples satisfaction and extends it to clarify the impact of specific facets of mindfulness, separately and in interaction. These results indicate that awareness and acceptance interact in predicting couples satisfaction, clarifying the importance of interventions targeting both of these facets of mindfulness.

**Funding Source**

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

References

Baer, R.A., Smith, G.T., Hopkins, J., Krietemeyer, J., & Toney, L. (2006). Using self-report assessment methods to explore facets of mindfulness. *Assessment*, *13*, 27–45.

Bishop, S.R., Lau, M., Shapiro, S., Carlson, L., Anderson, N.D., Carmody, J., ... & Devins, G. (2004). Mindfulness: A proposed operational definition. *Clinical Psychology: Science and Practice*, *11*, 230-241.

Cardaciotto, L., Herbert, J.D., Forman, E.M., Moitra, E., & Farrow, V. (2008). The assessment of present-moment awareness and acceptance: The Philadelphia Mindfulness Scale. *Assessment*, *15*, 204–223.

Desrosiers, A., Vine, V., Curtiss, J. & Klemanski, D.H. (2014). Observing nonreactively: A conditional process model linking mindfulness facets, cognitive emotion regulation strategies, and depression and anxiety symptoms. *Journal of Affective Disorders, 165*, 31-37.

Eisenlohr-Moul, T.A., Walsh, E.C., Charnigo, R.J., Lynam, D.R., & Baer, R.A. (2012). The “what” and “how” of dispositional mindfulness: Using interactions among subscales of the Five-Facet Mindfulness Questionnaire to understand its relation to substance use. *Assessment*, *19*, 276–286.

Fletcher, L., & Hayes, S. C. (2005). Relational frame theory, acceptance and commitment therapy, and a functional analytic definition of mindfulness. *Journal of Rational-Emotive and Cognitive-Behavior Therapy*, *23*, 315–336.

Funk, J.L., & Rogge, R.D. (2007). Testing the ruler with item response theory: Increasing precision of measurement for relationship satisfaction with the Couples Satisfaction Index. *Journal of Family Psychology*, *21*, 572–583.

Hayes, A.F., & Matthes, J. (2009). Computational procedures for probing interactions in OLS and logistic regression: SPSS and SAS implementations. *Behavior Research Methods*, *41*, 924–936. http://doi.org/10.3758/BRM.41.3.924

Jones, K.C., Welton, S.R., Oliver, T.C., & Thoburn, J.W. (2011). Mindfulness, spousal attachment, and marital satisfaction: A mediated model. *The Family Journal*, *19*, 357–361. http://doi.org/10.1177/1066480711417234

Khaddouma, A., Gordon, K.C., & Bolden, J. (2015). Zen and the art of sex: Examining associations among mindfulness, sexual satisfaction, and relationship satisfaction in dating relationships. *Sexual and Relationship Therapy*, *30*, 268–285.

Khoury, B., Lecomte, T., Fortin, G., Masse, M., Therien, P., Bouchard, V., … Hofmann, S. G. (2013). Mindfulness-based therapy: A comprehensive meta-analysis. *Clinical Psychology Review*, *33*, 763–771.

Peters, J.R., Eisenlohr-Moul, T.A., Upton, B.T., & Baer, R.A. (2013). Nonjudgment as a moderator of the relationship between present-centered awareness and borderline features: Synergistic interactions in mindfulness assessment. *Personality and Individual Differences*, *55*, 24-28.

Wachs, K., & Cordova, J.V. (2007). Mindful relating: Exploring mindfulness and emotion repertoires in intimate relationships. *Journal of Marital and Family Therapy*, *33*, 464–481.

*Figure 1*. Predicted couples satisfaction with awareness moderated by acceptance

*Figure 2*. Predicted couples satisfaction with acceptance moderated by awareness