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Recommended Citation
Edmonds, F., Masuda, A., & Tully, E. C. (2013). Relations among self-concealment, mindfulness, and internalizing problems. *Mindfulness*. doi: 10.1007/s12671-013-0204-z

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ORIGINAL PAPER

Relations among Self-Concealment, Mindfulness, and Internalizing Problems

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Abstract

Self-concealment and mindfulness can be viewed as two fairly stable emotion/behavior regulation tendencies, which are often linked to a range of internalizing problems. The current study examined whether low levels of mindfulness and higher levels of self-concealment predict higher levels of depression, anxiety, and somatization for both men and women. An ethnically diverse sample of college undergraduate females (n = 738) and males (n = 249) completed a web-based survey that included the self-report measures of interest. Path analysis models were evaluated separately for male participants and female participants. The findings from these models revealed that low levels of mindfulness predict higher levels of depression, anxiety, and somatization above the effects of self-concealment, age, and ethnicity for both men and women. Low levels of self-concealment predicted higher levels of depression and anxiety above the effects of mindfulness, age, and ethnicity for both men and women, and low levels of self-concealment predicted higher levels of somatization for women. Contrary to predictions, self-concealment did not predict somatization in men above the effects of mindfulness, age, and ethnicity. These findings suggest that mindfulness and self-concealment are distinct predictors useful for understanding the correlates of internalizing problems.

Key words: mindfulness; self-concealment; internalizing problems; somatization; anxiety; depression

Introduction

Recent research suggests that emotion/behavior regulation plays a crucial role on the onset and maintenance of a wide range of psychopathology and internalizing problems (Aldao, Nolen-Hoeksema, & Schweizer, 2010; Gross, 2002; Hayes, Wilson, Gifford, Follette, & Strosahl, 1996). Emotion/behavior regulation can be generally defined as patterns of behavioral strategies through which individuals influence their psychological experiences and the resulting experiences and expressions of emotions (Gross, 1998; Hayes, Luoma, Bond, Masuda, & Lillis, 2006). Maladaptive regulation tendencies, such as rumination, experiential avoidance, and thought suppression, are found to be transdiagnostic and are associated with a broad array of internalizing problems (Aldao et al., 2010), including general psychological distress (Kashdan, Barrios, Forsyth, & Steger, 2006), depression (Joormann & D'Avanzato, 2010), anxiety (Aldao & Nolen-Hoeksema, 2010), and somatization (Tull, Gratz, Salters, & Roemer, 2004). A recent study also suggested that maladaptive regulation tendencies were more strongly associated with a range of psychological distress than adaptive regulation strategies, such as reappraisal and problem-solving (Aldao & Nolen-Hoeksema, 2011).

Self-concealment, although varying in definition across investigators (Kelly & Yip, 2006; Masuda, Anderson, et al., 2011), is generally viewed as a fairly stable behavioral tendency to keep distressing and potentially embarrassing personal information hidden from others (Cramer & Barry, 1999; Larson & Chastain, 1990). Conceptually, while considered an adaptive behavioral tendency in some sociocultural contexts (O'Neil, Helms, Gable, David, & Wrightsman, 1986; Wallace & Constantine, 2005), self-concealment may serve as a maladaptive control- and avoidance-focused emotion/behavior regulation strategy in other contexts (Masuda, Anderson, et al., 2011; Masuda, Boone, & Timko, 2011). Research has shown that self-

concealment is positively associated with global psychological symptoms (Cramer, 1999), depression (DiBartolo, Li, & Frost, 2008), anxiety (Larson & Chastain, 1990; Potoczniak, Aldea, & DeBlaere, 2007), and various forms of somatic complaints (Larson & Chastain, 1990). Self-concealment is also found to be associated with maladaptive regulation tendencies, such as experiential avoidance (Masuda, Anderson, et al., 2011) and scrutinizing one's negative moods without being able to label these and adequately act upon them (Wismeijer, van Assen, Sijtsma, & Vingerhoets, 2009).

Another regulation tendency pertinent to an array of internalizing problems is mindfulness. Mindfulness, although its definition varies across investigations (Hayes & Wilson, 2003), can be viewed as an adaptive regulation pattern of enhanced attention to, and nonjudgmental awareness of, present moment experiences (Brown & Ryan, 2003; Chambers, Gullone, & Allen, 2009; Masuda & Tully, 2012). Recently the teaching and practice of mindfulness has been actively incorporated into psychotherapy (Baer, 2006; Hayes, Villatte, Levin, & Hildebrandt, 2011) due to its salutary effects found across a range of clinical contexts (Brown, Ryan, & Creswell, 2007). Mindfulness, when defined in this way, is found to be positively associated with psychological well-being (Howell, Digdon, & Buro, 2010; Howell, Digdon, Buro, & Sheptycki, 2008) and negatively associated with a broad array of internalizing problems (Brown & Ryan, 2003; Brown et al., 2007), including depression (Christopher & Gilbert, 2010; Masuda & Tully, 2012), anxiety (Brown & Ryan, 2003; Roemer et al., 2009), somatization (Masuda & Tully, 2012), and general distress (Masuda & Tully, 2012; Masuda, Wendell, Chou, & Feinstein, 2010).

Furthermore, preliminary findings suggest that self-concealment and mindfulness are related, but distinct behavioral patterns associated with a range of internalizing problems (Brown

et al., 2007; Larson & Chastain, 1990; Masuda, Anderson, & Sheehan, 2009; Masuda et al., 2010; Wismeijer et al., 2009). For example, a negative association between self-concealment and mindfulness was found in Asian American and European American college students (Masuda et al., 2010) as well as in African American college students (Masuda et al., 2009). These inverse associations are somewhat expected as self-concealment is a maladaptive regulation pattern of restricting expressions of distress and other unfavorable personal information, while mindfulness is viewed as adaptive regulation pattern enhancing attention to distress and other personal experiences. Furthermore, these studies revealed that both mindfulness and self-concealment were uniquely and separately related to *general* psychological distress in these student groups (Masuda et al., 2009; Masuda et al., 2010).

Several questions about the overlap between these concepts and their maladaptive versus adaptive qualities remain unanswered. While previous studies explored the unique role of self-concealment and mindfulness on general psychological distress (Masuda et al., 2009; Masuda et al., 2010), it is still unclear whether self-concealment is a unique predictor of specific forms of internalizing problems, such as somatization, depression, and anxiety above the effect of mindfulness, and vice versa. Additionally, it is unclear whether mindfulness and self-concealment are unique predictors of these internalizing problems in both men and women. Although previous studies controlled gender in investigating the associations among self-concealment, mindfulness, and general distress, they did not examine gender differences in these associations. Investigating these associations separately in men and women is useful as gender differences in associations between regulation tendency and internalizing problems are found in emotion/behavior regulation literature (Cramer, Gallant, & Langlois, 2005).

In response to these questions, the present study investigated whether self-concealment and mindfulness were uniquely and separately associated with specific types of internalizing problems, including somatization, depression, and anxiety, in a non-clinical sample and these associations were examined separately in men and women. In line with a contextual and functional framework of emotional and behavioral regulation, nonjudgmentally attending to present moment experiences is an adaptive approach to regulating emotional and behavioral experiences and thus mindfulness tendencies should be associated with fewer internalizing problems, whereas the stable pattern of concealing distressing personal experiences and information is a maladaptive means of regulating behaviors and emotions and self-concealment should be associated with more internalizing problems. Given this conceptual framework and previous findings (Masuda et al., 2009; Masuda & Tully, 2012; Masuda et al., 2010), it was hypothesized that regardless of gender lower levels of mindfulness would predict higher levels of depression, anxiety, and somatization above the effects of self-concealment, age, and ethnicity for both men and women. Similarly, it was hypothesized that higher levels of self-concealment would predict higher levels of depression, anxiety, and somatization above the effects of mindfulness, age, and ethnicity for both men and women.

Method

Participants

The present study was conducted at a large, public 4-year university in Georgia. Participants were recruited from undergraduate psychology courses through a Web-based research participant pool. Two hundred forty-nine undergraduate male students and 738 undergraduate female students completed a survey containing the instruments of interest. Male participants ranged in self-reported age from 17 to 58 years (M = 21.29; SD = 5.38). The ethnic

composition was representative of the university, with 37% (*n* = 93) identifying as "Caucasian American," 31% (*n* = 76) identifying as "African American," 19% (*n* = 47) identifying as "Asian American," 5% (*n* = 13) identifying as "Hispanic American," and 8% (*n* = 20) identifying as "Native American," "Pacific Islander," "Other," or "Bi-Racial." Female participants ranged in self-reported age from 16 to 63 years (*M* = 20.80; *SD* = 4.90). The ethnic composition was representative of the university, with 36% (*n* = 267) identifying as "Caucasian American," 33% (*n* = 242) identifying as "African American," 13% (*n* = 99) identifying as "Asian American," 6% (*n* = 45) identifying as "Hispanic American," and 12.5% (*n* = 85) identifying as "Native American," "Pacific Islander," "Other," or "Bi-Racial."

Procedure and Measures

The present study was reviewed, approved, and monitored by the institutional review board at the university with which the authors of the study were affiliated. Participants were asked to complete an anonymous web-based survey. Participants anonymously provided demographic information and completed the measures. The following measures were used to assess internalizing problems, self-concealment, and mindfulness.

Internalizing problems. The *Brief Symptom Inventory 18* (BSI-18; Derogatis, 2001) is a measure of psychological distress designed to screen for depressive, anxious, and somatic symptoms. The BSI-18 contains 18 items and employs a 5-point Likert scale ranging from 0 (*not at all*) to 4 (*extremely*) used to indicate the degree to which the individual experiences the symptoms. Scores can be obtained for the somatization (six items; e.g., "faintness"), depression (six items; e.g., "no interest"), and anxiety (six items; e.g., "nervousness") dimensions. The BSI-18 has been shown to be a reliable and valid measure, with an adequate internal consistency (α = .74, .84, and .79 for somatization, depression, and anxiety respectively (Derogatis, 2001). In

the present study, Chronbach's alphas of somatization, depression, and anxiety were .83, .85, and .85 respectively for male participants and 79, .85, and .83 respectively for female participants.

Self-concealment. The *Self Concealment Scale* (SCS; Larson & Chastain, 1990) is a self-report inventory designed to measure a person's tendency to conceal personal information that is distressing or negatively-evaluated (e.g., "There are lots of things about me that I keep to myself"). The SCS contains 10 items and employs a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agre*e) for each item. The total score is derived from the sum of responses to all 10 items, with greater values indicating greater self-concealment. The SCS is a reliable measure of self-concealment, with test-retest (over 4 weeks) and inter-item reliability estimates of .81 and .83, respectively (Larson & Chastain, 1990). In the present study, Cronbach's alphas were .88 for male participants and .88 for female participants.

Mindfulness. The *Mindful Attention Awareness Scale* (MAAS; Brown & Ryan, 2003) is a 15-item, self-report measure, which is designed to assess the frequency of mindlessness, the opposite of the construct of mindfulness, over time (e.g., "It seems I am running automatic without much awareness of what I'm doing"). Participants rate the extent to which they function mindlessly in daily life, using a six-point Likert scale ranging from 1 (*almost always*) to 6 (*almost never*). Total scores range from 15 to 90, with higher scores denoting greater mindfulness. The MAAS has good internal consistency (i.e., Cronbach's α), ranging from .82 to .87 (Brown & Ryan, 2003). Chronbach's alphas of MAAS in the present study were .90 for male participants and .89 for female participants.

Results

Associations among Self-concealment, Mindfulness, and Internalizing Problems

In the present analyses, ethnic background was dichotomized and dummy-coded as 1 for U.S. non-Hispanic Caucasian American and 2 for U.S. ethnic minority. Descriptive statistics and correlations among the study variables are presented in Table 1. In both gender groups, self-concealment was positively associated with somatization, depression, and anxiety. Mindfulness was negatively associated with all of the three internalizing problems for men and women. Furthermore, in both groups, an inverse association was found between mindfulness and self-concealment.

Path Analyses for Mindfulness and Self-Concealment Predicting Internalizing Problems

Path analysis models testing the associations between mindfulness, self-concealment, and the three specific forms of internalizing problems were evaluated using the Mplus 5.2 software (Muthén & Muthén, 1998-2007) and maximum likelihood estimation. Separate models were fit to the data for male participants and female participants, and several comparative and absolute fit indices are presented in Table 2. A nonsignificant χ^2 difference test indicates that the more restrictive model provides an appropriate fit (i.e., not significantly worse than the less restrictive model) to the data, and in general this more restrictive (i.e., parsimonious) model is preferred. The Bayesian Information Criterion (BIC; Schwarz, 1978) is an alternative to the χ^2 goodness-of-fit test statistic that is less influenced by large sample sizes and thus less prone to rejecting a more restrictive model when deviations between the baseline and restricted model are relatively small. However, the BIC penalizes for model complexity to a great degree. The Sample Size Adjusted Bayesian Information Criterion (SABIC) is similar to BIC but does not penalize as highly for model complexity. Lower values of BIC and SABIC are preferred. The Root Mean Square Error of Approximation (RMSEA) is an absolute measure of fit and values of .01, .05,

and .08 indicate excellent, good, and mediocre fit, respectively (MacCallum, Browne, & Sugawara, 1996).

First, the full model in which depression symptoms, anxiety symptoms, and somatization symptoms were regressed on mindfulness, self-concealment, age, and ethnicity was fit to the data (models 1 and 8 for men and women, respectively). This model provided a good fit to the data for both sexes as evidenced by the low χ^2 and RMSEA values. The standardized parameter estimates for these full models for men and women are presented in Figure 1. These models support the hypothesis that higher levels of mindfulness and lower levels of self-concealment predict significantly higher levels of depression and anxiety for both sexes and higher levels of somatization for women above the effects of each other and the covariates. Contrary to prediction, self-concealment was not a significant predictor of somatization for men above the effects of mindfulness and the covariates.

Next, the fit of this full model was compared to a series of models in which the parameters for each internalizing symptom variable regressed on mindfulness and self-concealment were removed one at a time. The significant X_{Diff}^2 tests for all parameters except the regression of self-concealment on somatization for male participants indicate that the removal of these parameters significantly reduced the fit of the model, and these parameters should be retained in the models. The nonsignificant X_{Diff}^2 for the regression of self-concealment on somatization for male participants indicates that the removal of this parameter did not significantly reduce the fit of the model and it can thus be removed from the model. For female participants, the BIC and SABIC fit indices concur with the X_{Diff}^2 test and RMSEA values, indicating that the best-fitting model is one in which both mindfulness and self-concealment are included as predictors of depression, anxiety, and somatization after accounting for age and

ethnicity. For males, the BIC indicates that the model with the parameter for self-concealment predicting somatization removed is the best-fitting model, and the SABIC indicates that the full model with all parameters is the best fitting model. The BIC penalizes more per parameter than the SABIC, thus preferring the more parsimonious model (model 7). Thus, overall, the fit indices indicate that this parameter should be dropped from the model for male participants. The significant residual variance estimates for depression, anxiety, and somatization indicate that other parameters not included in this model are needed to explain the variance in these psychological distress variables.

Discussion

The findings from our study support the prediction that low levels of mindfulness are associated with higher levels of depression, anxiety, and somatization above the effects of self-concealment, age, and ethnicity for both men and women. Also as expected, low levels of self-concealment predicted higher levels of depression and anxiety above the effects of mindfulness, age, and ethnicity for both men and women, and low levels of self-concealment predicted higher levels of somatization for women. Contrary to predictions, self-concealment did not predict somatization in men above the effects of mindfulness, age, and ethnicity.

The current study has several conceptual implications. First, from a broader conceptual perspective, the present study suggests the applicability of a process-based account of psychopathology (Aldao & Nolen-Hoeksema, 2010; Hayes, Luoma, Bond, Masuda, & Lillis, 2006) as self-concealment and mindfulness can be construed as fairly stable emotion/behavior regulation tendencies. Put differently, the present study suggests that a fairly stable pattern of how individuals tend to respond to their own internal and external environmental stimuli is crucial for understanding their experience of internalizing problems. Second, as self-concealment

and mindfulness were found to be unique predictors of a range of internalizing problems, the study suggests the broader conceptual applicability of these two constructs. More specifically, the present study is the first study to explicitly provide evidence that mindfulness, when defined as enhanced present moment awareness of personal experiences (Brown & Ryan, 2003), is a unique predictor low levels of somatization, depression, and anxiety in both females and males. The tendency to self-conceal personal experiences from others, a somewhat opposite emotion/behavioral regulation technique, was also a unique predictor and was related to higher levels of anxiety and depression regardless of gender and to somatization in women specifically.

A somewhat unexpected finding was that self-concealment had a relatively small association with somatization and this association was nonsignificant for men. One explanation for this lack of association might be simply that self-concealment is not relevant to somatization. In fact, the bivariate associations between self-concealment and somatization found in the present study were relatively small (r = .18 for men and r = .22 for women). Additionally, literature suggests that having somatic complaints are less stigmatized than having emotional and psychological concerns, such as anxiety and depression (Ben-Porath, 2002), therefore the stable behavioral tendency of concealing personal and potentially embarrassing information may not be relevant to the context of somatization.

The present study also provides the implications for practice. These implications parallel the theories and practices of mindfulness- and acceptance-based psychotherapies (Baer, 2006; Hayes, Follette, & Linehan, 2004), which have been widely investigated and practiced in recent years. A growing body of evidence has demonstrated that these therapies promote positive clinical outcomes through improving mindfulness (Brown et al., 2007) and weakening the global avoidance tendency, in which self-concealment partially reflects (Hayes et al., 1996; Masuda,

Anderson, et al., 2011). In practice, mindfulness and maladaptive regulations, such as self-concealment, are assessed and targeted throughout the course of these therapeutic modalities (e.g., assessment, case-conceptualization/treatment plan, and treatment). Our findings support the application of acceptance- and mindfulness-based psychotherapies by suggesting that focusing on self-concealment and mindfulness is useful in understanding and perhaps treating a wide range of internalizing problems of adult males and females.

The current study has a number of notable limitations. Due to the use of a non-clinical sample, the present study should not be interpreted as a clinical investigation of severe psychopathology. The variables included in this study were intentionally limited in attempt to gain a preliminary understanding of the role of mindfulness and self-concealment on a range of internalizing problems. The significant residual variance in depression, anxiety, and somatization indicate that other parameters not included in this model are needed to explain the variance in these internalizing problems. Self-concealment and mindfulness are only two of many emotion/behavior regulation strategies, and other regulation strategies are likely to contribute to these problems uniquely. Future studies should investigate the role of self-concealment and mindfulness as well as other regulation strategies (e.g., thought suppression, experiential avoidance, rumination, cognitive reappraisal).

Another limitation is the selection of self-report measures. The psychological construct of interest is bound to the self-report measure used. To date, there are several self-report instruments of mindfulness available (Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006; Hayes & Wilson, 2003), and each of them views mindfulness somewhat differently. The present study used the Mindful Awareness and Attention Scale (MAAS; Brown & Ryan, 2003), one of the most widely used instruments of mindfulness. However, it is important to note that given the

employment of reverse-scoring system, scholars have questioned the construct validity of MAAS, stating that the MAAS may in fact measure “general inattention” or “mindlessness,” rather than mindfulness (Grossman, 2011; Van Dam, Earleywine, & Borders, 2010). Similarly, although the Self-Concealment Scale (SCS; Larson & Chastain, 1990) is the only measure of self-concealment to date, its validity is recently challenged (Wismeijer, Sijtsma, van Assen, & Vingerhoets, 2008). As such, despite the conceptual and applied value of the MAAS (Brown et al., 2007) and SCS (Larson & Chastain, 1990), it is important to investigate the role of mindfulness and self-concealment on a range of internalizing problems using other measures of mindfulness and relevant constructs. Furthermore, as the present study used the subscales of a single measure to assess a range of internalizing problems (i.e., depression, anxiety, or somatization), future studies should use instruments that measures that focus on a single internalizing problem.

Furthermore, the external validity of the present study is limited partially due to the use of the present sample. Many variables specific to the present sample, such as regional cultures, ethnic group compositions, religious practice, political views, and university culture, are likely to shape the variables of interest. The limitations due to the sample characteristics should be considered in order to avoid the overgeneralization of the present findings.

Lastly, possibly the largest limitation was the use of cross-sectional and correlational designs as well as the exclusive reliance on self-report measures. The analytic strategy of the present study did not permit drawing a causal inference or functional associations among the constructs of interest. As mindfulness and self-concealment are fairly stable behavioral tendencies of interacting with one’s internal and external stimuli in a given moment in a given

context, our exclusive reliance on self-reported measures may not fully capture the dynamic and functional nature of these two tendencies.

In spite of these limitations and concerns, the present study extended the existing literature by suggesting that mindfulness and self-concealment are useful concepts to understand a range of internalizing problems, including somatization, depression, and anxiety in both male and female adults. The study also suggests the potential practical applicability of these findings to the assessment and treatment for these internalizing problems.

Table 1

Means, Standard Deviations, Coefficient Alphas, and Zero-Order Relations between all Variables by Gender

	1	2	3	4	5	6
Male (*n* = 249)						
1. Somatization (BSI-18 Somatization)	--					
2. Depression (BSI-18 Depression)	.51**	--				
3. Anxiety (BSI-18 Anxiety)	.76**	.68**	--			
4. Self-Concealment (SCS)	.18**	.34**	.28**	--		
5. Mindfulness (MAAS)	-.33**	-36**	-.30**	-.26**	--	
6. Age	-.12	-.14*	-.07	-.10	.16*	--
7. Ethnicity	.10	.09	.01	-.02	.10	.10
M	3.27	4.55	3.83	29.33	58.50	21.29
SD	4.01	4.65	4.26	8.33	12.59	5.38
α	.83	.85	.85	.88	.90	
Female (*n* = 738)						
1. Somatization (BSI-18 Somatization)	--					
2. Depression (BSI-18 Depression)	.52**	--				
3. Anxiety (BSI-18 Anxiety)	.66**	.69**	--			
4. Self-Concealment (SCS)	.22**	.44**	.35**	--		
5. Mindfulness (MAAS)	-.34**	-37**	-.40**	-.40**	--	
6. Age	-.09*	-.09*	-.03	-.04	.11*	--
7. Ethnicity	-.04	.01	-.12**	.10**	. 05	-.01
M	3.82	5.05	4.58	28.96	57.59	20.80
SD	3.96	4.71	4.41	8.77	12.41	4.90
α	.79	.85	.83	.88	.89	

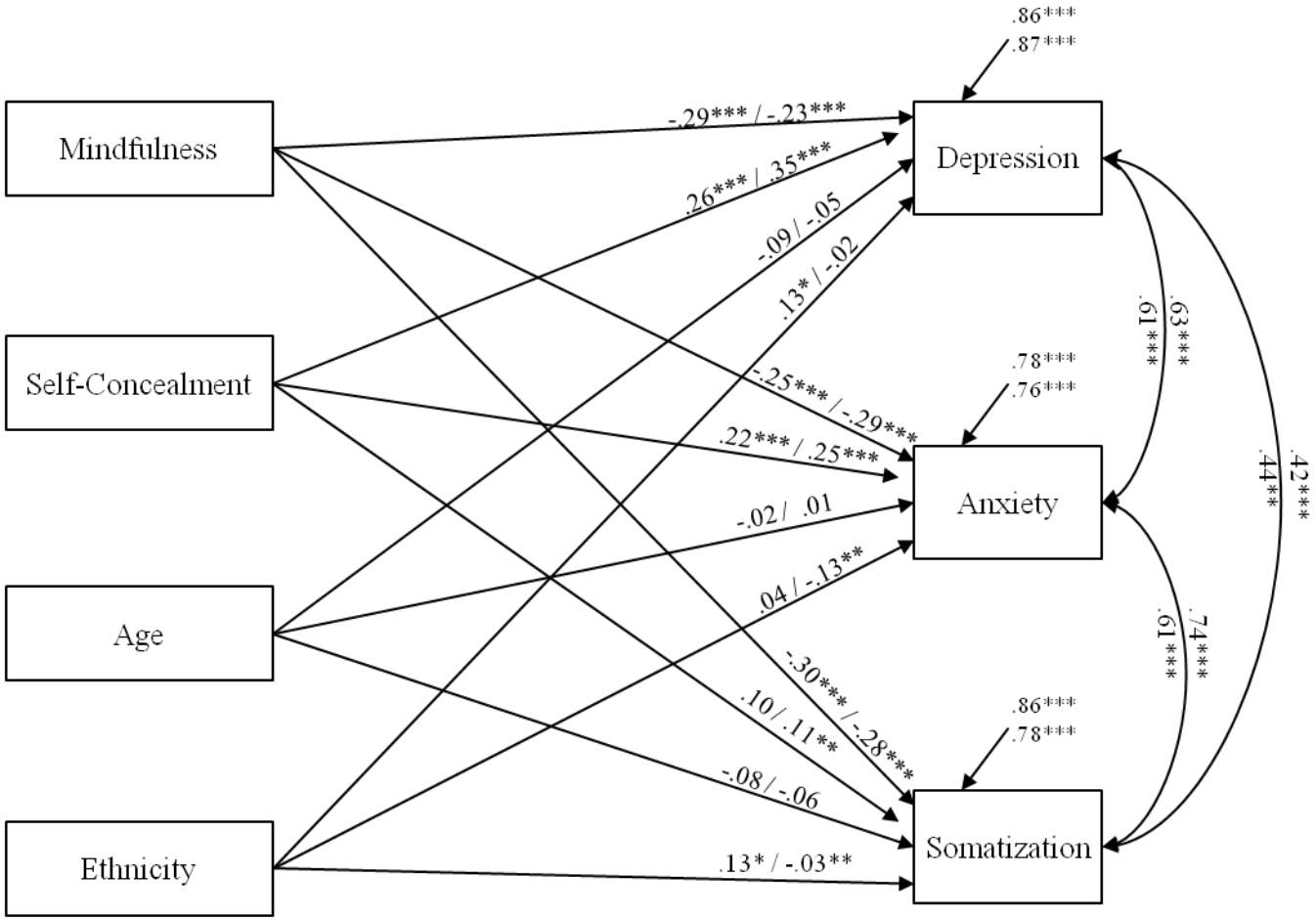
*$p < .05$, **$p < .01$, BSI-18 = Brief Symptom Inventory-18 item; SCS = Self-Concealment Scale; MAAS = Mindfulness Attention Awareness Scale

Table 2. *Model Fit Indices*

Model	X_{Diff}^2 Test Statistics			*BIC*	*SABIC*	*RMSEA* (90% CI)
	ΔX^2	Δdf	*p*			
Male Sample						
1. Full Model	0.00	0	<.001	9567.38	9484.96	.00 (.00, .00)
2. Remove regression of depression on mindfulness	23.34	1	<.001	9585.20	9505.95	.30 (.20, .41)
3. Remove regression of anxiety on mindfulness	15.48	1	<.001	9577.34	9498.09	.24 (.15, .35)
4. Remove regression of somatization on mindfulness	23.25	1	<.001	9585.11	9505.86	.30 (.20, .41)
5. Remove regression of depression on self-concealment	19.05	1	<.001	9580.91	9501.66	.27 (.17, .38)
6. Remove regression of anxiety on self-concealment	12.39	1	<.001	9574.25	9495.00	.21 (.12, .33)
7. Remove regression of somatization on self-concealment	2.58	1	.11	9564.44	9485.19	.08 (.00, .21)
Female Sample						
8. Full Model		0	<.001	28180.64	28098.08	.00 (.00, .00)
9. Remove regression of depression on mindfulness	41.06	1	<.001	28215.10	28215.10	.23 (.18, .30)
10. Remove regression of anxiety on mindfulness	63.60	1	<.001	28237.63	28158.25	.29 (.23, .35)
11. Remove regression of somatization on mindfulness	53.63	1	<.001	28227.66	28148.28	.27 (.21, .33)
12. Remove regression of depression on self-concealment	90.37	1	<.001	28264.40	28185.02	.35 (.29, .41)
13. Remove regression of anxiety on self-concealment	46.76	1	<.001	28220.80	28141.41	.25 (.19, .31)
14. Remove regression of somatization on self-concealment	8.38	1	<.001	28182.41	28103.03	.10 (.05, .17)

Notes. ΔX^2 are the differences in X^2 values between the model with constrained parameters and the fully unconstrained model (Model 1 or 8). AIC= Akaike Information Criterion. BIC=Bayesian Information Criterion. SABIC=Sample Size Adjusted Bayesian Information Criterion. RSMEA=Root Mean Square Error of Approximation. CI=Confidence Interval.

Figure 1. *Standardized Coefficients for Full Model for Men and Women*



Notes. Beta coefficients are before the slashes (or above the lines) for men and after the slashes (or below the lines) for women.
* $p < .05$, ** $p < .01$, *** $p < .001$.

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