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An Implicit Measure of Anti-Gay Attitudes: Prospective Associations with Emotion Regulation Strategies and Psychological Distress

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Abstract

Members of stigmatized groups are at increased risk for mental health problems, and recent research has suggested that emotion dysregulation may be one mechanism explaining the stigma-distress association. However, little is known regarding characteristics that predict vulnerabilities to emotion dysregulation and subsequent distress. We examined whether anti-gay attitudes would predict poorer emotion regulation and greater psychological distress in 31 lesbian, gay, and bisexual (LGB) respondents. Respondents completed implicit and explicit attitude measures at baseline, and participated in an experience sampling study examining stigma-related stressors, emotion regulation strategies, and mood over the course of ten days. Implicit and explicit attitude measures were not correlated. LGB respondents with greater implicit anti-gay attitudes engaged in significantly more rumination and suppression and reported more psychological distress. Rumination fully mediated the prospective association between implicit prejudicial attitudes and psychological distress, and suppression was a marginally significant mediator.

Keywords

stigma; emotion regulation; psychological distress; implicit attitudes; LGB

Stigma-related stressors are associated with a variety of adverse mental health outcomes, including depression and anxiety (Brownell, Puhl, Schwartz, & Rudd, 2005; Meyer, 2003; Williams, Neighbors, & Jackson, 2003). One potentially important mechanism in the relationship between stigma-related stress and psychological problems is emotion regulation (Hatzenbuehler, in press), or the “conscious and nonconscious strategies we use to increase, maintain, or decrease one or more components of an emotional response” (Gross, 2001, p. 215). Two common regulation strategies are rumination, which is passive and repetitive self-focus on one’s symptoms and the circumstances surrounding these symptoms (Nolen-

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Hoeksema, Wisco, & Lyubomirsky, 2008), and suppression, defined as inhibiting emotion-expressive behaviors (Gross, 2001). A recent experience sampling study, for example, found that on days in which stigma-related stressors occurred, respondents engaged in more rumination and suppression; rumination, in turn, mediated the relationship between the stressor and psychological distress (Hatzenbuehler, Nolen-Hoeksema, & Dovidio, in press). Building on the Hatzenbuehler et al. (in press) work, the present research investigated how individual differences in identity-relevant attitudes of members of a stigmatized group (lesbians, gays, and bisexuals; LGB) may moderate responses to stigma-related stressors, including rumination and suppression and, ultimately, the experience of psychological distress.

An identity-relevant attitude that has received much theoretical attention is self-stigmatization (Thoits, 1985), a process of incorporating negative societal views into the self-concept, also referred to as *internalized homophobia*. A review of self-reported self-stigmatization among LGBs indicated significant relationships between self-stigmatization and adverse mental health outcomes (Williamson, 2000).

The present research considered two forms of identity-relevant attitudes, participants' explicit reports of self-stigmatization (Meyer & Dean, 1998) and their implicit associations with homosexuality based on the Implicit Association Test (IAT) (Greenwald, McGhee, & Schwartz, 1998). A recent meta-analysis indicated that the IAT is especially useful with socially sensitive topics, such as stereotyping and prejudice, which may be subject to impression management biases (Greenwald, Poehlman, Uhlmann, & Banaji, 2009). Although the IAT is most often used to detect out-group bias, it has also been applied to attitudes with respect to one's own group, including among African Americans (Livingston, 2002) and overweight/obese individuals (Schwartz, Vartanian, Nosek, & Brownell, 2006). Because prior research has indicated that higher self-presentation concerns produce a weaker correlation between implicit and explicit measures (Hofmann, Gawronski, Geschwender, Le, & Schmitt, 2005; Nosek, 2005), explicit and implicit measures of self-stigmatization (i.e., internalized homophobia) were not expected to be strongly correlated.

We propose that self-stigmatization relates to emotion regulation strategies for stigma-related stressors, which, in turn, can shape mental health outcomes. With respect to rumination, those who endorse views that their social groups are unworthy or regret their membership in such groups are likely to develop expectations of rejection (Mendoza-Denton, Downey, Purdie, Davis, & Pietrzak, 2002), which lead to increased hypervigilance for threat cues in the environment (Major & O'Brien, 2005; Mays, Cochran, & Barnes, 2007). This hypervigilance is a key element of rumination (Lyubomirsky, Tucker, Caldwell, & Berg, 1999). With regards to suppression, those with concealable stigmas, such as homosexuality, often develop negative views of the self and ambivalence regarding their identity (Pachankis, 2008). Although concealment of one's stigma may confer protection from negative events, including social rejection and physical assault, it also requires that individuals suppress their emotions and behaviors in order to ensure that the stigma is not revealed (Cole, Kemeny, & Taylor, 1997).

The focus of the present study was therefore on whether individual differences in explicit and implicit measures of self-stigmatization among LGB participants influence the use of rumination and suppression and ultimately psychological distress. We rely partly on data from a previous experience sampling study in which we examined the relationships between stigma-related stress, emotion regulation, and distress (Hatzenbuehler et al., in press), but we included new measures that were not part of the previous dataset – the key measures of explicit and implicit self-stigmatization – to test hypothesized moderating effects of individual differences in internalized stigma. Consequently, the present research extends our prior work on socio-environmental (i.e., stigma-related stress) determinants of emotion dysregulation and distress

by focusing on a distinct intrapersonal, cognitive risk factor (i.e., identity-relevant attitudes) and by incorporating an implicit measure, an important methodological advancement.

Our main hypothesis in the present research was that self-stigmatization, measured explicitly and implicitly, would predict vulnerability to emotion dysregulation (i.e., rumination and suppression) and greater psychological distress. Moreover, based on our previous work (Hatzenbuehler, in press; Hatzenbuehler et al., in press), we hypothesized that emotion dysregulation would mediate the association between self-stigmatization and psychological distress.

Methods

Participants

Thirty one gay (n=15), lesbian (n=10), bisexual (n=6) participants (16 male, 15 female) participated for pay. Participants were students and community members recruited through fliers (mean age: 21.00, $SD=2.89$).

Procedure

At baseline, participants completed an implicit and explicit measure of stigma (see below). Participants then completed ten days of experience sampling surveys. If participants reported experiencing a stigma-related stressor, they were asked to report how they responded to the stressor and their mood. When stigma-related events were not endorsed, participants completed emotion regulation and distress items in response to non-stigma events occurring that day. This afforded the opportunity to examine whether negative implicit attitudes were associated with greater levels of emotion dysregulation and distress on days when stigma-related stressors were endorsed, relative to days on which these stressors were not endorsed.

Data were excluded from two participants who withdrew from the study. Of the remaining respondents, 94.2% completed the full set of 10 diary days, for a total of 471 diary days. Respondents accessed the secure on-line survey each evening any time after 9 pm before they went to bed.

Self-Stigmatization Measures

Explicit self-stigmatization—A nine-item scale of internalized homophobia was used for the explicit measure of attitudes of homosexuality (Meyer & Dean, 1998). Participant responded from “never” (0) to “often” (3) to items such as, “You have felt that being gay, lesbian or bisexual is a personal shortcoming,” and “You have wished you weren’t gay, lesbian, or bisexual” ($\alpha=.71$).

Implicit self-stigmatization—The Implicit Association Test (IAT; Greenwald et al., 1998) was used to measure implicit attitudes towards homosexuals. The sexual orientation IAT required participants to categorize four homosexual couples (two all male couples and two all female couples) and four heterosexual couples as well as eight positive words (e.g. love, cheer, happy) and eight negative words (e.g., evil, pain, hate). Following standard IAT procedures (Nosek, Greenwald, & Banaji, 2007), the sexual orientation IAT consisted of two critical blocks, one in which participants were required to use the same key to categorize homosexual couples and positive words and another key to categorize heterosexual couples and negative words. In the second critical block, participants were required to use the same key to categorize heterosexual couples and positive words and another key to categorize homosexual couples and negative words. Each critical block consisted of 72 trials and their presentation order was counterbalanced between participants. The IAT was analyzed using the new scoring algorithm

(Greenwald, Nosek, & Banaji, 2003) to calculate *D* scores, with higher scores reflecting greater implicit bias against homosexuals (i.e., implicit self-stigmatization).

Emotion Regulation Strategies

Rumination—Five items (e.g., “I thought about the situation, wishing it had gone better”) from the brooding subscale of the Response Styles Questionnaire (Treyner, Gonzalez, & Nolen-Hoeksema, 2003) were used to assess rumination ($\alpha=.85$).

Suppression—Two items (“I kept my emotions to myself” and “I controlled my emotions by not expressing them”) from the Emotion Regulation Questionnaire (Gross & John, 2003) were used to assess suppression ($\alpha=.85$).

Outcome Variable

Psychological distress—Psychological distress was assessed per participants’ responses (from very slightly/not at all [0] to extremely [5]) to five negative affect items (distressed, upset, shame, nervous, and afraid; $\alpha=.90$) from the Positive and Negative Affect Scale (PANAS; Watson, Clark, & Tellegen, 1988). Studies have shown convergent validity between the PANAS and established measures of depression (Hughes & Kendall, 2001; Watson & Clark, 1992).

Results

Descriptive Statistics of Implicit and Explicit Measures

The mean of the explicit measure was 7.55 ($SD=4.00$), with scores ranging from 3 to 15. The distribution was positively skewed, indicating that the majority of LGB respondents did not endorse high levels of internalized homophobia. Nevertheless, nearly a third of the sample (31.0%) reported experiencing moderate-to-high levels (i.e., scores of at least 9 or higher) of internalized homophobia.

Overall, LGB respondents showed positive implicit attitudes towards gays and lesbians on the IAT ($M=-0.11$, $SD=0.19$), but this did not differ significantly from zero, indicating the absence of an in-group bias. IAT scores ranged from $D = -0.77$ to $D = 0.19$ and, thus, had substantial variability with respect to implicit anti-gay attitudes.

Bivariate analyses revealed that the implicit and explicit measures were not significantly correlated, $r(27)=.239$, $p=.22$.

Prospective Prediction of Emotion Regulation Strategies and Psychological Distress¹

Given the nested structure of the data, Hierarchical Linear Modeling (HLM 6.0; Raudenbush, Bryk, Cheong, Congdon, & du Toit, 2004) was used to test the study hypothesis that self-stigmatization, measured explicitly and implicitly, would predict emotion dysregulation (rumination and suppression) and psychological distress over the course of the experience sampling study. Time-varying covariates (i.e., rumination and suppression) were entered at level 1, and covariates that are time invariant (explicit and implicit self-stigmatization) were entered at level 2. When there is no evidence of a linear trend, the intercepts within HLM represent the mean values for the dependent variable (e.g., rumination) for each participant averaged across the number of study days.

¹To examine direct relationships between anti-gay attitudes, emotion regulation and distress, we coded the emotion regulation and distress variables as missing on days when stigma-related stressors did not occur. When the original values for these variables were re-entered, the pattern of results remained unchanged.

Rumination—LGB respondents who exhibited greater negative implicit attitudes towards gays and lesbians were more likely to ruminate in response to stigma-related stressors over the course of the experience sampling study, compared to those with more positive implicit attitudes, $\beta=1.11$, $SE=0.46$, $p=0.022$. The explicit measure of internalized homophobia was also predictive of rumination, $\beta=0.44$, $SE=0.21$, $p=0.048$.

Suppression—LGB respondents with greater negative implicit anti-gay attitudes were significantly more likely to report suppressing their emotions in response to stigma-related events than those with more positive implicit attitudes, $\beta=1.45$, $SE=0.70$, $p=0.047$. The explicit measure of internalized homophobia also predicted suppression, $\beta=1.49$, $SE=0.63$, $p=0.03$.

Psychological Distress—On days in which stigma-related stressors occurred, those LGB respondents with greater negative implicit anti-gay attitudes reported greater distress, relative to those with less implicit anti-gay attitudes, $\beta=6.20$, $SE=2.76$, $p=0.03$. In contrast, the explicit measure of internalized homophobia was not a significant prospective predictor of distress, $\beta=1.19$, $SE=1.72$, $p=0.49$. Consequently, the full mediation model for explicit attitudes could not be examined.

Mediation Analyses

Mediation was examined using the causal steps strategy (Baron & Kenny, 1986), and Sobel's standard error approximation was used to test the significance of the intervening variable effect (Sobel, 1982). As indicated in Table 1, there was a significant indirect effect of implicit attitudes on distress through rumination (Sobel's $z=2.15$, $p=.03$); the indirect effect through suppression was marginally significant (Sobel's $z=1.88$, $p=.059$). When rumination and suppression were entered simultaneously, both remained statistically significant predictors of distress in the full mediation model.

Discussion

Members of stigmatized groups are at increased risk for mental health problems (Brownell et al., 2005; Meyer, 2003; Williams et al., 2003), but little is known regarding characteristics that predict an individual's vulnerabilities to emotion dysregulation and subsequent psychological distress. Given problems with self-report measures for socially sensitive topics (Greenwald et al., 2009; Nosek, 2005), including internalized stigma (Williamson, 2000), implicit measures may represent an important tool with which to identify characteristics that render stigmatized individuals vulnerable to emotion dysregulation and psychological distress. Thus, we used both explicit and implicit measures of self-stigmatization. These measures were only modestly and nonsignificantly correlated ($r=.24$), similar in magnitude to research on self-stigmatization of African Americans ($r=.18$; Livingston, 2002) and measures of implicit and explicit prejudice generally ($r=.24$; Hofmann et al., 2005).

Whereas prior research with African Americans (Livingston, 2002) and overweight/obese individuals (Schwartz et al., 2006) has shown that the IAT can assess bias toward the in-group, the current study extended these results with a sample of LGB participants in three substantive ways. First, beyond measuring in-group bias, the present research further demonstrated that implicit self-stigmatization (implicit anti-gay attitudes) predicted responses that are important for coping with stigma. In particular, LGB respondents with higher implicit self-stigmatization were more likely to engage in rumination and suppression, two risk factors for mental health problems (Gross, 2001; Nolen-Hoeksema et al., 2008). Second, negative implicit self-stigmatization, but not explicit self-stigmatization, predicted psychological distress. This finding is consistent with Rudman's (2004) conclusion that "implicit attitudes are more sensitive to affective experiences than are explicit attitudes" (p. 80; see also Amodio, Harmon-

Jones, & Devine, 2003; Connor & Feldman Barrett, 2005; Phelps et al., 2000). Third, the present research further identified potential ways that implicit self-stigmatization relates to psychological distress in response to stigma-related stressors: Rumination fully mediated the prospective association between implicit anti-gay attitudes and psychological distress, and suppression was a marginally significant mediator.

The present work also suggests some promising directions for future research. The generalizability of our results, obtained with a convenience sample of LGB young adults, might be tested with other stigmatized groups, including those whose stigmatizing “marks” are not concealable (Miller & Kaiser, 2001; Hatzenbuehler et al., in press). Because suppression is involved directly in concealment, self-stigmatization may be more strongly related to suppression for concealable stigmas, relative to conspicuous stigmas (e.g., obesity). Also, although the measure of psychological distress is correlated with symptoms of depression and anxiety (Hughes & Kendall, 2009; Watson & Clark, 1992), it may be valuable, particularly for its clinical implications, to include DSM-IV-defined (APA, 1994) criteria for psychiatric disorders as outcome measures. In addition, in the present study, implicit stigmatization was only assessed at one time point. Although some research has supported the reliability of the IAT across time (Cunningham, Preacher, & Banaji, 2001), future research is needed to determine whether implicit anti-gay attitudes represent a stable marker of risk for emotion dysregulation and distress. Finally, because there is some debate regarding the extent to which the IAT measures attitudes that are self-relevant versus attitudes that may only reflect cultural knowledge (see Nosek & Hansen, 2008), future research might utilize other measures of implicit identification (e.g., “me-not me” tasks; Nock & Banaji, 2007).

Nevertheless, there are several noteworthy strengths of the current study. The results supported the predictive validity of the IAT as a potentially important marker of differential vulnerability to emotion dysregulation and psychological distress among members of a stigmatized group. The use of a prospective experience sampling design provided a methodological strength and afforded the opportunity to examine whether implicit anti-gay attitudes were longitudinally associated with emotion dysregulation and psychological distress, and whether emotion dysregulation mediated the attitude-distress association. These results have implications for understanding factors that are associated with maladaptive attempts to cope with stigma and also point to different intervention strategies for LGB populations.

References

- American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders. 4. Washington DC: 1994.
- Amodio DM, Harmon-Jones E, Devine PG. Individual differences in the activation and control of affective race bias as assessed by startle eyeblink response and self-report. *Journal of Personality and Social Psychology* 2003;84:738–753. [PubMed: 12703646]
- Brownell, KD.; Puhl, R.; Schwartz, MB.; Rudd, R. *Weight bias: Nature, consequences, and remedies*. New York: Guilford Publications; 2005.
- Cole SW, Kemeny ME, Taylor SE. Social identity and physical health: Accelerated HIV progression in rejection-sensitive gay men. *Journal of Personality and Social Psychology* 1997;72:320–335. [PubMed: 9107003]
- Conner T, Feldman Barrett L. Implicit self-attitudes predict spontaneous affect in daily life. *Emotion* 2005;5:476–488. [PubMed: 16366751]
- Cunningham WA, Preacher KJ, Banaji MR. Implicit attitude measures: Consistency, stability, and convergent validity. *Psychological Science* 2001;12:163–170. [PubMed: 11340927]
- Greenwald AG, McGhee DE, Schwartz JLK. Measuring individual differences in implicit cognition: The Implicit Association Test. *Journal of Personality and Social Psychology* 1998;74:1464–1480. [PubMed: 9654756]

- Greenwald AG, Nosek BA, Banaji MR. Understanding and using the Implicit Association Test: I. An Improved scoring algorithm. 2003
- Greenwald AG, Poehlman TA, Uhlmann E, Banaji MR. Understanding and using the Implicit Association Test: III. Meta-analysis of predictive validity. *Journal of Personality and Social Psychology* 2009;97:17–41. [PubMed: 19586237]
- Gross JJ. Emotion regulation in adulthood: Timing is everything. *Current Directions in Psychological Science* 2001;10:214–219.
- Gross JJ, John OP. Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being. *Journal of Personality and Social Psychology* 2003;85:348–362. [PubMed: 12916575]
- Hatzenbuehler ML. How does sexual minority stigma “get under the skin”? A Psychological Mediation Framework. (in press).
- Hatzenbuehler ML, McLaughlin KA, Nolen-Hoeksema S. Emotion regulation and the development of internalizing symptoms in a longitudinal study of LGB adolescents and their heterosexual peers. *Journal of Child Psychology and Psychiatry* 2008;49:1270–1278. [PubMed: 18564066]
- Hatzenbuehler ML, Nolen-Hoeksema S, Dovidio JF. How does stigma “get under the skin”? The mediating role of emotion regulation. *Psychological Science*. (in press).
- Hofmann W, Gawronski B, Gschwendner T, Le H, Schmitt M. A meta-analysis on the correlation between the Implicit Association Test and explicit self-report measures. *Personality and Social Psychology Bulletin* 2005;31:1369–1385. [PubMed: 16143669]
- Hughes AA, Kendall PC. Psychometric properties of the Positive and Negative Affect Scale for Children (PANAS-C) in Children. *Child Psychiatry and Human Development* 2009;40:343–352. [PubMed: 19142724]
- Livingston RW. The role of perceived negativity in the moderation of African Americans’ implicit and explicit racial attitudes. *Journal of Experimental Social Psychology* 2002;38:405–413.
- Lyubomirsky S, Tucker KL, Caldwell ND, Berg K. Why ruminators are poor problem solvers: Clues from the phenomenology of dysphoric rumination. *Journal of Personality and Social Psychology* 1999;77:1041–1060. [PubMed: 10573879]
- Major B, O’Brien LT. The social psychology of stigma. *Annual Review of Psychology* 2005;56:393–421.
- Mays VM, Cochran SD, Barnes NW. Race, race-based discrimination, and health outcomes among African Americans. *Annual Review of Psychology* 2007;58:201–225.
- Mendoza-Denton R, Downey G, Purdie V, Davis A, Pietrzak J. Sensitivity to status-based rejection: Implications for African-American students’ college experience. *Journal of Personality and Social Psychology* 2002;83:896–918. [PubMed: 12374443]
- Meyer IH. Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin* 2003;129:674–697. [PubMed: 12956539]
- Meyer, IH.; Dean, L. Internalized homophobia, intimacy, and sexual behavior among gay and bisexual men. In: Herek, GM., editor. *Stigma and sexual orientation: Understanding prejudice against lesbians, gay men, and bisexuals*. Thousand Oaks, CA: Sage; 1998. p. 160-186.
- Miller CT, Kaiser CR. A theoretical perspective on coping with stigma. *Journal of Social Issues* 2001;57:73–92.
- Nock MK, Banaji MR. Prediction of suicide ideation and attempts among adolescents using a brief performance-based test. *Journal of Consulting and Clinical Psychology* 2007;75:707–715. [PubMed: 17907852]
- Nolen-Hoeksema S, Wisco BE, Lyubomirsky S. Rethinking rumination. *Perspectives on Psychological Science* 2008;3:400–424.
- Nosek BA. Moderators of the relationship between implicit and explicit evaluation. *Journal of Experimental Psychology: General* 2005;134:565–584. [PubMed: 16316292]
- Nosek, BA.; Greenwald, AG.; Banaji, MR. The Implicit Association Test at age 7: A methodological and conceptual review. In: Bargh, JA., editor. *Automatic processes in social thinking and behavior*. Psychology Press; 2007. p. 265-292.
- Nosek B, Hansen JJ. The associations in our heads belong to us: Searching for attitudes and knowledge in implicit evaluation. *Cognition and Emotion* 2008;22:553–594.

- Pachankis JE. The psychological implications of concealing a stigma: A cognitive-affective-behavioral model. *Psychological Bulletin* 2008;133:328–345. [PubMed: 17338603]
- Phelps EA, O'Connor KJ, Cunningham WA, Gatenby JC, Funayama ES, Gore JC, Banaji MR. Amygdala activation predicts performance on indirect measures of racial bias. *Journal of Cognitive Neuroscience* 2000;12:729–738. [PubMed: 11054916]
- Raudenbush, S.; Bryk, A.; Cheong, YF.; Congdon, R.; du Toit, M. HLM 6: Hierarchical linear and nonlinear modeling. Lincolnwood, IL: Scientific Software International; 2004.
- Rudman LA. Sources of implicit attitudes. *Current Directions in Psychological Science* 2004;13:80–83.
- Schwartz MB, Vartanian LR, Nosek BA, Brownell KD. The influence of one's own body weight on implicit and explicit anti-fat bias. *Obesity* 2006;14:440–447. [PubMed: 16648615]
- Sobel, ME. Asymptotic confidence intervals for indirect effects in structural equation model. In: Leinhardt, S., editor. *Sociological methodology*. San Francisco: Jossey-Bass; 1982. p. 290-312.
- Treynor W, Gonzalez R, Nolen-Hoeksema S. Rumination reconsidered: A psychometric analysis. *Cognitive Therapy and Research* 2003;27:247–259.
- Watson D, Clark LA. Affects separable and inseparable: On the hierarchical arrangement of the negative affects. *Journal of Personality and Social Psychology* 1992;62:489–505.
- Watson D, Clark L, Tellegen A. Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology* 1988;54:1063–1070. [PubMed: 3397865]
- Williams DR, Neighbors HW, Jackson JS. Racial/ethnic discrimination and health: Findings from community studies. *American Journal of Public Health* 2003;93:200–208. [PubMed: 12554570]
- Williamson I. Internalized homophobia and health issues affecting lesbians and gay men. *Health Education Research* 2000;15:97–107. [PubMed: 10788206]

Table 1

Mediation analyses

Outcome	Mediator <i>Rumination</i>		Mediator <i>Suppression</i>						
<i>Psychological Distress</i>	Variable	Std β	SE	Final β	Block	Variable	Std β	SE	Final β
Block 1	IAT	6.20*	2.76		Block 1	IAT	6.20*	2.76	
Block 2	Mediator	1.70**	0.35		Block 2	Mediator	0.61**	0.14	
Block 3	IAT			5.04	Block 3	IAT			4.67*
	Mediator			1.62**		Mediator			0.60**

Note. Std β is the standardized beta coefficient for that variable when its block is first entered into the equation. Final β is the standardized beta coefficient for that variable when both variables have been added to the equation.

* $p < .05$,

** $p < .001$.