

Testing Hypotheses Distilled from Four Models of the Effects of Health-Related Social Control

Morris A. Okun, PhD

Barbara P. Huff, MS

Kristin J. August

Karen S. Rook, PhD

Morris A. Okun, Department of Psychology, Arizona State University, Tempe, AZ
85287-1104.

Barbara P. Huff, Department of Psychology, Arizona State University, Tempe, AZ
85287-1104.

Kristin J. August, Department of Psychology and Social Behavior, University of
California at Irvine, Irvine, CA 92697-7085.

Karen S. Rook, Department of Psychology and Social Behavior, University of California
at Irvine, Irvine, CA 92697-7085.

Send all correspondence to:

Dr. Morris A. Okun, Department of Psychology, Arizona State University, Tempe, AZ 85287-
1104

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Abstract

This study distilled and tested hypotheses derived from four models of the effects of social control on affect and health behavior among 401 college students involved in heterosexual dating relationships. Each model received at least some support. Consistent with the *dual effects* model, social control strategies predicted both health behavior change and negative affect. In accord with the *domain-specific* model, positive social control was related to positive affect and negative social control was related to negative affect. In partial support of the *mediational* model, positive social control exerted both a direct and an indirect effect via positive affect on health behavior change and negative social control exerted both a direct and an indirect effect via negative affect on hiding unhealthy behavior. As predicted by the *contextual* model, quality of dating relationship moderated the influence of positive and negative social control on hiding unhealthy behavior.

Testing Hypotheses Distilled from Four Models of the Effects of Health-Related Social Control

Until recently, scant attention has been devoted to examining how social control influences health (Lewis & Butterfield, 2005). Studies of social control investigate the effects on a person when other people make attempts to change the person's behavior in some way. Social control refers to attempts by network members to influence and regulate the behavior of another person (Rook & Pietromonaco, 1987). Such influence attempts often are directed toward a person's health behavior. Explicit efforts to engage in health-related social control occur when network members prompt or persuade an individual to engage in behaviors that can enhance health or to discontinue behaviors that can compromise health. Positive social control strategies involve providing information, positive reinforcement of engaging in healthy behavior, and showing concern for the recipient. Negative social control strategies, in contrast, involve such behaviors such as ridiculing, pressuring, and making an unflattering comparison between the recipient and someone else (Lewis & Rook, 1999). Whether these strategies have differential effects on affect and health behaviors, and what mediating processes and moderating factors influence these relations, remains poorly understood.

Conceptual Framework

The current study sought to add to existing knowledge about health-related social control by distilling from the literature four models of the effects of social control and examining them in college students involved in dating relationships. These models are referred to as the dual effects, domain-specific, mediational, and contextual models, respectively. We discuss these models in the chronological order that they appeared in the literature (see Figure 1).

Insert Figure 1 about here

Dual Effect Model. The dual effects model focuses on the effects of social control on health behavior change and negative affect. According to this model, social control has both a benefit and a cost. Social control may be beneficial because it enhances healthy behavior by the recipient but it also may elevate the recipient's negative affect because the recipient perceives the initiator as badgering him or her (Hughes & Gove, 1981; Rook, 1990).

Lewis and Rook (1999) examined the relations among positive and negative social control, hostility and sadness, and health behavior change. In support of the dual effects model, Lewis and Rook (1999) demonstrated that as positive social control increased, health behavior change and sadness increased, and as negative social control increased, both sadness and hostility increased. Contrary to the dual effects model, in cross-sectional analyses, Helgeson, Novak, Lepore, and Eton (2004) found that forms of spousal social control directed toward health-restoring and health-compromising behavior were associated with both greater psychological distress and worse health behavior.

The original formulation of the dual effects model did not distinguish between positive and negative forms of social control. Thus, in testing hypotheses derived from the dual effects model, we examined the contribution of positive and negative social control as a set of predictors of negative affect and health behavior change. More specifically, we tested the following hypothesis derived from the dual effects model: (a) positive and negative social control together will make an independent contribution to predicting health behavior change; and (b) positive and negative social control together will make an independent contribution to predicting negative

affect.

Domain-specific model. The domain-specific model explicitly distinguishes between positive and negative forms of social control and emphasizes their distinctive associations with positive affect and negative affect, respectively (hence, domain-specific effects). Three strands of research provide the foundation for the domain-specific model. First, positive affect and negative affect have been shown to be separate dimensions of well-being (Diener & Emmons, 1985), although there are circumstances under which they may be correlated (Zautra, Potter, & Reich, 1997). Second, positive and negative dimensions of social exchanges have been found to be independent (Pagel, Erdly, & Becker, 1987), but see Okun and Lockwood (2003) for exceptions. Third, it has been demonstrated that positive social exchanges influence positive affect but not negative affect and negative social exchanges influence negative affect but not positive affect (Ingersoll-Dayton, Morgan, & Antonucci, 1997), but see Newsom, Rook, Nishishiba, Sorkin, and Mahan (2005) for an exception.

Consistent with the domain-specific model, Tucker (2002) observed in a study of older adults that positive and negative affective reactions to social control were uncorrelated. Moreover, in a study of married couples, Tucker and Anders (2001) reported that (a) positive social control was significantly related to positive, but not negative, affect and (b) negative social control was significantly related to negative, but not positive, affect.

Based upon the domain-specific model, we tested the following hypotheses: (a) positive social control will be a significant positive predictor of positive affect; and (b) negative social control will be a significant positive predictor of negative affect.

Mediational model. The mediational model extends the domain-specific model by developing a more elaborate set of hypothesized relations among social control, affect, and

health behaviors. First, it recognizes that responses to social control attempts may be either compliant or noncompliant, and that noncompliant responses may take several forms. In response to social control attempts, individuals may engage in the healthy behavior, thus complying with the wishes of their significant others. Alternatively, individuals may decline to comply with the social control attempts of significant others by ignoring the attempts, persevering overtly in the unhealthy behavior, or engaging covertly in (hiding) the unhealthy behavior (Tucker & Anders, 2001). Tucker (2002) found that there was no association among older adults between engaging in healthy behaviors and hiding unhealthy behaviors, indicating that engaging in and hiding a health behavior may be independent. Second, the mediational model posits that positive affect mediates the relation between positive social control and engaging in healthy behavior, whereas negative affect mediates the relation between negative social control and hiding unhealthy behavior.

Tucker and Anders (2001) found that positive social control was positively correlated with positive affect and engaging in healthy behavior. When engaging in healthy behavior was predicted from positive social control and positive affect, only positive affect was significant. Therefore, Tucker and Anders (2001) concluded that positive affect fully mediated the relation between positive social control and engaging in healthy behavior. Negative social control was positively correlated with negative affect and hiding unhealthy behavior. When hiding unhealthy behavior was predicted from negative social control and negative affect, both variables were significant. These results led Tucker and Anders (2001) to conclude that negative affect partially mediated the relation between negative social control and hiding unhealthy behavior.

The following hypotheses were derived from the mediational model: (a) positive social

control will be a significant positive predictor of positive affect; (b) negative social control will be a significant positive predictor of negative affect; (c) positive affect will be a significant positive predictor of health behavior change; (d) negative affect will be a significant positive predictor of hiding unhealthy behavior; (e) positive social control will exert a significant positive indirect effect on health behavior change via positive affect; and (f) negative social control will exert a significant positive indirect effect on hiding unhealthy behavior via negative affect.

Contextual model. The first three models do not consider the possibility that the effects of social control may be moderated by contextual influences (Ingersoll-Dayton et al., 1997), such as the nature of the relationship between the initiator and the recipient of social control. Presumably, social control is more successful in changing health behavior when the social control initiator and recipient are in a close relationship (Lewis & Butterfield, 2005). However, differences in the quality of specific close relationships largely have been ignored in studies of the effects of social control on health behavior. How recipients interpret persuasive communications from initiators may be affected by the quality of the relationship (Sarason & Sarason, 2001).

Tucker (2002) investigated whether network relationship satisfaction moderated the effects of direct social control on engaging in healthy behavior and hiding unhealthy behavior among older adults. She found that older adults who experienced more direct social control reported more frequent hiding of unhealthy behavior if they had low satisfaction with their social network relationships and less frequent hiding of unhealthy behavior if they had high satisfaction with their social network relationships. Tucker's (2002) measure of social control did not distinguish between positive and negative forms of social control, but the items in the direct social control measure appear to focus on positive forms of social control (e.g., "they offer to

engage in healthy behavior with me”). Thus, when network satisfaction is low, positive social control may be unlikely to arouse positive affect or could arouse negative affect, leading to a “crossover” effect on compliance, i.e., as positive social control increases, hiding of unhealthy behavior increases.

In light of Tucker’s (2002) finding, we tested the prediction that in low-quality dating relationships, positive social control will be positively related to hiding of unhealthy behavior. Furthermore, we predicted that in low-quality dating relationships, the positive relation between negative social control and hiding unhealthy behavior would be amplified. As indicated by the dashed lines and question marks in the bottom panel of Figure 1, we explored whether quality of dating relationship moderated the relations between positive and negative social control and health behavior change.

Method

Procedure

Starting with the fourth week of the 2004 spring and fall semesters, we recruited participants for our study from students enrolled in an introduction to psychology course offered at a large southwestern state university. To fulfill a course requirement, students visited a website to learn about the menu of studies that were available. The present study was described as examining how individuals in heterosexual dating relationships attempt to influence positively their dating partner’s health behavior. Students were informed that to be eligible for this study they had to be single, dating a person of the opposite sex, involved with their dating partner for three months or longer, and in contact with their dating partner during the past 30 days. Students who signed up to participate in the study were administered a survey in groups ranging from 2 to 20 people.

Sample

Four-hundred-and-eighteen students participated in the study. The questionnaire included items that assessed the eligibility criteria and demographics as well as the main study variables. Thirteen students were excluded from the study because they did not meet all of the eligibility criteria and four students were excluded because of missing data.

Among the 401 students included in the study, 73% were women. Fifty-six percent of the participants were white, non-Hispanic, 9% were Hispanic, 7% were Asian, 3% were African American, 2% were American Indians, and the remaining 23% of the participants were of other ethnicities or were of mixed heritage. Eighty-eight percent of the participants were younger than 21 years old and the remaining 12% were between the ages of 21 and 39 years old. With respect to self-rated health, 77% indicated that their health was “good” or “very good”, 15% reported that their health was “excellent”, and the remaining 8% perceived their health to be “fair” or “poor.” The majority of the participants reported that they had been dating their partner for longer than 1 year (53%) and that they had daily contact with their partners (66%).

Measures

Type of health behavior targeted for change. Following the elicitation procedure used by Lewis and Rook (1999), participants were instructed to recall a time during the past 3 months when their dating partner tried to influence them to do something for their health. They were asked to list the health-related behavior (e.g., exercise more) that their dating partner targeted for change during the past 3 months. We classified the type of health behavior targeted by the dating partner on the basis of judgments made by one of two coders. We used 13 categories (smoking, exercise, alcohol, relaxation, weight, nutrition, coffee, visit a physician, sleep, driving safely, drugs, vitamins, and ‘other’). Based upon 40 protocols classified independently by the two

coders, the Kappa for type of health behavior targeted by their dating partner was .88.

Social control. Participants were asked to indicate how true or untrue it was that their dating partner tried to get them to change their health behavior during the past three months using each of 10 strategies (Lewis & Rook, 1999). The items were rated on a 5-point scale with anchor points of *false* (0) and *true* (4). Six items tapped into positive social control (My dating partner (a) offered to help me change the health behavior, (b) showed concern about my health, (c) rewarded me when I tried to change the behavior, (d) tried to be understanding of my situation, (e) pointed out people who had already successfully change their health behavior, and (f) gave me information about how I could change the health behavior). The remaining four items assessed negative social control (My dating partner (a) tried to make me feel guilty, (b) pressured me to change the health behavior, (c) ridiculed me, and made me feel bad, and (d) compared me to people who were unable to change their health behavior). Based upon an item analysis, one of the positive items (My dating partner pointed out people who had already successfully changed their behavior) was dropped. Scores on these scales were computed by averaging the responses to the appropriate items. The coefficient alphas for the positive and negative social control scales were .66 and .72, respectively.

Quality of the dating relationship. Quality of the dating relationship was measured using a modified version of the Quality Marriage Index (Norton, 1983). Norton (1983) provided evidence that this scale is a reliable and valid measure of marital quality. We excluded one item because it did not seem appropriate for unmarried couples (“I really feel like part of a team with my partner”). In the present study, participants answered five questions with respect to the relationship with their dating partner. A sample item was, “My relationship with my partner makes me happy.” The items were rated on a 7-point scale ranging from *strongly disagree* (0) to

strongly agree (6). Scores on this scale were computed by averaging the responses to the items. The coefficient alpha for this scale was .94.

Affect aroused by dating partner's social control attempts. Participants were asked to indicate how they felt at the time that their dating partner tried to influence them to change the targeted health behavior (Lewis & Rook, 1999). Each affect was rated on a 5-point scale with anchor points of *very weakly* (0) and *very strongly* (4). Positive affect was assessed with nine items (e.g., appreciative) and negative affect was assessed with eight items (e.g., resentful). Scores on these scales were computed by averaging the responses to the appropriate items. The coefficient alphas for the positive and negative affect scales were .91 and .87, respectively.

Health behavior. We included measures of health behavior change and hiding of unhealthy behavior in response to the dating partner's social control attempts. Participants were asked to indicate whether in response to their dating partner's social control attempts, they had changed their behavior in the direction advocated, had changed their behavior in the direction opposite to that advocated, or had not changed their behavior at all (Lewis & Rook, 1999). Participants who indicated that they had changed their behavior rated on a 7-point scale the extent to which they had changed their behavior (1 = *not at all*, 7 = *very much*). This rating was given a positive sign for individuals who reported changing their behavior in the direction advocated by their dating partner and a negative sign for individuals who reported changing their behavior in the direction contrary to that advocated by their dating partner. Individuals who reported no behavior change were given a score of 0. To assess hiding behavior, participants were asked how often (0 = *never*, 1 = *rarely*, 2 = *sometimes*, 3 = *often*) they hid the unhealthy behavior from their dating partner (Tucker, 2002).

Results

Preliminary Analysis

The types of health behaviors targeted most frequently by dating partners were exercising (17%), eating healthier (16%), smoking (14%), drinking (13%), and relaxing (12%). Descriptive statistics for, and the correlations among, the main study variables are presented in Table 1.

Insert Table 1 about here

Data Analytic Approach

Each model of the effects of social control makes predictions about two dependent variables. In testing each prediction, we controlled for the variation shared by the dependent variables.

The Dual Effects Model

We used hierarchical regression analysis to test the hypotheses derived from the dual effects model. In the first model, health behavior change was regressed on negative affect in step 1 and positive and negative social control in step 2. After step 1, 3 percent of the variance in health behavior change was explained, $F(1, 399) = 10.67, p < .01$. After step 2, 9 percent of the variance in health behavior change was accounted for, $F(3, 397) = 13.40, p < .001$. The increment in R^2 associated with adding positive and negative social control to the regression model (.06) was significant, $F_{change}(2, 399) = 14.41, p < .001$. Inspection of the regression

Insert Table 2 here

coefficients (see Table 2) reveals that positive social control was the strongest predictor of health

behavior change ($\beta = .26$).

In the second model, negative affect was regressed on health behavior change in step 1 and positive and negative social control in step 2. After step 1, 3 percent of the variance in negative affect was explained, $F(1, 399) = 10.67, p < .01$. After step 2, 30 percent of the variance in health behavior change was accounted for, $F(3, 397) = 57.18, p < .001$. The increment in R^2 associated with adding positive and negative social control to the regression model (.27) was significant, $F_{change}(2, 399) = 78.36, p < .001$. With all predictors in the model, negative social control was the strongest predictor of negative affect ($\beta = .53$).

The Domain-Specific Model

We used simultaneous regression analysis to test the hypotheses derived from the domain-specific model. In the first model, positive affect was regressed on negative affect, positive social control, and negative social control. Twenty-seven percent of the variation in positive affect was explained, $F(3, 397) = 47.97, p < .001$. Positive social control was a significant ($p < .001$), positive predictor of positive affect ($\beta = .42$) whereas negative social control was not (see Table 3).

Insert Table 3 here

In the second model, negative affect was regressed on positive affect, positive social control, and negative social control. Thirty-three percent of the variation in negative affect was explained, $F(3, 397) = 63.94, p < .001$. Negative social control was a significant ($p < .001$), positive predictor of negative affect ($\beta = .50$) whereas positive social control was not (see Table 3).

Mediational Model

We used simultaneous regression analysis to test the hypotheses derived from the mediational model regarding the direct effects of the social control strategies and the affective reactions. In the first model, health behavior change was regressed on positive social control, negative social control, positive affect, negative affect, and hiding unhealthy behavior. Thirteen percent of the variation in health behavior change was explained, $F(5, 395) = 11.75, p < .001$. Positive affect ($\beta = .23$) was the strongest predictor of health behavior change (see Table 4). However, the direct effect of positive social control remained significant ($\beta = .16$).

Insert Table 4 here

In the second model, hiding unhealthy behavior was regressed on positive social control, negative social control, positive affect, negative affect, and health behavior change. Twenty-six percent of the variation in hiding unhealthy behavior was explained, $F(5, 395) = 27.91, p < .001$. Negative affect ($\beta = .30$) was the strongest predictor of hiding unhealthy behavior. However, the direct effect of negative social control remained significant ($\beta = .28$).

We tested the indirect effect of positive social control on health behavior change via positive affect and the indirect effect of negative social control on hiding unhealthy behavior via negative affect for significance using the Sobel (1982) procedure. The indirect effects were computed by multiplying (a) the path from positive social control to positive affect ($b = .46$; see Table 3) by the path from positive affect to health behavior change ($b = .61$; see Table 4) and (b) the path from negative social control to negative affect ($b = .43$; see Table 3) by the path from negative affect to hiding unhealthy behavior ($b = .35$; see Table 4). The Z statistic was 3.72 ($p < .001$) for the indirect

effect of positive social control on health behavior change via positive affect and 5.13 ($p < .001$) for the indirect effect of negative social control on hiding unhealthy behavior via negative affect. Thus, positive affect partially mediated the relation between positive social control and health behavior change and negative affect partially mediates the relation between negative social control and hiding unhealthy behavior.

Contextual Model

We used hierarchical regression analysis to test the hypotheses derived from the contextual model. Positive social control, negative social control, and quality of the dating relationship scores were centered (Aiken & West, 1991) and two interaction terms were created by multiplying each participant's centered quality of the dating relationship score by his or her centered (a) positive social control score; and (b) negative social control score. Separate hierarchical regression models were carried out to predict health behavior change and hiding unhealthy behavior. In each analysis, positive social control, negative social control, positive affect, negative affect, quality of dating relationship, and the health behavior not being used as the criterion variable were entered in step 1 and the two interaction terms were entered in step 2.

In the model predicting health behavior change, the R^2 associated with the main effects model was .15, $F(6, 394) = 11.70, p < .001$. After the interaction terms were entered, the R^2 did not change, $F(8, 392) = 8.96, p < .001$. The increment in R^2 associated with adding the two interaction terms to the regression model (.00) was not significant, $F_{change}(2, 392) = 0.78$.

In the model predicting hiding unhealthy behavior, the R^2 associated with the main effects model was .26, $F(6, 394) = 23.65, p < .001$. After the interaction terms were entered, the R^2 was .28, $F(8, 392) = 8.96, p < .001$. The increment in R^2 associated with adding the two interaction terms to the regression model (.02) was significant, $F_{change}(2, 392) = 5.15, p < .01$.

The highest p level associated with the individual interaction effects was .05. To examine the form of the significant interaction effects on hiding unhealthy behavior, we followed procedures developed by Aiken and West (1991).

Insert Figures 2 & 3 about here

As can be seen in Figure 2, there is a strong positive relation between positive social control and hiding unhealthy behavior only among participants in low (-1 standard deviation) quality dating relationships. In contrast, as depicted in Figure 3, there is a stronger positive relation between negative social control and hiding unhealthy behavior among participants who are in high, as opposed to low, quality dating relationships

Discussion

The purpose of the present study was to delineate and test hypotheses derived from four models of the consequences of health-related social control. We did not pit the four models of the effects of health-related social control against each other. Instead, we have shown that each of the models can shed some light on the pathways by which social control influences health behavior (Berkman, Glass, Brissette, & Seeman, 2000).

The dual effects model highlights the notion that although health-related social control might have a beneficial effect on health behavior change, it also can evoke negative affective reactions. Consistent with this model, we found that social control strategies influence both health behavior change and negative affect. The domain-specific model elaborates on the dual effects model by proposing that positive social control influences positive affect and that negative social control influences negative affect. As hypothesized, greater positive social

control was related to more positive affect and greater negative social control was related to greater negative affect.

The mediational model expands the domain-specific model by postulating that positive affect mediates the effect of positive social control on health behavior change and that negative affect mediates the effect of negative social control on hiding unhealthy behavior. In partial support of the mediational model, positive social control exerted both an indirect effect on health behavior change via positive affect and a direct effect on health behavior change. Similarly, negative social control exerted both an indirect direct effect on hiding unhealthy behavior via negative affect and a direct effect on hiding unhealthy. What other variable(s) may contribute to mediating the relations between social control and health behaviors? Certain types of positive social control strategies (e. g., praise) may promote efficacy beliefs (Bandura, 1998), and as efficacy beliefs increase, individuals are more likely to change their health behaviors (Pomaki, Maes, & Ter Doest, 2004). Negative social control strategies may elicit psychological reactance. To maintain a sense of control in the face of negative social control attempts, recipients of negative social control may be motivated to engage covertly in the unhealthy behavior (Butterfield & Lewis, 2002).

The contextual model is based upon the assumption that the quality of close personal relationships provides a backdrop that influences the impact of social control on health behavior. The quality of the dating relationship is posited to affect how recipients interpret and react to the efforts of initiators to change their health behavior. Our findings indicate that the quality of the dating relationship does moderate the effects of social control on hiding unhealthy behavior. In high-quality dating relationships, only negative forms of social control influence hiding unhealthy behavior. In contrast, in low-quality dating relationships, both positive and negative

forms of social control are associated with more frequent hiding of unhealthy behavior.

Paralleling the findings of Tucker (2002), the form of the positive social control by quality of the dating relationship interaction effect on hiding unhealthy behavior indicated that for recipients who report low quality dating relationships, positive social control attempts backfire by fostering hiding of unhealthy behavior. In low-quality dating relationships that typically lack intimacy, recipients may interpret positive social control attempts as coercive and may be more willing to deceive their dating partners by not disclosing their pursuit of unhealthy behavior.

We had predicted that in low-quality dating relationships, the positive relation between negative social control and hiding unhealthy behavior would be amplified. Contrary to this hypothesis, the form of the interaction between negative social control and the quality of the dating relationship on hiding unhealthy behavior indicated that as the quality of the dating relationship increased, negative social control was a stronger predictor of hiding behavior. One way to think about this interaction effect is that negative social control is a much stronger determinant of hiding unhealthy behavior than quality of dating relationship. When negative social control strategies are used frequently, regardless of quality of dating relationship, hiding of unhealthy behavior increases. However, in the absence of negative social control strategies, the quality of dating relationship is inversely related to hiding unhealthy behavior.

Although in the present study, we focused on the joint influence of social control and quality of the dating relationship on health behavior, it is important to consider the possibility that social control attempts affect the quality of the dating relationship. For example, it has been shown that frequent intrusive behaviors (which would include negative forms of social control) that are emotionally charged are linked to greater relationship dissatisfaction and increase the likelihood of relationship dissolution (Cunningham, Shamblen, Barbee, & Ault, 2005).

However, it should be noted that in the present study, positive social control attempts and positive affective reactions were positively correlated with the quality of the dating relationship. Thus, the relation between social control attempts and quality of the dating relationship may depend on the valence of the social control attempts.

The present study has several limitations. Our findings are limited by our cross-sectional, correlational design that cannot capture the reciprocal processes that may occur in health-related social control interactions. Our findings may not generalize to other age groups, to other relationship types, or across genders (e.g., Westmaas, Wild, & Ferrence, 2002). Because our data are based solely on self-report from the recipient, some associations may be inflated due to shared reporter variance. Given the negatively skewed distribution for quality of dating relationship scores, participants in the present study labeled as having a low quality of dating relationship, in actuality, were above the midpoint of the scale.

In conclusion, knowledge of the multiple effects that health-related social control may exert can help health educators and relationship counselors in their efforts to devise strategies to promote positive health behavior change while maintaining positive affect in close relationships. Therefore future research is warranted that identifies positive social control strategies that elicit positive affective reactions and positive health behavior change without concomitantly evoking negative affective reactions and hiding of unhealthy behaviors.

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Table 1

Means, standard deviations, and interrelations among the variables

Variables	1	2	3	4	5	6	7
1. Health behavior change	--						
2. Hiding unhealthy behavior	-.06	--					
3. Positive affect	.32***	-.14**	--				
4. Negative affect	-.16**	.45***	-.30***	--			
5. Positive social control	.27***	.02	.45***	-.09	--		
6. Negative social control	-.10*	.44***	-.23***	.54***	-.13**	--	
7. Quality of dating relationship	.27***	-.20***	.29***	-.30***	.31***	-.29***	--
<i>M</i>	2.95	0.93	2.19	1.40	2.63	1.26	5.19
<i>SD</i>	2.64	1.08	0.98	0.91	0.88	1.04	1.10

Note. * $p < .05$, ** $p < .01$; *** $p < .001$.

Table 2

Summary of Step 2 from Hierarchical Regression Models Testing Predictions from the Dual Effects Model

Predictor	Dependent Variable					
	Health Behavior Change			Negative affect		
	b	SEb	β	B	SEb	β
Positive social control	.78***	.14	.26	.01	.04	.01
Negative social control	.03	.14	.01	.46***	.04	.53
Negative affect	-.42*	.17	-.14	NA		
Health Behavior Change	NA			-.04*	.02	-.11

Note. * $p < .05$, ** $p < .01$; *** $p < .001$.

Table 3

Summary of Simultaneous Regression Models Testing Predictions from the Domain-Specific Model

Predictor	Dependent Variable					
	Positive affect			Negative affect		
	b	SEb	β	B	SEb	β
Positive social control	.46***	.05	.42	.07	.05	.07
Negative social control	-.04	.05	-.05	.43***	.04	.50
Positive affect	NA			-.20***	.04	-.21
Negative affect	-.25***	.06	-.23	NA		

Note. * $p < .05$, ** $p < .01$; *** $p < .001$.

Table 4

Summary of Simultaneous Regression Models Testing Predictions Regarding Direct Effects from the Mediational Model

Predictor	Dependent Variable					
	Health behavior change			Hiding unhealthy behavior		
	b	SEb	β	B	SEb	β
Positive social control	.50**	.16	.16	-.11	.06	.09
Negative social control	.06	.16	.02	.29***	.05	.28
Positive affect	.61***	.15	.23	-.03	.06	-.02
Negative affect	-.26	.17	-.09	.35***	.06	.30
Health behavior change	NA			-.00	.02	-.01
Hiding unhealthy behavior	-.02	.13	-.01	NA		

Note. * $p < .05$, ** $p < .01$; *** $p < .001$.

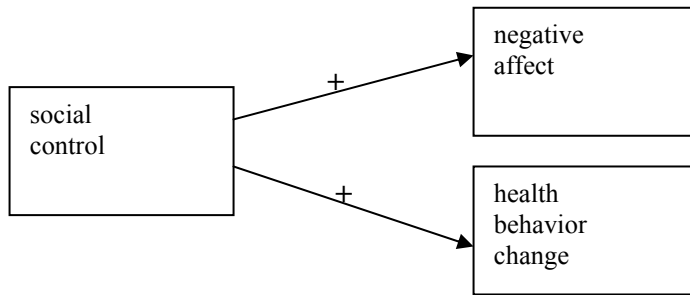
Figure Captions

Figure 1. Hypothesized Effects of Social Control on Affect and Health Behavior.

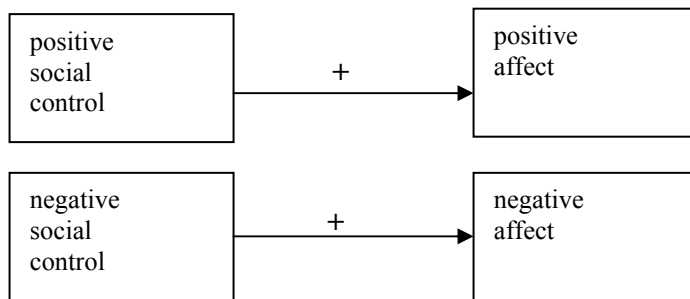
Figure 2. The quality of dating partner relationship by positive social control interaction effect on hiding unhealthy behavior.

Figure 3. The quality of dating partner relationship by negative social control interaction effect on hiding unhealthy behavior.

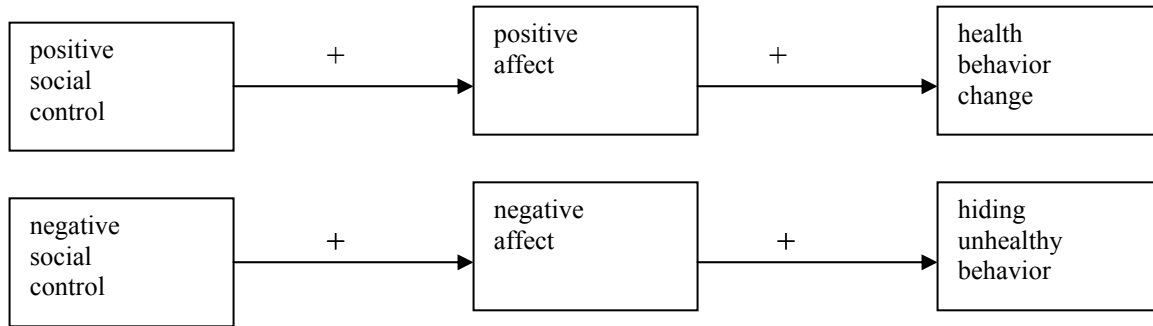
MODEL 1: DUAL EFFECTS



MODEL 2: DOMAIN-SPECIFIC



MODEL 3: MEDIATIONAL



MODEL 4: CONTEXTUAL

