

Bring It On: Proactive Coping with Discrimination

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We investigated proactive coping with discrimination among heavy women in both a high impact lab study (101 women) and a daily diary study (62 women). Heavy women assessed greater harm and fewer coping resources for discriminatory, as compared to non-discriminatory, hassles (Study 2). Primary appraisals of harm were important determinants of proactive coping, including primary control (attempts to change the environment) and secondary control (attempts to change the self to fit the environment) directed at discriminatory stressors (Studies 1 and 2). When heavy women used primary control coping efforts, they experienced positive interpersonal outcomes (Study 1) and less negative intrapersonal outcomes (Study 2). We discuss the benefits and limitations of engaging in proactive coping and suggest avenues for future research.

KEY WORDS: discrimination; proactive coping; primary control; weight; diary.

I had a choir concert today, and we had a dress rehearsal before the actual concert. I'm on the top row of the risers, so while we were standing there, this guy who stands in front of me leans back and says, so that I can hear it, 'Let's hope the risers don't break, MELISSA'S⁴ on the last row.' I was really upset about it, but managed to sneak in, 'If I go down, you go down with me.'

—Participant report in study of heavy women's experiences with discrimination.

Given their socially devalued status, members of stigmatized groups constantly face the threat of discrimination (Crocker, Major, & Steele, 1998). This unique and pervasive peril produces an additional form of stress for members of stigmatized groups—one that is not present for their unmarked peers (Miller & Major, 2000). Although one might expect the cost of additional stress to materialize in the

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⁴The names of diary respondents have been changed to protect their anonymity.

form of negative outcomes, including low self-esteem and poor physical health (Allport, 1979), research has failed to find a one-to-one association between the experience of stress due to discrimination and the presence of negative outcomes (Allison, 1998; Clark, Anderson, Clark, & Williams, 1999; Crocker & Major, 1989). Instead, research reveals that the way in which individuals interpret and respond to a stressor determines the extent to which they experience a negative outcome (Folkman & Lazarus, 1985; Lazarus & Folkman, 1984; Major, McCoy, Kaiser, & Quinton, 2003). The present research expands existing investigations of coping with stress in general and coping with stress due to discrimination in particular by examining event-specific appraisals, two classes of coping responses, intrapersonal and interpersonal outcomes, and the relation among these variables.

APPRAISAL OF POTENTIAL STRESSORS

In the classic stress and coping framework, individuals employ primary and secondary appraisals of a stressor to determine the extent to which coping is necessary. Primary appraisals specify whether anything personal is at stake in the encounter, such as blockage of a goal or damage to self-esteem, and secondary appraisals evaluate whether one has enough resources to prevent harm from the stressor (Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen, 1986). In general, appraising threat of harm (primary appraisal) and the presence of resources to address the harm (secondary appraisal) indicate the extent to which coping is required (Lazarus & Folkman, 1984). The critical question is whether resources are sufficient to address demand.

Consistent with arguments about the theoretical overlap between coping with stress in general and discrimination in particular, we expect the same general process should apply to discriminatory and non-discriminatory hassles. Despite a similar process, mean levels of appraisals may differ depending on type of hassle. Discrimination is a unique stressor because unlike non-discriminatory stressors, it often targets a core component of one's identity. For example, missing the bus and therefore being late to work does not necessarily imply that one is socially devalued. In comparison, being ignored or treated rudely because of one's weight does imply that one is socially devalued. Accordingly, discriminatory hassles might produce greater appraisals of harm than non-discriminatory hassles. Moreover, discrimination is often difficult to deter, and therefore might produce lower appraisals of resources than non-discriminatory hassles. Specifically, we predict that because discrimination presents a unique stressor, mean levels of primary appraisals should be higher and mean levels of secondary appraisals should be lower for discriminatory, compared to non-discriminatory hassles. Additionally, for both types of stressors, primary appraisals, indicating harm or threat of harm, and secondary appraisals, indicating that one has adequate resources to address the harm, are predicted to be associated with a greater frequency and strength of a variety of coping efforts than neutral appraisals.

COPING WITH STRESS

Coping may involve any number of active or passive and cognitive or behavioral strategies enacted to minimize the harm incurred from a stressor (Lazarus & Folkman, 1984), and it is useful to form classifications of these various forms of coping responses. One way to classify coping responses is to specify whether they exert primary or secondary control (Rothbaum, Weisz, & Snyder, 1982). *Primary control efforts attempt to change the environment* so that it conforms to one's needs, whereas *secondary control efforts try to adapt the self to the environment* and 'go with the flow.' In some cases, one might have a good deal of power over the environment and exert primary control, whereas in other cases one might have little power and instead exert secondary control (Rothbaum et al., 1982). For example, in order to elicit positive responses from a stranger, a heavy woman might exert primary control by smiling and introducing herself rather than risk being mocked or ignored because of her weight. Alternatively, a heavy woman might exert secondary control by attempting to regulate her emotions during an encounter where she is concerned that such events might occur.

Past research offers numerous classifications of coping responses, but the majority of alternatives can be subsumed within the constructs of primary control (e.g., approaching, active coping, engaging, problem-focused coping) and secondary control (e.g., avoiding, passive coping, disengaging, emotion-focused). We use this classification because it frames the individual as an active agent, working to achieve balance with the environment, even when coping efforts may appear to be passive or withdrawn. In addition, this classification maps on to distinctions made in existing research on coping with stress due to discrimination (Kaiser & Miller, 1999; Major et al., 2003; Major & Schmader, 1998; Matheson & Cole, 2004; Swim, Johnston, & Pearson, 2005).

Considering research on coping with stress due to discrimination, several coping responses previously identified in this literature embody attempts at primary control, including exerting more effort at a task (being more persistent or assertive; Miller & Myers, 1998; Myers & Rosen, 1999), using social skills (altering verbal and nonverbal self-presentation, using humor, smiling, being friendly, educating the other person; Cross & Strauss, 1998; Miller & Myers, 1998), or paying more attention to the interaction partner's behavior (monitoring verbal and nonverbal cues) either before or during a potentially stressful episode (Frable, Blackstone, & Scherbaum, 1990). Examples of secondary control efforts include increased attention to one's own behavior (Saenz, 1994; Saenz & Lord, 1989), psychological withdrawal from a goal or a domain (Major & Schmader, 1998; Schmader, Major, & Gramzow, 2001), avoidance of potentially prejudiced people or situations (Pinel, 1999; Swim, Hyers, Cohen, & Ferguson, 2001), distraction, acceptance, or positive thinking (Crocker & Major, 1989; Miller & Kaiser, 2001). Secondary control may also be used to change the way one thinks about a bad situation, particularly one that cannot be avoided (Miller & Kaiser, 2001).

Proactive Coping

The majority of research on general stress and coping focuses on reactive coping, including seeking social support, confronting, and psychological distancing that occurs *after* an individual exits a stressful situation (e.g., Folkman et al., 1986). The tendency to focus on reactive coping is also reflected in research on discrimination, where researchers consider the extent to which an individual dis-identifies with academics (Schmader et al., 2001), identifies with devalued groups in order to protect self-esteem (Schmitt & Branscombe, 2002), and explains an event by making attributions to discrimination rather than accepting personal responsibility for failure (Crocker & Major, 1989). Given its post hoc nature, reactive coping cannot explain how individuals approach potentially stressful situations or use strategies to reduce or eliminate negative consequences *before* or *during* a potentially stressful event. For example, a reactive approach would not consider strategies that a heavy woman could use to minimize the likelihood of rejection from a potential dating partner. Although examining how individuals repair damage incurred from a stressful experience is useful, it fails to address the complete process of coping—specifically, appraisals and coping efforts that occur before one turns to reactive coping.

Attempts to avoid or overcome negative outcomes associated with bias are at the heart of the present research, which aims to clarify when individuals attempt to protect themselves from a potential stressor through proactive coping and to document the outcomes of proactive coping efforts. Aspinwall and Taylor's (1997) theory of proactive coping allows us to expand the time frame of a stressful episode to include how one might deal with a stressor *before* it has materialized or been fully defined. In general, proactive coping involves exerting effort before a potentially stressful event, either to change the nature of the stressor or to prevent it from happening (Aspinwall & Taylor, 1997).

One line of research on coping with discrimination has examined proactive coping responses. Miller and colleagues find that when members of stigmatized groups are aware that their stigma could produce a negative interpersonal outcome, they attempt to mitigate the potentially negative outcome that might otherwise occur *during* the potentially discriminatory situation (Miller & Kaiser, 2001; Miller, Rothblum, Barbour, Brand, & Felicio, 1990; Miller, Rothblum, Brand, & Felicio, 1995; Miller, Rothblum, Felicio, & Brand, 1995). In one experiment, Miller and colleagues (1995) had heavy and non-heavy women interact with another person in one of four conditions of perceived and actual visibility. They found that when the women knew their stigma was visible to their partner, they were rated as positively as their non-stigmatized peers. In comparison, when the women mistakenly believed that their stigma was hidden from their partner, they were rated significantly lower than their non-stigmatized peers. Their results suggest that when members of stigmatized groups know that stigma may affect an interaction, they do something during the interaction to prevent a negative

outcome. If stigmatized individuals do not anticipate that prejudice will influence an interaction because their stigma is not visible and therefore irrelevant, they may not try as hard and may actually underestimate the skills needed, particularly if the interaction were uncontaminated by prejudice.

Outcomes of Coping Efforts

Although we know that proactive coping with discrimination likely exists, we do not know whether different types of proactive coping strategies result in different outcomes. Primary control efforts attempt to change the environment and, if successful, should theoretically be associated with positive interpersonal outcomes because one has changed the way others see or respond to the self. In comparison, secondary control efforts adjust the self to the environment and, if successful, should theoretically be associated with positive intrapersonal outcomes because one has adapted the self to the stressor. A third possibility is that the two coping strategies are linked; if one successfully changes the environment via primary control coping, secondary control efforts may no longer be needed. Therefore, positive intrapersonal outcomes may also emerge from primary control responses in that one can also feel positive about the self if the environment now matches the self. In general, successful coping responses should be associated with positive intrapersonal (e.g., personal affective states) and interpersonal (e.g., the way that others perceive the self) outcomes.

PRESENT RESEARCH

Past research on discrimination speaks to some elements of the stress process and, at times, is explicitly framed in terms of stress and coping models. However, existing research addresses only part of the stress and coping process, thereby potentially missing important distinctions between or relations among variables, and failing to examine possible consequences of coping with discrimination. In the present research we more fully examine the stress process.

In the present research we examine both primary and secondary appraisals. Existing research on reactive coping with discrimination combines multiple measures of expectations to indicate an overall appraisal of the stressor rather than separately assessing primary and secondary appraisals (e.g., Kaiser & Miller, 1999). This method works well for some questions, but leaves unanswered the unique role of primary and secondary appraisals in motivating different types of proactive coping.

We also examine a range of possible coping responses. Existing research on coping with discrimination tends to investigate one or two individual coping

strategies (e.g., confronting sexism, psychologically disengaging from a task), and has not typically investigated different classes of coping strategies (e.g., primary and secondary control coping processes) that targets might employ. This method fails to provide a realistic picture of the coping strategies that people use in their everyday lives to achieve a balance with the environment (Swim et al., 2005). Different coping responses may be used to pursue specific goals such as self-regulation of emotion or general social goals such as a need to belong (Carver et al., 1989; Lazarus & Folkman, 1984; Swim & Thomas, 2006). Additionally, research shows that no single coping strategy works well across all individuals or situations (Lazarus & Folkman, 1984; Rothbaum et al., 1982), and given the costs and benefits associated with particular coping responses, targets might increase their chances of success by using multiple strategies (Swim & Thomas, 2006). Targets of discrimination may therefore effectively cope with stress by combining strategies, perhaps by using both primary and secondary coping responses (Lazarus & Folkman, 1984; Rothbaum et al., 1982).

The present research builds on Miller and colleagues' work on proactive coping with weight-based discrimination. The majority of existing work on proactive coping with discrimination focuses on heavy women, and since discrimination against heavy women is a common everyday experience (Crandall, 1995; Miller & Myers, 1998), there might be a frequent need to proactively cope with this form of discrimination. Past studies suggest that women are doing something during an interaction to ward off discrimination, yet we do not know specifically what actions they take. We add to Miller and colleagues' research by obtaining a fuller understanding of what women actually do when they proactively cope with discrimination. Our first study uses a multi-method high impact design to examine how heavy women use primary control coping behaviors to prepare for a potentially difficult experience. We use a daily diary methodology in our second study to extend the lab findings from Study 1 to a wider variety of potentially stressful situations encountered in everyday life, to examine proactive coping both before and during interactions, and to examine primary as well as secondary control coping responses.

In addition to providing a more detailed description of proactive coping responses, we also examine predictors and consequences of coping responses. We build on Swim and colleagues' research on everyday experiences with discrimination (Swim et al., 2001; Swim, Johnston & Pearson, 2005; Swim et al., 2004) by examining the role of both primary and secondary appraisals, by looking at proactive rather than reactive coping responses, and by assessing outcomes theoretically tied to primary and secondary coping responses. Successful coping responses should be associated with positive intrapersonal (e.g., personal affective states) and interpersonal (e.g., the way that others perceive the individual) outcomes. Theoretically, secondary control coping responses should be associated with favorable intrapersonal outcomes and primary control coping responses should be associated with favorable interpersonal outcomes, and possibly with

favorable intrapersonal outcomes. In the first study, the outcome we investigate is how third-party raters perceive the target. In the second study, we rely on the target's own assessment of her success at preventing stress, as she defines it.

STUDY 1

In Study 1, heavy women faced a potential stressor in the form of a virtual interaction with an attractive male. We used an Internet dating paradigm to create the potential for stigma-related stress. Making a good impression on a potential dating partner can be stressful no matter how physically attractive one is. However, a first encounter with a potential dating partner could be even more stressful for women who are heavy, as weight is often a critical element of attractiveness, and is evaluated in the early stages of dating (Millman, 1980). Participants reported primary and secondary appraisals of the anticipated event and were videotaped as they prepared for and introduced themselves to the male interaction partner. After the experiment, participant's preparatory behaviors were coded for the use of primary control coping. Plus, interpersonal success of the introduction to the alleged male partner was assessed via ratings of the quality of the participant's introduction.

We also examined the influence of perceived weight on appraisals. One's perception of being heavy may be as important, or more important, than actual weight in producing primary and secondary appraisals. Because rejection is a self-based threat, the extent to which one places the self in the stigmatized group may increase both the extent to which the threat is perceived to be self-relevant and the amount of resources that are perceived to be required to overcome the threat. Although all women in the study could be medically classified as overweight and therefore possibly perceive discrimination based on size, within our sample, women varied in the extent to which they were heavy and the extent to which they perceived themselves to be heavy. Because stigma due to weight increases as a woman's weight increases (Crocker, Cornwell, & Major, 1993), heavier women might anticipate more harm and fewer resources to minimize the negative treatment than lighter women, even though they are all technically overweight.

Methods

Participants

Women must see themselves as heavy in order to anticipate self-directed discrimination on behalf of that particular stigma. Accordingly, all 101 participants were pre-screened to have a Body Mass Index (BMI) of ≥ 25 (the minimum BMI to be classified as heavy is 25) and labeled themselves as a least "a little heavy" on

a perceived weight scale that ranged from 1 *extremely thin* to 7 *extremely heavy* ("How do you perceive your weight now?"). Height ranged from 4'9" to 6'1" ($M = 5' 5"$, $SD = 3.6"$) and weight ranged from 118 to 250 ($M = 166.63$, $SD = 21.88$). Body Mass Index scores ranged from 25 to 41.6 ($M = 27.40$, $SD = 3.01$); therefore, women in our study were, on average, slightly heavy. Women were recruited from psychology courses, and did not know they were recruited because they were heavy. They did not know the purpose of the study until they arrived, at which time they were told that we were interested in learning how people get to know each other over the Internet. Most participants were psychology majors and were either given course credit or \$10 for participation if they no longer required course credit.

Materials

Using a computer, participants answered a 40-item questionnaire designed to reflect information usually found on Internet dating service profiles. The questionnaire contained a section on basic background (name, age, astrological sign), a section on dating status and preferences (are you single, what do you like in a potential dating partner), education (major), questions about their family (number of siblings, animal companions), past employment (first job, most entertaining job), and entertainment preferences (favorite book, movie).

Primary and secondary appraisals were measured on a 1 *not at all* to 7 *very much* scale using items inspired by previous research on stress and coping (Folkman et al., 1986; Lazarus et al., 1985) that were modified to apply to the specific impending stressor (see Table I for all items). For primary appraisals of harm, we used items such as "I am afraid that my interaction partner will not like me" and "This experience will hurt my self-esteem" ($\alpha = .88$). We assessed secondary appraisal of resources in two ways. First, we assessed appraisal of resources specific to the upcoming interaction with items such as "I think I will be able to convey the type of person that I really am in my introduction"; "I will be able to remain calm during my presentation" ($\alpha = .91$). These items reflect the participant's assessment of skills and resources that could be used to effectively communicate with her partner in the experimental setting. Second, we assessed appraisal of the more general resource of self-competency using Tafarodi and Swann's (1995) 10-item scale ($\alpha = .90$). Tafarodi and Swann (1995) argue that self-competency is the sense that one is capable, effective, and in control, and that it can serve as a powerful resource for individuals in all types of settings. As expected, a principle components analysis with promax rotation showed that all items representing primary appraisals, specific secondary appraisals, and more general appraisals of self-competence loaded on to distinct factors. The solution explained 59.3% of the total variance. See Table I for items in each scale and their respective factor loadings.

Table I. Factor Loadings for Principle Components Analysis of Primary and Secondary Appraisal Items in Study 1

	Self-competence	Specific secondary appraisals	Primary appraisals
I am a capable person	.881		
I have done well in life so far	.854		
I don't succeed at much (r)	.830		
I do not have much to be proud of (r)	.808		
Owing to my capabilities, I have much potential	.720		
I perform very well at a number of things	.698		
I am not very competent (r)	.663		
I am talented	.636	.336	
I deal poorly with challenges (r)	.434		
I think I will be able to convey the type of person that I really am in my introduction		.910	
I think my introduction will convey a positive image of who I am		.900	
I think I will do a good job with my introduction		.884	
I know enough about public speaking to accurately present who I am in a speech		.865	
In the past, I have done well in situations like the introduction that I will have to do in a few minutes		.730	
I will be able to remain calm during my presentation		.719	
I perform inadequately in many important situations (r)		.661	
This experience will hurt my self-esteem			.859
I will feel bad if my interaction partner does not like me			.748
I will probably be disappointed after our introductions are over			.728
I am afraid that my interaction partner will not like me			.721
I will become anxious because of this event			.721
I will become depressed because of this event			.689
I am afraid that I will not do a good job in my presentation			.685
I will become angry because of this event			.567

Note. Loadings less than .30 in absolute value have been omitted for clarity of presentation.

Procedures

Participants were told that we were interested in how people get to know each other over the Internet—specifically, that we were interested in how people prepare for and decide what kinds of things to talk about in an initial “virtual” encounter. The research assistant explained that the participant’s partner was in the other room, and they would communicate through the computer and a

videotaped introduction. Using a digital camera, we took a full-length picture of each participant at the beginning of the session and ostensibly sent the picture to her partner's computer, thereby making her stigma visible. After the experimenter left the room, a picture of her alleged interaction partner appeared on the participant's computer screen. In reality, all women received the same picture of the same male partner, who did not really exist. This picture was pre-tested to be very attractive to heterosexual, college-aged women.

Each participant then answered a 40-item questionnaire about herself on the computer. After she submitted her answers, she received what she believed were her partner's answers to the same questions.⁵ After reading his answers, participants reported primary and secondary appraisals. The research assistant then invited the participant to draw a slip of paper from a cup to determine whether she recorded her introduction before or after her partner. The participant always discovered that her presentation was to be recorded, and viewed, before that of her interaction partner. At this point, the research assistant turned on the video camera to record the participant's preparation for her introduction. The participant was told that her interaction partner could not see her preparing, but that we needed to record how she prepared for research purposes. She was told that later, the same camera would relay her introduction to her partner, but that we would hook it up in the other room to transmit.

Participants were allowed 8 min to prepare for the introduction using various materials that allowed multiple methods of primary control, including materials on public speaking, paper for writing an outline, and books on how to make a positive impression, as well as opportunities for distraction including popular magazines, crossword puzzles, or use of her own materials (e.g., cell phone). After the study, two research assistants watched video of each participant's coping efforts and recorded how long she spent on various forms of primary control (e.g., reviewing information about how to create a speech, time spent planning her introduction, time spent grooming) versus other activities (e.g., reading magazines, doing crossword puzzles, or other non-task related behaviors like playing games on her cell phone). Each second of the 8 min preparation period was coded as either exhibiting or not exhibiting primary control, producing a variable where higher numbers indicate more behavioral coping efforts. Additionally, research assistants coded the videotapes of the women's actual self-presentation during her introduction to her interaction partner for how likeable, competent and intelligent the women seemed using a scale from 1 *not at all* to 7 *very much*. In order to establish inter-rater reliability for the coding of proactive coping and for the coding of interpersonal evaluations of the participant's introduction, two coders reviewed an overlapping subset of 36 sessions (36% of the total sample).

⁵We attempted to manipulate the women's primary appraisals of the situation by inserting one of three statements about their partner's preference for physical appearance his answers. Manipulation checks showed no difference between conditions in primary appraisals, so we collapsed across conditions in the present analyses.

Inter-rater reliabilities calculated for that subset of overlapping sessions were excellent ($r = .99, r = .99$, for proactive coping and self-presentation, respectively).

After the preparation period, the research assistant returned to the room and asked for the participant's help in connecting the camera to her partner's computer. Specifically, the participant was asked to push a cord, ostensibly plugged in to the video camera, through a hole in the wall that led to what she believed to be her partner's room. All participants willingly complied with this request. The research assistant then left the room to "connect" the camera to her partner's computer. When she returned, she told the participant that her partner could now see and hear her. The experimenter then instructed the participant to begin her 5-minute introduction.

After the introduction, the research assistant debriefed the participant, probed for suspicion and eventually revealed the true nature of the experiment. The assistant continued debriefing until she was certain that the participant did not have any lingering negative affect. Participants then received a written debriefing and were compensated for their time.

Results

Descriptive Information

Table II provides the means and standard deviations for the Study 1 variables used in our model testing. On average, participants perceived themselves to be "a little bit heavy." Primary appraisals of potential harm tended to be low. Both types of secondary appraisals were above the midpoint of the scale, but general secondary appraisals in the form of self-competence were slightly higher than specific secondary appraisals. Out of the 8 min that the women had to proactively cope with the potentially stressful introduction, the average participant spent a little over 6 min on primary control forms of preparation.

As predicted, perceived weight was correlated with primary appraisals ($r = .30, p = .003$), specific secondary appraisals of the potentially stressful situation ($r = -.33, p < .001$), and general secondary appraisals in the form of self-competence ($r = -.24, p < .02$). *T*-tests based on a median split of perceived weight showed that women who perceived themselves as the most heavy had higher primary ($M = 2.33$) and lower specific secondary appraisals ($M = 3.87$) and self-competence ($M = 5.69$) than women who perceived themselves as the least heavy ($M_s = 1.69, 4.51, \text{ and } 6.07$ respectively; $t(98) = -3.66, p < .001$ for primary appraisals, $t(98) = 2.83, p = .006$ for specific secondary appraisals, and $t(98) = 2.09, p = .04$ for self-competence).

Actual weight status, as measured with BMI, and current dating status were uncorrelated with primary appraisals ($r = .19, r = -.16, p_s = \text{n.s.}$, BMI and dating status, respectively), specific secondary appraisals ($r = -.07, r = .13,$

Table II. Correlations Between Variables, and Means and Standard Deviations for Variables Used in Model Testing (Study 1)

	Perceived weight	Primary appraisals	Specific secondary appraisals	General secondary appraisals	Primary control coping	Likeable	Competent	Intelligent
Perceived weight	1.00							
Primary appraisals	.30**	1.00						
Specific secondary appraisals	-.24*	-.34**	1.00					
General secondary appraisals	-.34***	-.49***	.51***	1.00				
Primary control coping	-.06	.14	.04	-.11	1.00			
Likeable	.02	.08	.05	.04	.27**	1.00		
Competent	-.05	-.03	.04	.13	.26**	.65***	1.00	
Intelligent	-.09	-.03	.04	.09	.24*	.50***	.78***	1.00
Mean	5.21	1.95	4.29	5.92	6.41	3.16	3.40	3.32
(SD)	(.96)	(.92)	(1.20)	(.90)	(2.53)	(1.40)	(1.39)	(1.14)

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

$ps = \text{n.s.}$) and general secondary appraisals ($r = -.19, r = .04, ps = \text{n.s.}$). Although it is possible that a sample with a wider range of BMIs might result in correlations between BMI and primary and secondary appraisals, the present results indicate that, as predicted, for women who are medically classified as overweight, perceptions of one's weight are more important than one's actual size in the extent to which potential harm and resources are appraised for an upcoming stressor.

Structural Equation Modeling (SEM)

We used SEM to assess the unique effect of each variable on our outcome measure. SEM provides the weight of each path in the model, while simultaneously estimating all other model paths. Therefore, it allows us to test the direct and indirect effects of appraisals on interpersonal outcomes. In our model, the exogenous manifest variable of perceived weight had direct paths to primary and secondary appraisals. We used the parceling technique to create four indicators of the latent variable of primary appraisals. One parcels by combining pairs or groups of items from a larger scale in order to reduce the likelihood of spurious correlations and provide a more stable model, compared to using each individual scale item to indicate the latent construct (Bandalos & Finney, 2001; Marsh, Hau, Balla, & Grayson, 1998).

The predicted model consists of the following variables and paths. Four parcels of the eight primary appraisal items indicated the latent variable of primary appraisals. The average of specific secondary appraisals and the average of the general self-competence scale indicated the latent variable of secondary appraisals. Primary and secondary appraisals had direct paths to primary control proactive coping efforts, and direct paths to the dependent variable. Primary control efforts also had a direct path to the latent dependent variable, which was the impression that the participant made on a set of unbiased third party raters. Interpersonal impression was indicated by the ratings of likeability, intelligence, and competence.

We assessed model fit via inspection of the comparative fit index (CFI), the root mean square error of approximation (RMSEA), and the confidence intervals around the RMSEA. The CFI ranges from 0 to 1, with values above .95 indicating good fit (Hu & Bentler, 1999). For the RMSEA, values below .10 represent adequate fit. A large confidence interval around the RMSEA indicates that this value is imprecise, making inferences about the model's fit to the population difficult, whereas a narrow confidence interval around the RMSEA indicates a good deal of precision in determining the model's fit in the population (MacCallum, Browne, & Sugawara, 1996).

The model fit the data well ($\chi^2(40) = 41.7; CFI = .99; RMSEA = .03, \text{lower bound} = .00, \text{upper bound} = .07$). Table II presents the correlations among

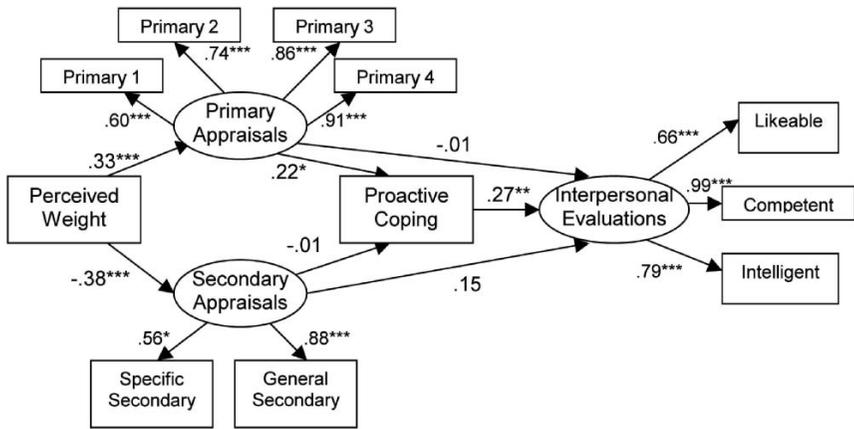


Fig. 1. Structural equation model assessing associations between the proactive coping process and interpersonal outcomes (Study 1).

the measures used in model testing, and Fig. 1 presents the standardized path estimates. Perceived weight was positively and significantly related to primary appraisals ($\beta = .36, SE = .12, p = .002$) and negatively and significantly related to secondary appraisals ($\beta = -.40, SE = .11, p < .001$). Participants who perceived they were very heavy reported more potential harm and fewer resources than participants who perceived they were less heavy. In the model, primary appraisals were positively related to primary control efforts ($\beta = .55, SE = .27, p = .04$). However, secondary appraisals were unrelated to primary control efforts ($\beta = -.01, SE = .35, p = .85$). Primary ($\beta = -.38, SE = .14, p = .93$) and secondary appraisals ($\beta = .21, SE = .16, p = .21$) were unrelated to the outcome variable of interpersonal impressions. However, as predicted, time spent engaging in proactive primary control efforts was positively related to how likeable, intelligent, and competent the participant was perceived to be by outside observers ($\beta = .15, SE = .05, p = .006$). The more heavy women tried to thwart a negative outcome using proactive coping, the better they were evaluated by outside observers in terms of likeability, competence, and intelligence.

DISCUSSION

When faced with introducing themselves to an attractive interaction partner who was aware of their weight, most heavy women engaged in some form of proactive coping. We found that the heavier participants perceived themselves to be, the more harm and the fewer resources they perceived. Moreover, the more harm participants anticipated, the more they engaged in proactive coping. Proactive coping was then related to positive interpersonal outcomes. In fact,

proactive efforts at primary control had the greatest influence of all variables on interpersonal outcomes.

Somewhat surprisingly, secondary appraisals were not associated with time spent on primary control coping. Rothbaum and colleagues (1982) speculated that primary control efforts are often engaged in before attempts at secondary control. It could be the case that primary appraisals of threat are able to trigger attempts to adjust the environment to one's needs independently of secondary appraisals. If primary control efforts fail, then secondary appraisals of resources might play a more vital role in initiating secondary control coping. It is also possible that secondary appraisals were not associated with time spent engaging in primary control coping because, overall, secondary appraisals of resources were high and our situation was not perceived to be extremely stressful. We will explore this question in greater detail in our second study with a wider range of stressors.

Because, on average, primary appraisals were low, our situation could have only been stressful for women who perceived their weight to be heavy. This is consistent with past research where stigma increased as weight increased. In our study, as perceived weight, or stigma, increased, stress in the form of higher primary appraisals and lower secondary appraisals increased. Although we do not know whether participants would have labeled the situation as potentially discriminatory, their reactions support the argument that coping was enacted in response to concerns about negative treatment caused by their weight.

Overall, the data provide an optimistic picture of proactive coping with anticipated discrimination. Specifically, time spent on proactive primary control coping was directly and positively related to external evaluations of success. The more that heavy women attempted to ward off negative outcomes due to potential prejudice, the more likeable, competent, and intelligent they were perceived to be by outside observers. It is worthwhile to note that both our measure of proactive coping and our outcome measure of interpersonal evaluations were not self-report. Instead, coders who were unaware of the research hypotheses coded videotapes of the women's preparation for her introduction and her actual introduction. Thus our results for associations between coping and outcomes do not reflect the women's internal responses to the situation, which might have differed from the responses of outside observers.

STUDY 2

Study 1 provided overall support for our hypotheses related to proactive coping with a potentially discriminatory stressor. However, it is possible that in the experimental situation, perceptions of a potentially negative outcome were not a function of perceiving discrimination. Rather, it is possible that the heavy women were simply nervous about making a good impression, regardless of the effect their

weight might have on the interaction. Thus, in Study 2 we specifically examine the role that perceptions of discrimination play in the proactive coping process by comparing hassles women labeled as discriminatory and non-discriminatory. We use a daily diary method to test these relations in people's everyday lives and to enhance the external generalizability of our findings by examining a wide range of hassles.

As in Study 1, we examine elements of the stress and coping model, but in Study 2 we are able to expand the number of elements we consider. In this study, our analysis of proactive coping includes both primary and secondary coping responses. We also consider both types of responses to discriminatory and non-discriminatory hassles.

As in Study 1, we expect that in general, primary and secondary appraisals will be positively related to the initiation of coping efforts. The more threat perceived from a potential stressor, the more heavy women should be motivated to cope using either primary or secondary control efforts. Individuals who perceive adequate resources should be able to initiate more coping efforts.

We also test the relation between proactive coping and intrapersonal outcomes. Although if successful, primary and secondary control coping could result in positive intrapersonal outcomes, it is also possible that secondary coping responses may involve more intrapersonal costs than primary coping responses because secondary control efforts require the individual to change the self to fit the environment. If the environment is hostile or devalues the self, then the self might suffer if one attempts such an adjustment.

Methods

Participants

In Study 2, 62 heavy women completed a daily diary study. Participants were recruited from introductory psychology classes, from the general campus and from the community to participate in a study of how women who think they are heavy cope with stress. They either received course credit or \$20 for participating. Participants were screened for BMI, which ranged from 25.5 to 45.7 ($M = 30$, $SD = 4.84$).

Materials

For seven days, participants completed up to four daily diary forms per day on the Internet. Each diary form began by asking participants to describe the potentially stressful event using an open-ended format. Primary appraisals were then assessed on a scale from 1 *not at all* to 7 *very much* using items drawn from

previous studies of stress and coping (Folkman et al., 1986; Lazarus, DeLongis, Folkman, & Gruen, 1985), including statements such as “Did you think you would lose something because of this event?” Secondary appraisals were assessed using three items on a scale from 1 *not at all* to 7 *very much*, also drawn from previous studies of stress and coping. These included items such as “How confident were you that you could overcome the potentially negative outcome?” Items used to assess primary and secondary appraisals differed from items used in Study 1 in that Study 2 items were phrased more generally so that they could apply to the wide variety of stressors reported by participants (see primary and secondary appraisal items in Table III).

A principle components analysis with promax rotation showed that all items representing primary and secondary appraisals loaded on three distinct factors (see Table III). A scree plot analysis and inspection of factor loadings also revealed

Table III. Factor Loadings for Principle Components Analysis of Primary and Secondary Appraisal Items in Study 2

	Primary appraisals: affect	Primary appraisals: threat	Secondary appraisals
Did you think this event might hurt your self-esteem?	.961		
Did you think you would become depressed because of this event?	.924		
Did you think this event might lower other people’s regard for you?	.674		
Did you think you would become anxious because of this event?	.664		
Did you think you would become angry because of this event?	.608		
Did you feel as if your ability to deal with this incident was challenged?		.824	
How dangerous did you think this event might turn out to be?		.823	
How personally challenging did you think this event was going to be?		.761	
How personally threatening did you think this event was going to be?		.710	
How intimidated were you by this event?		.652	
Did you think you would lose something because of this event?		.601	
How confident were you that you had enough skills to overcome the potentially negative outcome?			.936
How confident were you that you had enough resources to overcome the potentially negative outcome?			.907
How confident were you that you could overcome a potentially negative outcome?			.801

Note. Loadings less than .30 in absolute value have been omitted for clarity of presentation.

three factors. Primary appraisals split into two factors, one was composed of affect-related primary appraisals ($\alpha = .81$) and a second factor related to a more explicit sense of threat-related primary appraisals ($\alpha = .83$). Secondary appraisals loaded on to a single factor ($\alpha = .84$). The solution explained 62.3% of the total variance.

Participants were next presented with 14 potential proactive coping strategies and asked to indicate the extent to which they attempted to diminish the impact of the stressor using each strategy (see primary and secondary control items in Table IV). Participants could indicate that they did not use a particular coping response (i.e., “I did not use this response”). If they did indicate using a strategy, however, they reported the extent to which it was used on a scale from 1 *very little* to 6 *very much*. Coping strategies were worded in either present or past tense because although we asked participants to pay attention to when they first noticed the potential for the event to become stressful, we realized that most participants would not be able to complete the diary until after they had experienced the event. Therefore, phrasing of the items was designed to reflect completion of the diary after they had experienced a stressor or thought they might experience a stressor.

All coping items were derived from past research. Specifically, research and theorizing by Aspinwall and Taylor (1997) inspired items about information seeking (e.g., “I paid attention to information that told me about the nature of a potential stressor”). Miller and colleagues’ (e.g., Miller & Myers, 1998; Miller et al., 1995; Myers & Rosen, 1999) work on compensation used by heavy women led to the items about self-presentation (e.g., “I made sure that my hair and clothing looked nice so that people knew I was a respectable person”; “I tried to be funny to get what I wanted when I thought I was being disrespected”). Frible and colleagues’ (Frible et al., 1990; Frible, Platt, & Hoey, 1998) work on mindfulness provided the items about attention to the interaction partner and the situation (e.g., “When I was speaking to someone who was not heavy, I paid close attention to what the other person was doing because it told me more about how she or he felt than what was said”). Saenz and colleagues’ (e.g., Saenz, 1994; Saenz & Lord, 1989) work on solo status in groups suggested an item regarding attention to one’s self (e.g., “I paid close attention to my own behavior or performance in a stressful situation”).

A principle components analysis with promax rotation showed that items representing primary control and secondary control loaded on to distinct factors (see Table IV). We examined the scree plot and factor loadings and confirmed the presence of two separate factors, which could be best described as primary ($\alpha = .82$) and secondary control ($\alpha = .83$). Items that theoretically described attempts to alter the nature of a stressor (i.e., primary control) loaded on one factor, whereas items that theoretically described attempts to protect the self from harm (i.e., secondary control) loaded on another factor. The solution explained 59.1% of the variance.

Table IV. Factor Loadings for the Principal Components Analysis of Primary and Secondary Control Items in Study 2, and the Number of Times Each Potential Type of Proactive Coping Was Used with a Discriminatory Hassle and the Mean and Standard Deviation for Each Strategy When It Was Used

	Secondary control	Primary control	Percent of time used	Mean	Standard deviation
I monitored my own thoughts in a stressful situation	.918		93%	3.63	(1.67)
I tried to maintain self-control in a stressful situation	.862		93%	3.93	(1.69)
I tried to regulate my emotions when I was in a stressful situation	.795		92%	3.74	(1.66)
I paid close attention to my own behavior or performance in a stressful situation	.749		91%	3.69	(1.71)
I tried to remember that I was a good person in a stressful situation	.729		89%	3.73	(1.92)
I relied on my faith in God or a higher power in a stressful situation	.601		45%	1.91	(2.48)
I paid attention to information that told me about the nature of a potential stressor	.434		70%	2.53	(1.99)
When I was speaking to someone who was not heavy, I paid close attention to what the other person was doing (e.g., eye contact, body position) because it told me more about how she or he felt than what was said		.795	65%	2.41	(2.12)
I was aware of the weight of the person I was interacting with (i.e., bigger or smaller than me?)		.611	86%	3.82	(2.08)
I could tell whether the person I was interacting with liked people like me		.726	78%	3.05	(2.05)
When I sensed that another person did not like heavy women, I tried to emphasize parts of myself that were not being called into question, but were positive (e.g., if appearance is insulted, emphasize intelligence)		.726	54%	1.78	(1.99)
I paid close attention to elements of the environment when I interacted with people that were not heavy (e.g., decorations, exits)		.622	62%	2.18	(2.14)
I made sure that my hair and clothing looked nice so that people knew I was a respectable person		.598	74%	3.34	(2.41)
I tried to be funny to get what I wanted when I thought I was being disrespected		.577	67%	2.48	(2.19)

Note. Loadings less than .30 in absolute value have been omitted for clarity of presentation.

Participants also completed two items indicating how they personally evaluated the outcome of the potentially stressful event. Specifically, they indicated on a scale from 0 *not at all* to 6 *very much*, “How successful were you at keeping this stressful event from happening?” and “How stressful did this event end up being for you?” Finally, in order to be able to identify the extent to which hassles

were perceived as discriminatory, participants completed a single item that asked “To what extent did you anticipate that it would be stressful because of possible expressions of prejudice or discrimination against a social group you belong to?” Participants wrote in the group that they thought was targeted by prejudice. We considered labels such as “size,” “weight,” “fat people,” and “heavy women” to reflect the stigmatized group of interest. Potential prejudice against stigma other than weight was excluded from this analysis. Ratings of prejudice ranged from 0 *not at all* to 6 *very much*.

Procedure

Participants were required to attend an initial information session where the research assistant briefly described proactive coping and discussed various tactics that people sometimes use to proactively cope with stress. Specifically, participants were told that we were “interested in the types of things that people do to protect themselves from stress before it occurs or while it is occurring.” Proactive coping was defined as “coping that occurs before the stressful event actually occurs or right when it is happening.” In terms of what kinds of events and behaviors we were looking for, we asked that they “try to focus only on stressors that involve other people in some way.” We told them:

It doesn’t matter how stressful the event ends up being. We just want you to report things that you thought might have been stressful. We want you to pay attention to how far in advance you begin to see it coming. We also want you to notice what kinds of things you do to prepare. These things are usually done in an attempt to minimize the amount of harm you experience because of the event. You might do something so you don’t feel as angry, sad, or depressed. You might do something so you can still get what you want from the other person, despite their prejudice. You might try to avoid that event or leave the stressful situation as soon as possible. You might do these things before or during the stressful event.”

They were reminded that they needed to “tell us everything you think you might have done to prepare for a stressful event or to deal with it while it’s happening.” In regards to the type of stressors we wanted them to focus on in their reports, we asked them to pay attention to everyday hassles (e.g., things that “can happen to anyone, regardless of things that make them different from others”) and stress due to discrimination. Participants were provided with examples of everyday hassles and everyday discrimination, and told that for each stressor, we would ask them to “tell us how much you think prejudice had to do with the stressor. For each entry this can range from totally to not at all.” They were informed that we did not necessarily expect that they would encounter prejudice during their diary week, so it was all right to not report any stressful events that were due to prejudice. Participants were told that they could report up to four potentially stressful events each day.

At the end of the session, participants were provided with the location of the diary form on the Internet and were asked to complete the entries on a computer as soon as they anticipated or actually experienced the stressful event. Electronic time stamps on diary submissions allowed us to verify that daily diary entries were completed during the 24 hr “day” period rather than generated at the end of the diary week. The majority of diaries were completed within this 24 hr time period, or within a few hours of the diary day. At the end of the diary week, participants returned to be compensated for participation and were debriefed.

Results

Descriptive Information

Participants reported 269 discriminatory and 236 non-discriminatory hassles. Examples of non-discriminatory hassles included experiences such as “Today we had our choir picture taken. I had to carry my dress around most of the day, then rush to get ready for the picture during choir. It turned out to be a lot less stressful than I thought it would be, as I was planning on not having enough time.” In comparison, examples of weight-based discriminatory hassles included the following example of proactive coping *before* an event,

One of the things I do every day is take a shower. I live on the other end of the hall from where the showers are. I also live on a co-ed floor, so there are boys walking up and down my hall a lot. I don't feel particularly comfortable walking down the hall in a towel, but I have to do it every day. Sundays are usually the most stressful, because people mill around the halls talking to their friends to avoid doing their work. I have a routine I do every time I go to the shower, but on Sundays I am particularly cautious about it. I always wear my pajamas to the shower and change out of them in the bathroom. So walking to the shower I am covered. On the way back I hold my shower basket and my clothes close to my waist so that they sort of cover me up. I try and hide myself as much as possible so that no one could even say anything rude or give me a weird look. I am not totally sure if anyone would ever actually do that and I have never had anyone do that, but it makes me nervous to think it could happen.

There were also examples of proactive coping *during* an event,

When my Mom's hired man came to clear the snow from my lane today, he told me that I could always work off a couple of pounds helping him out. I just laughed and told him that is what he is getting paid for.

Participants recognized most events as potentially stressful during the actual interaction ($n = 231$, $n = 206$; discriminatory and non-discriminatory hassles, respectively). Fewer events were identified as potentially stressful before the interaction ($n = 29$, $n = 21$; discriminatory and non-discriminatory hassles, respectively). Because an individual still has the opportunity to change the course of the

potential stressor during an interaction, events identified as potentially stressful while they are happening can still be examined for evidence of proactive coping.

We are particularly interested in how the women chose to cope with potentially discriminatory hassles. Therefore, we examined the types of coping that our participants engaged in when faced with the potential of discrimination. Table IV provides information about the percent of the time that each of type of coping response was used for discriminatory hassles. The table also includes information on the mean and standard deviation of each strategy, when it was used. It is interesting to note that the coping strategies that are used with the greatest percentage of potentially stressful discriminatory events were mainly types of secondary control coping.

Mean Differences Between Discriminatory and Non-Discriminatory Hassles

We used hierarchical linear modeling (HLM) to correct for the shared variance of repeated responses within individuals.⁶ In order to test for differences in types of hassles, we used perceived discrimination (higher numbers mean greater certainty of discrimination) as a level 1 predictor of both kinds of primary appraisals and secondary appraisals, both primary and secondary coping efforts, and the perceived outcomes of coping. Coefficients in HLM are interpreted like unstandardized regression coefficients in regression analyses.

We tested whether there were mean differences in components of the coping process according to the extent to which a stressor was perceived to be due to discrimination. To do so, we entered perceived discrimination as a level 1 predictor separately for each variable. A significant association indicates that participants evaluated discriminatory and non-discriminatory hassles differently. Perceived discrimination was significantly associated with affect-related primary appraisals ($G_{10} = .13, SE = .04, p < .001$) and with threat-related primary appraisals ($G_{10} = .07, SE = .04, p < .05$), showing that discriminatory stressors were perceived as more harmful than non-discriminatory stressors. Perceived discrimination was also associated with secondary appraisals ($G_{10} = -.14, SE = .05, p < .01$), showing that participants perceived fewer resources for coping with discriminatory, compared to non-discriminatory stressors. Perceived discrimination was also significantly related to primary ($G_{10} = .22, SE = .03, p < .001$) and secondary control ($G_{10} = .06, SE = .03, p = .02$) efforts, showing that both types of coping were used more for discriminatory as compared to non-discriminatory hassles. Finally, perceived discrimination was not related to either perceived intrapersonal outcome of coping (kept it from happening, $G_{10} = -.03, SE = .05, p = .50$; extent it was stressful, $G_{10} = .07, SE = .05, p = .16$),

⁶Preliminary analyses revealed sufficient variance in our dependent variables to proceed with tests on the dependent variables (chi-square = 474.72, $p < .0001$ for primary control, chi-square = 908.94, $p < .0001$ for secondary control, chi-square = 281.98, $p < .0001$ for perceived outcome of coping).

suggesting that participants thought they coped just as well with discriminatory as with non-discriminatory stressors.

Testing Relations Among Elements of the Stress and Coping Model for Discriminatory Hassles

For the remainder of the analyses, we focus only on discriminatory hassles, as those are the type of hassles in which we are most interested.

Appraisals and Coping. We again used HLM to test for main effects of primary and secondary appraisals on coping via either primary or secondary control. Again, primary affect-related, primary threat-related, and secondary appraisals were entered as level 1 variables in the equation, and either primary or secondary control was the dependent variable. We found a main effect of affect-related primary appraisals on both primary ($G_{10} = .29, SE = .08, p < .001$) and secondary control coping ($G_{10} = .23, SE = .06, p < .001$). We found marginal main effects of threat-related primary appraisals on primary control coping ($G_{20} = .10, SE = .08, p = .09$) and secondary control coping ($G_{20} = .10, SE = .06, p = .09$). We also found main effects of secondary appraisals on both primary ($G_{30} = .15, SE = .04, p < .001$) and secondary control coping ($G_{30} = .11, SE = .04, p < .01$). See Fig. 2 for a diagram of the associations between appraisals and coping.

Coping and Personal Outcomes. Finally, we tested the relation between primary and secondary proactive coping efforts and the extent to which participants perceived that they had either successfully prevented a negative outcome from the stressor or the extent to which they experienced stress. We tested whether coping via primary or secondary control had a main effect on the perceived outcome by entering primary and secondary control as level 1 predictors and either self-evaluated success at prevention or self-evaluated stressfulness as the dependent variable. For self-evaluated success at keeping the event from happening, we found a main effect of primary control coping ($G_{40} = .20, SE = .09, p = .03$), but

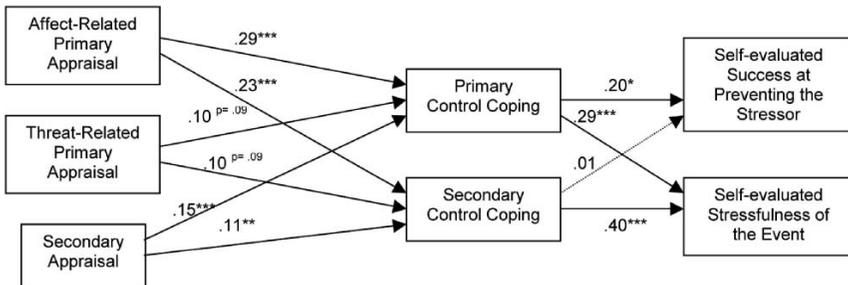


Fig. 2. Diagram representing the relations between appraisals, coping efforts, and self-evaluated success at coping with a potentially discriminatory stressor as assessed using HLM in Study 2.

we did not find a main effect of secondary control coping ($G_{50} = .01$, $SE = .14$, $p = .92$). For self-evaluated stressfulness of the event, we found a main effect of primary control coping ($G_{40} = .29$, $SE = .15$, $p < .01$) and secondary control coping ($G_{50} = .40$, $SE = .13$, $p < .01$). Since both forms of coping were significantly associated with the dependent variable, we calculated the confidence intervals for the coefficients in order to see whether they differed from each other. For primary control coping, the confidence interval ranged from .18 to .40. For secondary control coping, the confidence interval ranged from .29 to .50. Because the coefficients for each predictor are at the endpoints of the confidence intervals for the other predictor, it suggests that secondary coping is more strongly related to perceived stressfulness than primary coping. Though both forms of coping are significantly associated with self-perceived stressfulness, the coefficient for self-perceived stressfulness is smaller for primary control coping than for secondary control coping.

DISCUSSION

The women in this study anticipated many potentially threatening incidents, demonstrating that stigma affects individuals prior to the conclusion of any particular stigmatizing incident. Moreover, the potential for discrimination increased women's tendency to engage in both primary and secondary proactive coping responses, and the women used more proactive coping responses to deal with potential discrimination during the interaction ($n = 201$) than before the interaction ($n = 21$). This suggests that the women did not always anticipate that something was problematic prior to the interaction. Instead, in the majority of cases, something in the interaction indicated the possibility of discrimination. Perhaps over time, targets of discrimination develop a schema for discriminatory experiences. As any given interaction proceeds, it is scanned for schema-consistent or -inconsistent information. For example, perhaps at an earlier date the woman heard a comment about how fat she was or received poor service at a restaurant because of her size. If she encounters a similar experience in her present interaction, she will assess its fit with her existing schema and decide how to respond. Even during the interaction, theorizing on proactive coping suggests that she may incorporate feedback on the success of initial coping efforts and readjust her coping strategies accordingly.

Discriminatory Versus Non-Discriminatory Hassles

Components of the stress and coping process differ significantly depending on whether individuals are considering discriminatory or non-discriminatory hassles. We found that primary appraisals indicated more anticipated threat for

discriminatory hassles than for non-discriminatory hassles. Perhaps targets believe that discrimination is a stressor that is directly linked to one's value as a person and difficult to change (Hyers, 2005). Such a combination makes a discriminatory stressor more threatening than other stressors that are not as closely tied to one's self worth or easier to handle. Even if one had every resource available, the perpetrator's behavior still might not be altered.

In Study 2, we find that women's secondary appraisals indicate that they perceived fewer resources for dealing with discriminatory, compared to non-discriminatory hassles. This is similar to what we found in Study 1 where, as the women's weight increased, their appraisal of resources decreased. In both cases, the perception of few resources is related to stigma. Since stigma is a mark that socially devalues an individual, stigma might also enhance the perception that the bearer of the stigma cannot effectively overcome discrimination. She cannot effectively overcome the stigma, even with innumerable resources, because she is not in control over whether the stigma is applied to her. In comparison, when stigma is not coloring a stressor, the stigmatized person may have greater confidence in her resources, and perceive a greater ability to overcome the stressor.

Appraisals and Coping

With regard to the processes involved in predicting proactive coping responses, affect-related primary appraisals play a stronger role than threat-related appraisals in initiating both forms of coping with discriminatory hassles. For example, the following event elicited high affect-related primary appraisals in terms of threatening self-esteem, damaging other's regard for her, and causing anxiety:

I was going out with a bunch of friends but we had to squeeze into one car and there was 6 of us. The three thin girls had to sit in the front and I got stuck in the back with two guys I didn't know well. They kept saying, "Move over I can't close the door" but I couldn't move over. It was very embarrassing.

The woman in the scenario probably realized that efforts at primary control would not be possible. In fact, she did not report trying to use any primary control coping strategies. Instead, she chose only secondary coping control efforts, indicating a 4 or 5 (e.g., she used them a lot) for almost every secondary control response.

Additionally, we found a main effect of secondary appraisals on both primary and secondary coping efforts. The more resources that heavy women thought they had to protect themselves, the more they used both primary and secondary control efforts. Given that discrimination is thought to be difficult to change, and targets often rely on secondary control coping, it is important to consider the costs associated with efforts at secondary control. For example, it could be quite costly to "go with the flow" if doing so forces the self to accommodate to others'

perception that the self is flawed and socially devalued. Perhaps heavy women use more of both types of coping because discrimination is such a threat to their self-concept or because discrimination threatens a wider variety of goals than non-discriminatory stressors. Non-discriminatory stressors, for instance, might only threaten one's immediate goal to obtain good service at a restaurant. In comparison, a discriminatory stressor not only blocks the goal of obtaining good service, it blocks additional goals including one's goal to feel good about the self.

Coping and Outcomes

Finally, we see differences in the self-perceived successfulness of coping with discrimination depending on what type of coping was used. The more heavy women used primary control coping efforts, the more successful they thought they were at preventing discrimination, and the less stressful they perceived the event to be. For example, the following event was rated as very stressful:

I went to a Christmas party with a bunch of colleagues. I was anxious about it, because all of my colleagues are average weight or very thin and attractive. I've also heard some unflattering things mentioned about me from some of them in the past, so I feel pretty certain that my weight is a noticeable issue to more than just me.

The woman engaged in a great deal of primary control coping. She reported:

I tried on several different pairs of clothes until I found one (all black) that seemed to be the most loose yet still looking nice. I spent extra time on my makeup. I called another person, so I would not have to arrive alone.

As a result of her proactive primary control efforts, she reported that she was able to prevent the party from being as big of a stressor as she imagined. In comparison, the following event was also rated as very stressful by a different participant.

We went to the Olive Garden today. . .we went and waited in the lobby at the Hampton Inn since the wait for the Olive Garden was an hour and a half and I couldn't handle all 50 people in the front of the OG. So, anyways, there was this cute boy at the desk, and he didn't say anything to us at first. We were discussing what would happen if he said something to us about being there. One of my friends said, "Jo will just flash him and distract him." Then another said, "uhh. . . bad idea. He might just throw up." Haha, I said. "but this will distract him, right?" that isn't what i really wanted to say, but jokes are jokes. . .

After a brief attempt at primary control coping, the woman reported relying mainly on secondary control coping. Specifically, she said:

I honestly tried to avoid any of their suggestions to be MY acts, but it got to me anyways, and well, I couldn't defend myself since it was all fun and games, but ouch, some games are no fun at all.

She also indicated that she used the secondary control strategies, including “I monitored my own thoughts” and “I tried to maintain self control” more than the primary control strategies when coping with this stressor.

Different intrapersonal outcomes for primary and secondary control coping paint an interesting picture of proactive coping with discrimination. Both types of coping were positively and significantly associated with the outcome variables, indicating that to some extent, the events reported were not preventable and were stressful. It is not necessarily surprising to find positive associations between reports of coping and self-rated stressfulness considering that we asked respondents to report on potentially stressful events. Some amount of stressfulness is to be expected. What is interesting is that, compared to the use of secondary control coping efforts, the use of primary control coping efforts are more strongly associated with perceived success at preventing the stressor from happening, and less strongly associated with the experience of stress. However, because prejudice is difficult to change, efforts to exert primary control over a discriminatory stressor may often be blocked (Hyers, 2005). Finding the path to primary control blocked, heavy women might proceed to use secondary control efforts. Yet efforts at secondary control that focus on changing the self to accommodate the environment do not appear to reduce the total amount of stress experienced. Consider the following example:

Tonight I was in the shower, and two girls came in. I don't really know them, but living in an interest house, we all are aware of each other, so they knew who I was. They started saying something about how the girl down the hall from them always listens to Josh Groban, my favorite singer, and how they hate it. The one asked who, and the other responded, “Sara and Fat.” They both laughed, and the one said, “My God, she's so fat.” When I got out of the shower, they both cracked up and turned red.

It is unlikely that efforts to change the perpetrators' opinions would have been successful, as they did not apologize for their comments once the target revealed herself. Falling back on secondary control efforts to go with the flow, for example, reminding herself that she is still a good person, might do little to remove the sting of the insults. Therefore, it seems that, at times, targets face a difficult challenge when attempting to proactively cope with discrimination.

GENERAL DISCUSSION

In some cases, targets of discrimination can successfully use proactive coping to minimize the negative impact of discriminatory stressors. Proactive coping efforts can improve interpersonal outcomes in the form of unbiased third party ratings of the target, as well as intrapersonal outcomes in the form of self-perceived success of dealing with stress. Across two studies, we find that primary and secondary appraisals of a potential stressor play unique roles in initiating proactive

coping via primary and secondary methods of control. Therefore, it is important to consider appraisals and multiple methods of coping in order to understand the full process of proactive coping. If we had only examined secondary appraisals of a potential stressor, we would not have detected the unique influence of primary appraisals on coping. Additionally, we found differences within the types of primary appraisals such that affect-related appraisals explained more of proactive coping initiation than did threat-related appraisals. Further, by examining two different classes of coping, we see that when primary control coping efforts are effective, they can lead to positive outcomes. In comparison, secondary control coping, by itself, was not linked to positive outcomes in our sample.

In the present research, we incorporate two phases of proactive coping into our coping process, but Aspinwall and Taylor (1997) propose five stages of proactive coping. We examine only the initial appraisal and initial coping stages. In their model, the first stage of proactive coping requires building skills and resources before the anticipated stressor occurs (e.g., saving money, planning action, gathering social support). Next, the individual must recognize the potentially stressful event, which requires sensitivity to the environment for signs of harm. Once a potential stressor is detected, initial appraisal and coping occur to minimize or prevent the anticipated negative outcome. Finally, one gathers feedback from the environment about the status of the stressor, which tells the individual whether preliminary coping efforts have reduced or eliminated the need for self-protection, and provides information about what else can be done to reduce the stressor's impact. Future research on proactive coping should examine the influence of all five stages of proactive coping on an individual's ability to protect the self from the negative consequences of stress.

When considering the types of coping responses women in our study reported, it is important to note that, at times, it appeared that participants were reporting reactive rather than proactive responses to discrimination. However, participants reported using the strategies during interactions, which suggests that the coping responses were enacted with the goal of preventing an immediate negative consequence or future experiences with discrimination. These illustrations point out that the distinction between proactive and reactive coping responses may at times be blurred. Yet it also demonstrates that the coping responses individuals engage in are part of a continuous ongoing process that can occur during interactions and that the process involves both the anticipation and detection of discrimination and coping responses that both prevent future discrimination while simultaneously dealing with past or present discrimination.

When considering our results, it is also important to note that these results are generalizable only to our specific dependent measures. That is, in both studies, secondary control-related variables appear not to be related to successful coping. Although this is consistent with Aspinwall and Taylor's (1997) assertion that successful proactive coping is nearly always active, we cannot conclude that

attempts at secondary control would never be effective at reducing stress. For example, our first study did not assess the extent to which participants might have bolstered their self-esteem against anticipated negative feedback instead of making primary control efforts to prepare for their presentation. The women who spent more time engaging in secondary control efforts might have reported just as positive self-esteem as the women who spent more time engaging in primary control efforts. In Study 2, we did find that secondary control coping efforts were more strongly related to self-perceived stress than primary control efforts, but stressfulness was assessed at the time of the potential stressor. We cannot know if some reactive coping efforts, in combination with proactive secondary control efforts, would lead to equally positive outcomes as proactive primary control efforts. Therefore, it is important to test this paradigm using different time frames and with different dependent measures.

From the present research, it appears that it could be useful to inform stigmatized individuals about the possibility of detecting potential stressors in advance and providing them with examples of how to protect the self from stressors they are certain will occur. For example, stigmatized individuals could be informed of various primary and secondary control strategies that could reduce the likelihood of incurring negative outcomes from stressors. Part of the training should, of course, note the possible pitfalls of devoting energy to stressors that may never materialize (Aspinwall & Taylor, 1997). If successful, however, such training and self-protective measures have the potential to improve not only the health and well-being of targets, but also the quality of their interpersonal relationships. Specifically, if targets are able to exert primary control coping, they might actually be able to alter their relationship with the environment and be evaluated as more likeable, competent, and intelligent by their peers.

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