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TAKING STOCK: THE INFLUENCE OF AFFECT, COPING SKILL, AND GENDER

ON RESOURCE IDENTIFICATION AND APPRAISALS

A Thesis in

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Abstract

Two studies examine how people's affective states and coping knowledge may influence their ability to identify and appraise coping resources. The Broaden and Build Model of Positive Emotion suggests that positive affect (PA) should facilitate resource identification and promote positive resource appraisals (Fredrickson, 1998, 2001). The Affect Infusion Model (Forgas, 1995) indicates that affective influences should be particularly strong when people engage in effortful processing. Finally, the coping literature suggests that men might have to engage in more effortful processing than women, because men may have less general coping knowledge (e.g., Tamres et al., 2002). Together, these literatures led me to hypothesize that men would engage in more effortful processing than women when thinking about their resources, and thus be more influenced by affect, particularly PA. In contrast, women would directly retrieve resources and evaluations of resources, and thus not be influenced by affect. Data from two experiments indicated that gender alters how affect influences resource identification and appraisals, though not specifically as predicted. As predicted, men used effortful processing to appraise their resources and were influenced by PA. However, in contrast to predictions, men used a direct access strategy to list their resources and were not influenced by affect. For women, in contrast to predictions, their knowledge did not result in the use of direct access, but rather led to the use of heuristic processing for both listing and appraisals. Further, both PA and negative affect (NA) altered their judgments, though NA was especially influential. Thus, both PA and NA influenced women, whereas PA alone influenced men. This research indicates that cultivating feelings of PA and increasing coping skill should help people appraise their resources more positively. Further, this research is a first step in elucidating the complex relationship between coping knowledge and the use of affect during resource identification and appraisal.

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Introduction

An undergraduate senior is searching for a job. To accomplish this goal, she may think about and try to identify her resources. For instance, potentially valuable resources include friends, family, professors, career counselors, books, and internet job sites, in addition to her motivation, optimism, and resilience. Next, she must appraise whether her resources are helpful, and if she can use them effectively. In the present studies, I explore how her coping knowledge and her affective state might influence her ability to a) identify resources and b) form appraisals of them.

Current research on coping examines how people use resources to cope. According to this work, prior to engaging in coping efforts, individuals must make two appraisals, a primary and a secondary appraisal. First, they make a primary appraisal where they appraise the threat they face (e.g., Is this dangerous?). Then, they make a secondary appraisal where they appraise available coping strategies (e.g., What can I do to effectively combat this threat?; Lazarus & Folkman, 1984). It is here where one appraises resources (Schwarzer, 1998). Individuals can only select and implement appropriate coping strategies if they are able to identify their resources (Aspinwall & Taylor, 1997) and favorably appraise those resources, as well as their competency to use them (Schwarzer, 1998). However, researchers interested in coping often do not examine what factors influence individuals' ability to identify and appraise resources, despite their important role in selecting and implementing effective coping strategies.

In the studies reported here, I investigate the influence of affect on resource identification and appraisals, for affect may be important in these processes. In Fredickson's (1998, 2001) Broaden and Build Model of Positive Emotion, she argues that PA in particular helps people identify and build resources. Research also indicates that affect influences memory and

judgments (Forgas, 1995), depending on levels of knowledge or experience with the topic. Finally, research suggests that because men and women differ in the number and types of coping strategies they use (Tamres, Janicki, & Helgeson, 2002; Greenglass, 2002), they may differ in their level of coping knowledge. Based on this work, I examine the hypothesis that men and women differ in general coping knowledge about resources, which may moderate the role of affect, especially PA, in resource identification and appraisals.

However, before describing the predictions, I first define resources. Then, I examine the role that affect may play in resource identification and appraisals. And finally, I discuss the possible relationship between general coping knowledge and gender that may account for differences in this process. I then describe two experiments conducted to examine the claim that differences in general coping knowledge might explain why gender influences how affect alters people's ability to identify resources and make appraisals of them.

Defining Resources

Several lines of research suggest that people try to accumulate stores of resources that they can draw upon when necessary. In particular, the literature on proactive coping (Aspinwall & Taylor, 1997) suggests that people draw upon built up stores of resources to cope with impending stressors. In his resource-oriented model, Hobfoll (1989) also suggests that people often monitor their store of resources, try to avoid resource loss, and also try to build upon resources. In trying to define what resources are more specifically, many researchers simply describe different types (e.g. trait optimism and resilience; Fredrickson, Tugade, Waugh, & Larkin, 2003), categories (e.g., psychological and social resources; Fredrickson, 1998, 2001; Fredrickson & Branigan, 2005; Schwarzer, 2002), or uses (management of life crises and transitions; Moos & Schaefer, 1993). However, a survey of coping processes suggests a more

precise and comprehensive definition. Specifically, resources help people (a) recognize both bad and good things in life, (b) prevent the bad and acquire the good things in life, and (c) cope with or repair the bad and maintain or build upon the good things in life.

Evidence that resources help people recognize both the bad and good things in life (part a) comes from the proactive coping literature. Aspinwall and Taylor (1997) argue that people must accumulate resources, particularly social networks, to identify potential threats. This function of resources is echoed by Folkman and Moskowitz (2004) who maintain that resources should help individuals identify potential opportunities for growth and development. Resources also help people prevent bad things and acquire good things in life (part b). Research on preventative coping suggests that when uncertain future threats are identified, people use stores of general resources to prevent such events from occurring (Schwarzer, 1998; Schwarzer & Taubert, 2002; Schwarzer & Knoll, 2003). Schwarzer and Knoll (2003) also suggest that resources help people acquire positive outcomes, as they "facilitate promotion toward challenging goals and personal growth" (p. 396). Finally, resources help people cope with the bad and maintain or build upon the good things in their lives (part c). Most coping research focuses on reactive coping, or using resources to select and implement strategies for coping with negative events that have already occurred (Lazarus and Folkman, 1984; Schwarzer & Knoll, 2003; Schwarzer & Taubert, 2002). Similarly, as people build up stores of resources, positive outcomes such as well-being and the use of adaptive coping strategies, are further enhanced (Fredrickson & Joiner, 2002; Folkman & Moskowitz, 2004, 2007). In sum, research indicates that resources help people (a) recognize both bad and good things in life, (b) prevent the bad and acquire the good things in life, and (c) cope with or repair the bad and maintain or build upon the good things in life.

Affect, Resource Identification, and Resource Appraisals

Now with a clear definition of the term resource, I discuss the role that affect might play in resource identification. When thinking about resources, people are likely experiencing an affective state. Russell and Feldman Barrett (1999) define affect as feelings that can be either "free-floating" or directed at an object (p. 806). Further, affect is conceptualized as having two valenced dimensions corresponding to good or pleasant and bad or unpleasant (Larsen, 2000). These positive and negative dimensions are related, but separate constructs, which can be assessed independently (Diener, Smith, & Fujita, 1995). In the present studies, I examine both dimensions, and define positive affect (PA) as mild, everyday feelings of happiness and joy, and negative affect (NA) as mild, everyday, feelings of unpleasantness and anxiety.

The Broaden and Build Model of Positive Emotions. In her Broaden and Build Model of Positive Emotions, Fredrickson (1998, 2001) argues that the purpose of positive emotions in resource identification and building is distinct from that of negative emotions. She contends that where negative emotions narrow one's attentional focus so that specific actions can be taken in response to threat, positive emotions broaden one's attentional focus so that "novel, creative, and often unscripted paths of thought and action" can be pursued (Fredrickson, 1998, p. 304; see also Gasper, 2004a; Gasper, 2004b; Isen, 1999). Additionally, this broadened attentional focus and resulting thoughts and behaviors may lead to the identification and building of resources that can later be used when needed (Fredrickson, 1998, 2001; Fredrickson & Branigan, 2005; Fredrickson & Joiner, 2002). Thus, PA may help individuals identify and build resources.

There are several existing lines of research that support Fredrickson's theory and both highlight the potential importance of PA in resource identification and suggest that PA might facilitate positive resource appraisals. Isen (1999; see also Isen & Daubman, 1984) has shown

that people often tend to be in positive affective states, and thus that much of the information encoded into memory is linked to PA. Subsequently, individuals experiencing PA should have access to a broader array of stored information, including resources and evaluations of resources. In addition, Isen and Daubman (1984) found that PA leads to the use of more inclusive categories and the incorporation of low-prototypic exemplars into categories. This work suggests that PA should lead people to classify, as resources, objects they might not have previously identified as resources. Isen and others (Isen, Shalker, Clark, & Karp, 1978) and Teasdale and colleagues (Teasdale & Fogarty, 1979; Teasdale & Russell, 1983) also found that PA promotes positive evaluations because it facilitates the retrieval of positive information from memory. For example, people in a positive mood after receiving a free gift judged performance and service records for products they owned, such as their car, more positively than those who did not receive the free gift (Isen et al., 1978). In sum, research suggests that PA may help people identify resources and positively appraise them.

In support of the hypothesis that PA helps people cope, Folkman and Moskowitz (2000a, 2000b) found that people do experience PA even during times of chronic stress. Fredrickson and colleagues (Fredrickson et al., 2003; Tugade & Fredrickson, 2004) found that PA, not NA, increases psychological resilience and promotes other psychological resources in the face of negative events. In addition, Fredrickson and Joiner (2002) found that PA increased the use of coping strategies that lead to enhanced resilience and well-being. With regards to specific coping strategies, PA is associated with the use of three specific coping strategies: positive reappraisal, problem-focused coping, and infusing ordinary events with positive meaning (Folkman & Moskowitz, 2000a; 2000b). PA enhances the use of these coping strategies, which facilitate subsequent experiences of PA. However, this research is lacking in that it does not explicitly

demonstrate that PA facilitates resource identification and appraisal. Although the Broaden and Build Model argues that PA is critical, it also suggests that NA may narrow one's attentional focus, and thus inhibit resource identification and lead to more negative resource evaluations. One purpose of this research was to examine the role of PA and NA. Based on the Broaden and Build Theory, it was hypothesized that:

H1ab: PA should be more influential than NA in resource identification and appraisals. Specifically, PA should enhance people's ability to identify resources (H1a) and lead to more positive resource appraisals (H1b). (Note that hypothesis ending with "a" refer to resource listing and those ending in "b" refer to resource appraisals).

Pilot Study

I conducted a pilot study to investigate whether PA leads to enhanced resource identification and more positive resource appraisals. I obtained self-report measures of PA and NA and asked participants list their resources. Afterwards, respondents appraised their resources on each of the six dimensions noted in the definition of resources given above. Consistent with the Broaden and Build Model, PA positively predicted the number of resources listed, and NA negatively predicted the number of resources listed. However, this effect occurred for male participants only. The fact that PA helped males identify resources, and that NA inhibited identification, are in line with Fredrickson's (1998, 2001) theory that PA leads to a broadened focus whereas NA leads to a narrowed focus. In addition, PA predicted more positive resource appraisals for both males and females, while NA did not influence appraisals, which is also consistent with the model.

These initial data indicate that affect is involved in resource identification and appraisals. However, they also left some remaining questions that the present studies investigated further.

First (Q1), why did mood interact with gender to alter resource identification? (Q2), Why did this interaction occur on resource identification and not on resource appraisals? (Q3), Would these results be replicated if one used a more traditional measure of resource appraisals? And finally (Q4), would these results occur if mood was manipulated or could they be due to individual differences in affectivity?

Q1: Why did mood interact with gender to alter resource identification?

To address this question, one must consider when and why affect may influence processing and judgment. The Broaden and Build Model of Positive Emotions focuses on the effect of PA on processing, but does not address when PA may exert these effects. To address this issue, I turn to the Affect Infusion Model (AIM; Forgas, 1995; 2000; 2001). According to the AIM, when and how affect alters judgment depends on which one of four processing strategies people employ: direct access processing, motivated processing, heuristic processing, and substantive processing. Specifically, affect is not influential when people use a direct access or motivated processing strategy, but is influential when people use either a heuristic or substantive processing strategy. I will argue that the differential use of affect for men and women may be due to the use of different processing strategies. However, before discussing this logic, I briefly describe each strategy.

Direct Access Processing. Individuals use the direct access strategy when they encounter a familiar situation and have access to a predetermined response or set of responses in memory, and thus affect is not influential. For example when it comes to resource identification and appraisal, a student who is having a stressful time with a class might always ask a reliable classmate to help him study. Thus, when asked to identify and appraise resources, he would think of his classmate first, along with his predetermined evaluation of that classmate. Because

this process is already well established, affect would not be involved, and the identification and appraisal process would occur quickly.

Heuristic Processing. Individuals use a heuristic strategy when they encounter a topic that is familiar or typical to them, when they lack the motivation or cognitive capacity to think about the situation in depth, or when the situation does not require detailed consideration. For instance, a person may be familiar with their resources and use affect as a cue for how many to list and how to evaluate them, though mood might operate somewhat differently for each of these processes. For example, Martin and Stoner (1996) found that PA serves as a cue that one is enjoying a task or that one can be confident in completing a task, whereas NA indicates the opposite. Thus, while listing resources, PA may signal high confidence and task enjoyment, which could signal that one can or should come up with more resources, resulting in a longer list. Conversely, NA may signal low confidence or task enjoyment, which could signal that one cannot or should not come up with more resources, and thus no more resources are identified. For resource appraisals, mood might operate as a cue somewhat differently. When asked to appraise resources, rather than think about each resource in depth, individuals may merely ask themselves, "How do I feel about it?" (Schwarz & Clore, 1988). Feelings of PA would signal a more positive evaluation, and feelings of NA would signal a more negative evaluation. Thus, if individuals use this processing strategy, affect will influence resource identification and appraisals, and will do so relatively quickly, given that affect is merely a heuristic cue.

Substantive Processing. Substantive processing occurs in situations where the target of the judgment is complex or unfamiliar, where motivation to be accurate is high, or where personal relevance is high. In such situations, individuals engage in a thorough, systematic search through memory, where affect can prime information that it is linked to, thus influencing

the information recalled and used in making judgments. Again, consider the student who is trying to decide how to study for an upcoming exam for which he must achieve a high score. He would search his memory for all the circumstances under which he studied for exams in the past, which should help him decide which resources he must draw upon for the upcoming exam. As suggested by the Broaden and Build Model (Fredrickson, 1998, 2001), PA should broaden his attentional focus and thus increase the number of resources that he would retrieve. Conversely, NA might narrow his attentional focus, thus decreasing the number. Furthermore, being in a positive mood would prime the retrieval of positively valenced information in memory, while being in a negative mood would prime negatively valenced information, thus he should more positively evaluate his resources when in a positive mood than a negative mood. Further, according to the AIM, because substantive processing involves an extensive search for information through memory, it is relatively time consuming. Indeed, in a series of studies, Forgas (see Forgas, 2005, for a review) found that participants engaged in more substantive processing for targets that were typical, unusual, or complex, as evidenced by greater affective influences. Also, as substantive processing increased, so did the amount of time it took participants to make their judgments.

Motivated Processing. Individuals use motivated processing when searching for a predetermined outcome, which directs the search for information in memory that is linked to or leads to the desired outcome, thus reducing the influence of affect. Forgas (1995) suggests that this strategy is used to satisfy motivations, particularly those of high personal relevance, such as self-evaluation maintenance, mood repair, and achievement motivation. Consider our student who is having a stressful time in a class. The student may be motivated to repair his negative mood and feel better about his academic performance, thus he might only identify resources that

serve this function. His goal is not to think broadly or creatively, but rather to narrowly focus on resources that would make him feel good, such as a fellow classmate who is also doing poorly in the class with whom to commiserate or personality traits that have led to academic success in the past like determination (for example, see Forgas, 1991). Because he searched specifically resources that he knew would make him feel good (e.g., "I am a determined person"), he would recall evaluative information that is consistent with their intended use (e.g., "When I am determined, I perform better"), so his resource appraisals would occur quickly and be favorable. Here, his affect triggers a targeted information search in memory, and is not linked to the information retrieved via priming mechanisms, as in substantive processing, and is not used as a cue, as in heuristic processing. Because the search is motivated towards a predetermined outcome, affect is not directly linked to the information retrieved, and the identification and appraisal process would be rather quick.

One chief factor that influences which of the four processing strategies will be employed, and subsequently whether affect will be influential, is the amount of prior exposure or detailed and extensive knowledge about a target or situation (Forgas, 1995). Individuals with a great deal of knowledge may use a direct access strategy, for they should have a set of predetermined responses in mind, and thus should not be influenced by affect. In contrast, individuals with little knowledge may use a substantive processing strategy because they have to think more systematically about their responses, likely increasing affective influences. Thus, when individuals must identify and appraise their resources, they may use a direct access strategy when the situation is familiar and perceived knowledge is high, and substantive processing when the situation is unfamiliar and perceived knowledge is low. To account for the results of the pilot study, in which men were influenced by affect more than women, I argue that gender likely

influenced coping knowledge, which resulted in the use of differential processing strategies and affective influences.

In the context of the present studies, I define coping knowledge as high awareness of one's coping resources and potential coping strategies. Research on coping differences between men and women suggests that they might have varying levels of coping knowledge. A recent meta-analysis of gender differences in coping revealed that men and women differ in the number and types of coping strategies they use (Tamres, et al., 2002). Tamres et al. found that women tend to use more coping strategies than men overall, which indicates that they have a greater awareness of a variety of potential coping strategies. In addition, women tend to seek out more emotional social support (Tamres et al., 2002) and are more likely to report that they use social resources for both emotional and instrumental support (Greenglass, 2002) relative to men, which both suggest that they have more awareness of social support resources in general. These differences suggest that women may have more coping knowledge than men, in that they have a greater awareness of coping strategies overall and resources, social resources in particular. Note that I am not suggesting women are better at coping then men, only that women may have more experience accessing, thinking about, and identifying coping resources and possible coping strategies, and thus enhanced coping knowledge.

These differences in coping knowledge could alter respondents' use of processing strategies. Specifically, due to greater coping knowledge, women might use direct access, which involves the retrieval of information that already exists in memory, and thus does not require the use of affect. Conversely, due to less coping knowledge, men might use the more effortful substantive processing, which would allow for affect infusion. I argue that it is this difference in

coping knowledge that explained the gender effect in the pilot study, but because reaction times were not measured, it could not be tested. Thus, Hypothesis 2 is:

H2: If females have enhanced general coping knowledge relative to males, then men should use substantive processing and women should use a direct access strategy. Consequently, men would be influenced by affect more than women when it comes to listing (H2a-i) and appraising their resources (H2b-i) and take longer to list (H2a-ii) and appraise (H2b-ii) their resources.

In addition to examining whether men and women used different processing strategies, I also wanted to establish that differences in coping knowledge underlie these two effects. I did this in two different ways, first by measuring knowledge and then by manipulating it. In Study 1, I measured differences in general coping knowledge by investigating whether men and women differed in their familiarity with and liking for thinking about resources. If it is true that women have more awareness about their coping resources and strategies, then when asked to rate their familiarity in thinking about and liking to think about resources, women should indicate a higher level of familiarity than men. In support of this argument, Tidwell, Sadowski, & Pate (2000) found that that people who engaged in thought and liked to engage in thought about a topic had more knowledge when tested at a later time. If general coping knowledge underlies this gender difference, then accounting for this knowledge with a measure of familiarity in thinking about resources would eliminate the gender difference (H2ab-iii; Study 1).

Another possible way to examine whether differences in coping knowledge underlie gender differences in resource listing and appraisals would be with a manipulation of coping skill. This is because perceptions that one has skill with coping in a particular situation should lead to enhanced awareness of the resources and strategies one might use to negotiate the

situation, which I defined as enhanced general coping knowledge. Thus, if it is true that knowledge, or skill, with coping is responsible for gender differences in awareness of one's resources, then manipulating skill with a particular coping situation should equate this knowledge for men and women (H2ab-iv; Study 2).   That is, participants with high coping knowledge would use a direct access strategy, make their decisions quickly, and be uninfluenced by their mood. Conversely, participants with low coping knowledge would use substantive processing, make their judgments slowly, and be influenced by their mood.

While I predicted above that the processing strategies individuals' use to identify and appraise resources would be the same, it is important to note that individuals may not always use the same processing strategy to recall material from memory (i.e., identification) and to make judgments (i.e., appraisal). This issue leads to question two.

Q2: Why did the gender by mood interaction in the pilot occur for resource identification and not for resource appraisals?

The pilot data suggest that individuals might use different processing strategies to identify resources versus appraise resources. When asked to appraise one's resources outside of a specific context, as in the pilot study, the enhanced coping knowledge that women have in identifying resources might not confer the same advantage. Free of a specific situation in which each resource is used, both females and males might use substantive processing strategy to evaluate their resources one by one. This is because during appraisals, individuals must think about whether they are good at using each particular resource as well as whether each resource is helpful, both of which are types of appraisals that likely require substantive processing. This use of substantive processing would render both men and women susceptible to affective influences. While RTs were not assessed in the pilot, they should be similar if it is true that both men and

women use substantive processing. Thus, Hypothesis 3 is an alternative prediction for resource appraisals and is as follows:

H3: Males and females would both use substantive processing to appraise resources. Thus, both would be susceptible to affective influences (H3-i) and take a similar amount of time to make appraisals (H3-ii).

Q3: Would these results occur if one used a more traditional measure of resource appraisals?

In the pilot study respondents appraised the extent to which each resource helped them recognize both bad and good things in life, prevent the bad and acquire the good things in life, and cope with or repair the bad and maintain or build upon the good things in life. This appraisal framework, however, does not reflect the traditional coping literature. Recall that earlier I noted that resource appraisals are a key aspect of the secondary appraisal process (Aspinwall & Taylor, 1997; Schwarzer, 1998). Work that examines this process typically assesses two types of appraisals: response efficacy appraisals and self-efficacy appraisals. Response, or outcome, efficacy (RE) refers to the possible consequences of performing an action. A resource would receive a high RE appraisal if an individual believes that using that resource will lead to a positive outcome (e.g., "If I stop by my professor's office to ask for help in studying, then I will likely study more effectively and get a better grade on the exam. So my professor is a good resource."). Self-efficacy (SE) refers to one's perception of personal control or agency. A resource would receive a high SE appraisal if an individual believes that he or she can use it effectively (e.g., "I am good at getting advice from my professor on studying for exams. So my professor is a good resource."). Thus, to establish a more solid connection with traditional coping research, in Studies 1 and 2, I ask respondents to make RE and SE appraisals.

Q4: Would the findings replicate when mood was manipulated rather than when a measure of affect was used?

Recall that the pilot study relied on self-reported affect rather than a mood manipulation. It is possible that individuals with certain characteristics may have a natural propensity to experience more frequent positive or negative affective states. For example, people who naturally experience high levels of PA have potentially higher levels of well-being, which could promote resource identification and appraisals. Thus, to better determine whether experiences of PA and NA were responsible for the obtained results, I manipulated mood in both experiments. I planned to examine the influence of manipulated mood by comparing the mood conditions. However, I could not fully test the claim that PA would be a stronger predictor than NA of resource identification and appraisals by simply comparing the manipulated mood groups. That is, I could not determine whether the effects of being in the positive mood group, for example, were due to an increase in PA, a decrease in NA, or both. Thus, I planned to use multiple regression analyses, which allowed me to control the variance in resource listing and appraisal that was accounted for by PA and NA separately, as well as examine their interaction. To fully support my prediction that PA alone would be influential, I expected that when I accounted for NA, PA would significantly predict listing and appraisals.

Overview of Studies 1 and 2

The goal of Studies 1 and 2 was to examine whether general coping knowledge underlies the difference between males and females in their use of processing strategies and affect when identifying and appraising resources. I examined this hypothesis in two ways. In Study 1, one facet of general coping knowledge, familiarity with resources, was measured, whereas in Study 2 it was manipulated via skill with a particular coping situation. I predicted that:

➢ H1ab) PA would be more influential than NA in resource identification and appraisals. Specifically, PA would facilitate resource listing (H1a) and would lead to more positive appraisals (H1b).

➢ H2ab) Gender would moderate the effect of mood on resource listing (H2a) and appraisals (H2b). Specifically, men would use substantive processing, and women would use a direct access strategy, which would be manifest in the following ways:

    i) Affect would influence men, whereas affect would not influence women.

    ii) Men would take longer to list and appraise resources than women.

If differences in general coping knowledge explain the gender effects then:

    iii) Controlling for familiarity with thinking about resources would eliminate the effect of gender (Study 1).

    iv) The coping skill manipulation would replace the effect of gender such that the pattern for high skilled copers would mirror that of women, and the pattern for low skilled copers would mirror that of men (Study 2).

➢ H3) If it is the case that appraisals require the use of substantive processing because they are made independent of a specific coping situation and thus require more effortful processing, then alternative predictions were as follows. Gender would not moderate the effect of mood on resource appraisals. Specifically:

    i) Affect would influence both men and women.

    ii) Men and women would take a similar amount of time to appraise resources.

<div align="center">Study 1 Method</div>

Participants

One-hundred thirty two students participated in return for course credit. Two participants were excluded from the analyses for failing to follow instructions, and two participants were excluded because they were extreme outliers on at least one of the key dependent measures. Final data analyses were conducted on 128 participants, 67 males and 61 females, average age = 19 years ($SD = 1.58$).

Design

The study had a 2 (Gender: male, female) x 3 (Mood: positive, negative, neutral) between-subjects factorial design.

Procedures

All questionnaires and measures were completed on a computer, so that reaction times could be recorded. Participants were told that we were interested in learning more about the different resources people have at their disposal. To assess familiarity with thinking about coping resources, participants first read the following definition of resources and rated their agreement with eight statements (refer to Appendix A).

> Resources refer to internal characteristics, such as personality factors, and external
> sources of information and support, such as parents and money. In general, resources
> help people to: (a) recognize both bad and good things in life, (b) prevent the bad and
> acquire the good things in life, and (c) cope with or repair the bad and maintain or build
> upon the good things in life.

> Next, participants were told that before giving us more information about their resources,
we needed their help testing some video clips for another study about the media, which served as the mood manipulation. Participants watched one of three mood inducing videos. In the positive mood condition, participants watched a clip from the television show Saturday Night Live. In the

negative mood condition, they watched a clip from the movie Sophie's Choice. Finally, in the neutral mood condition, they watched a brief clip from a documentary on growing wild flowers at a nature preserve. A recent meta-analysis indicated that this technique is highly effective (Westermann, Spies, Stahl, & Hess, 1996). Participants then completed a short Media Questionnaire, which contained items designed to assess the effectiveness of the mood manipulation (refer to Appendix B). Specifically participants rated the extent to which they felt pleasant, positive, happy, unpleasant, negative, and anxious on a scale that ranged from 0 (*not at all*) to 10 (*very much*).

Finally, participants re-read the definition of resources and listed all of their resources, with the computer recording the amount of time it took them to list each one. After completing the listing task, participants appraised each resource on two dimensions using a scale that ranged from 0 (*not at all*) to 10 (*very much*). First, they rated their response efficacy (RE) by indicating the extent to which each resource is effective. Next they rated their self-efficacy (SE) by indicating the extent to which they are able to and good at using the resource (refer to Appendix C). The amount of time it took participants to appraise each of their resources was recorded. For exploratory purposes, respondents also answered some questions about their resources as a whole and their feelings about the task, and completed several measures that assessed individual differences in general self-efficacy (Sherer, 1982); proactive coping ability (Greenglass, 2002); and trait cooperation, agreeableness, and conscientiousness. Because these measures were exploratory and do not shed light on the current data, they will not be discussed further.

Study 1 Results

Below is a table containing all of the variables from Study 1, their correlations, means, and standard deviations.

Table 1

Study 1 Correlations, Means, and Standard Deviations

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
1. Gender	1									
2. Mood	-.01	1								
3. PA	-.04	.69**	1							
4. NA	.06	-.74**	-.88**	1						
5. Familiarity	.09	.19*	.20*	-.16	1					
6. # Resources	.17	.01	.05	-.13	.13	1				
7. List RT	-.12	.17	.09	-.07	-.09	-.18*	1			
8. RE	.24**	.14	.21*	-.17	.33**	.16	-.02	1		
9. SE	.12	.11	.22*	-.17	.19*	.12	.04	.67**	1	
10. Appraise RT	-.18*	.08	.03	.02	-.08	-.28**	.35**	-.19*	-.08	1
Mean			4.66	4.35	6.07	12.15	2.55	7.84	7.95	2.24
SD			2.73	2.56	1.68	6.53	.34	.93	1.08	.35

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

Note. For gender, males were coded as 0 and females as 1. Mood refers to the manipulated mood variable, where 1 represents negative mood, 2 neutral mood, and 3 positive mood. PA and NA refer to self-reported affect from the manipulation check. Familiarity refers to the average familiarity rating, # Resources to the total number of resources listed, list RT to the average time spent listing each resource, RE to average rated response-efficacy, SE to average rated self-efficacy, and appraise RT to the average amount of time spend appraising each resource. Both RT measures were subjected to a natural log transform prior to analysis to eliminate skew.

Mood Manipulation Check

To determine the success of the mood manipulation, participants' responses were averaged across the three positive (PA: $\alpha = .93$) and three negative (NA: $\alpha = .79$) affective items embedded in the media questionnaire. A 2 (Gender: male, female) x 3 (Mood: positive, negative, neutral) x 2 (Affect: PA, NA) repeated measures Analysis of Variance (ANOVA), with repeated measures on the last factor, was conducted on these ratings. The mood manipulation

was successful. The test of within-subjects effects revealed an interaction between Mood and Affect, $F(2,122) = 74.89$, $p < .001$. Examination of the simple effects revealed that in the positive mood condition, ratings of PA ($M = 6.88$, $SD = 1.75$) were significantly higher than ratings of NA ($M = 2.30$, $SD = 1.48$; $p < .001$). In the negative condition, NA ($M = 6.98$, $SD = 1.53$) was higher than PA ($M = 2.20$, $SD = 1.79$; $p < .001$). In the neutral condition, PA ($M = 4.70$, $SD = 2.34$) did not differ from NA ($M = 4.00$, $SD = 2.05$; $p = ns$).

Resource Identification

Manipulated Mood. Next, to examine whether gender would moderate the effect of mood on the total number of resources listed (H2a), I conducted a 2 (Gender) x 3 (Mood) ANOVA on total resources. The analyses revealed that females tended to list more resources than males ($M_F = 13.19$, $SD_F = 7.48$, $M_M = 11.10$, $SD_M = 5.38$; main effect of gender, $F(1,122) = 3.36$, $p < .07$), but contrary to the predictions, mood did not interact with gender to alter resource listing.

Self-reported Affect: The Differential Effects of PA and NA. Manipulated mood had no effect on the number of resources listed, however, it is still possible that such effects may appear when one examines PA and NA as separate, independent constructs. Recall, I hypothesized that PA would be more influential than NA (H1a), and that PA would predict of the number of resources listed for males only (H2a-i). To test this prediction, I entered PA, NA[1], gender, and all of the two and three-way interactions into the equation as predictors of the total number of resources listed. As PA and NA were highly correlated, tolerance and VIF statistics were examined to determine whether multicolinearity was a problem. As suggested by Cohen, Cohen, West, and Aiken (2003), multicolinearity is a problem if the tolerance statistic is less than .10 and the VIF statistic is greater than 10, and here tolerances ranged from .11 to .49 and VIFs

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[1] Note that the same set of analyses were also run by averaging the 3 positive and 3 negative (reverse scored) items together to create one predictor variable representing overall affect. The results were largely the same as what is reported above.

ranged from 2.06 to 9.17. Thus, multicolinearity was not considered a problem. The regression indicated that once again females listed more resources than did males ($\beta = .25$, $p = .05$). The predicted PA by gender interaction, however, did not appear.

Instead, there was a trend indicating that NA altered responding for females, but not males (NA by gender interaction, $\beta = -.43$, $p = .10$), as depicted in Figure 1. Instead of increased PA helping men list resources, the data reveal that decreased NA helped women list resources. Specifically, NA negatively predicted the number of resources listed by females ($\beta = -.30$, $p < .02$), but not males. Looking at the effect of gender for individuals low and high in NA, follow-up regressions revealed that females listed more resources than males when NA was low ($\beta = .31$, $p < .02$), but not when NA was high.

Figure 1

Average Number of Resources Listed by Gender and Low and High Negative Affect
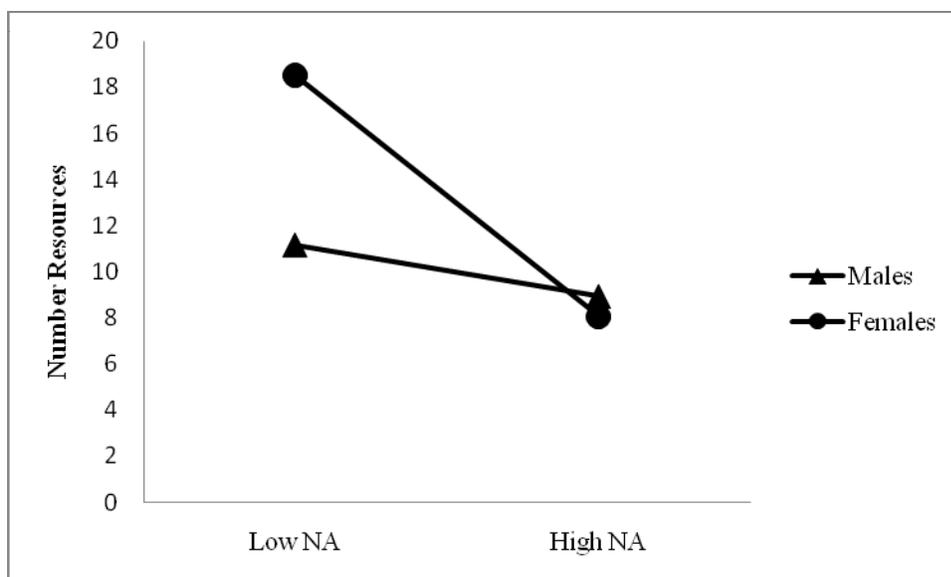
Note: points represent estimated values for participants falling one standard deviation above and below the mean on self-reported NA.

Familiarity

I hypothesized (H2a-iii) that mood would influence resource listing for men rather than women, because men would be less familiar with thinking about resources. While the predicted gender by mood interaction did not occur on resource listing, I still examined whether males and females differed in their ratings of familiarity because this effect could explain the aforementioned gender by NA interaction. Because item one item ("I had never really thought about my resources before") was poor, the familiarity score was calculated by averaging responses to the remaining seven items ($\alpha = .83$). A t test revealed that any effect of gender on the number of resources listed could not be due to differences in familiarity, because males and females did not differ in their level of familiarity ($M_M = 5.94$, $SD_M = 1.56$; $M_F = 6.22$, $SD_F = 1.80$; $t (126) = -.96$, $p = ns$). Furthermore, familiarity was not even correlated with the number of resources listed, $r (130) = .13$, $p = $ ns. Thus, familiarity, as measured here, could not account for the effects.

Reaction Times

To lend support to the prediction (H2a-ii) that males used a substantive processing strategy in listing resources and would thus have longer reaction times than females, who used a direct access strategy, I computed the average reaction time (RT) for listing each resource. A K-S test revealed that RTs were not normally distributed ($p < .01$), and thus, according to Ratcliff (1993) they were subjected to a natural log transform to eliminate the skew. Contrary to predictions, mood and gender did not influence how much time respondents spent listing their resources.

Resource Appraisals

Manipulated Mood. Recall that there were two possible predictions for resource appraisals. First, (H3) it was possible that both males and females would use a substantive

processing strategy to appraise their resources, and thus both would use affect. Alternatively just as in listing (H2b), it was possible that females would use a direct access strategy, and thus no affect, whereas males would use substantive processing, and thus affect. To test these predictions, participants' composite RE (2 items; $\alpha = .89$) and SE (2 items; $\alpha = .90$) scores were analyzed with two separate 2 (Gender) x 3 (Mood) ANOVAs. Consistent with the idea that females have more coping knowledge than males, and thus would appraise their resources more positively, females reported higher mean RE ($M = 8.06$, $SD = .94$) than did males ($M = 7.62$, $SD = .88$; main effect of gender, $F (1, 122) = 7.49$, $p < .01$). Also, consistent with the prediction that negative moods would lower appraisals, participants in the negative mood condition had lower RE estimates than those in the neutral mood condition ($M = 7.57$, $SD = .81$ vs. $M = 8.05$, $SD = .98$; main effect of mood condition, $F (2, 122) = 3.12$, $p < .05$; follow up Tukey tests, $p < .05$). However, the predictions were not fully supported, because respondents in the positive mood condition fell in between and did not differ from either group ($M = 7.91$, $SD = .94$; Tukey tests, $p = ns$). For SE, there were no significant effects.

Self-reported Affect: The Differential Effects of PA and NA. Next, to test the prediction that PA would be more influential than NA (H1b), and that PA would predict more positive RE and SE appraisals for men alone (H2b-i) or both men and women (H3-i), two separate linear regression analyses were conducted in which PA, NA, gender, and all of the interactions were used as predictors. As predicted, when it came to RE ratings, as PA increased, all respondents' RE ratings became more positive ($\beta = .52$, $p < .05$). Also, consistent with the results of the ANOVA, being female predicted more positive RE ratings ($\beta = .31$, $p < .02$). In addition, there was some support for the hypothesis (H2b-i) that males' resource appraisals would be more influenced by PA than females', because there was a marginally significant interaction between

PA and gender (β = -.42, *p* = .10; see Figure 2). Specifically, PA led to more positive RE ratings

for males (β = .25, *p* < .05), thus equating them with those of females, which remained high

regardless of PA.

Figure 2

Interaction Between Gender and Positive Affect on Average RE Ratings
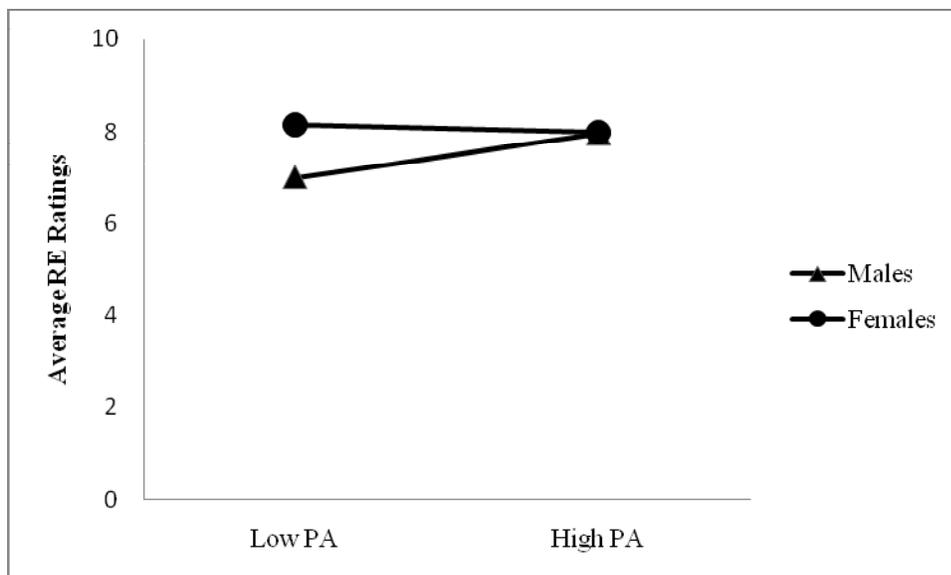
Note: points represent estimated values for participants falling one standard deviation above and
below the mean on self-reported PA.

Additionally, similar to the pattern found for the total number of resources listed, there

was a trend for NA to lead to more negative RE ratings for females, but not males. Specifically,

there was a marginally significant interaction between NA and gender (β = -.43, *p* < .10) on RE

ratings such that NA tended to lead to more negative RE ratings for females (β = -.20, *p* < .06),

but not males (refer to Figure 3). Indeed, gender predicted RE only for those low in NA (β = -

.32, *p* = .01).

Figure 3

Interaction Between Gender and Negative Affect on Average RE Ratings

Note: points represent estimated values for participants falling one standard deviation above and below the mean on self-reported NA.

Now turning to the SE ratings, consistent with the regression findings for RE ratings, gender was a significant predictor of SE ratings ($\beta = .29$, $p < .05$), such that being female predicted more positive ratings, though the ANOVA did not detect this gender difference. Affect also influenced SE ratings. As shown in Figure 4, PA and NA interacted ($\beta = -.28$, $p < .04$), such that PA lead to higher SE when NA was low ($\beta = .33$, $p < .01$), but not high.

Figure 4

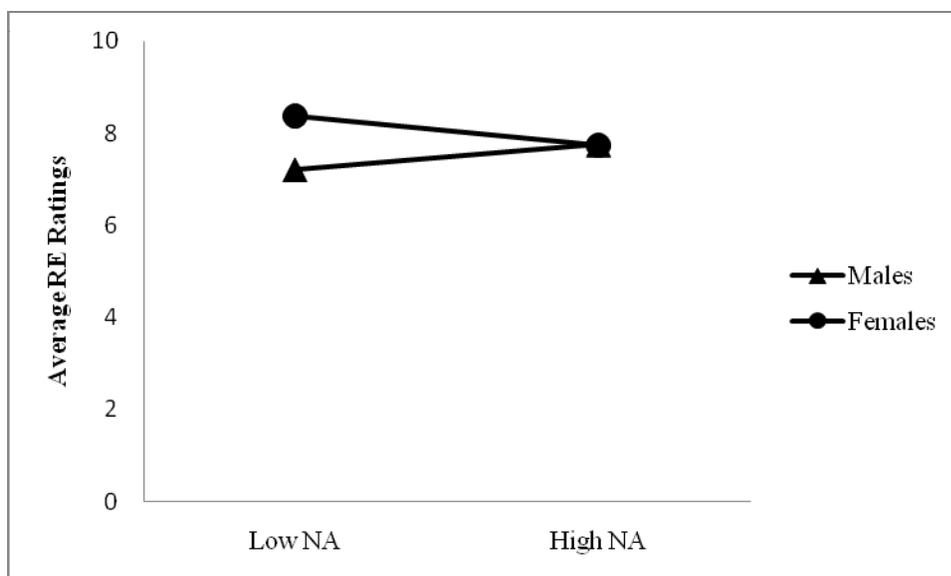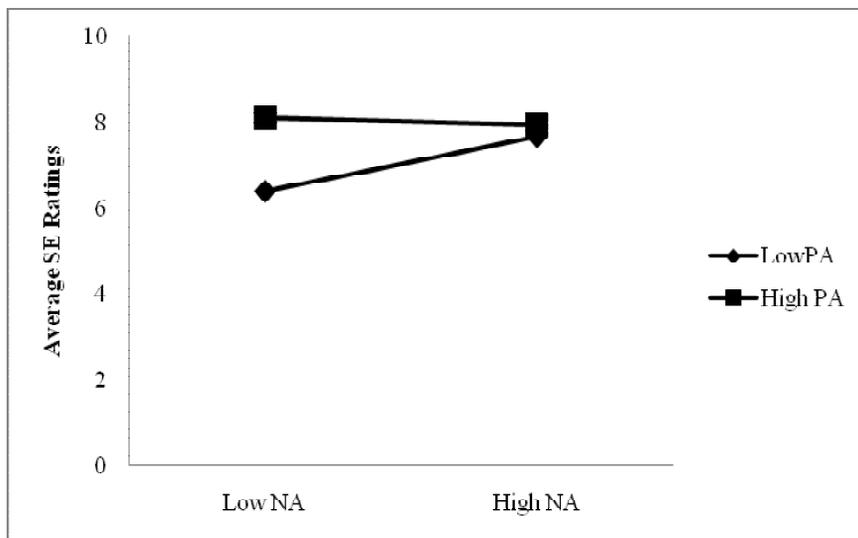*Interaction Between Positive and Negative Affect on Average SE Ratings*

Note: points represent estimated values for participants falling one standard deviation above and below the mean on self-reported NA and PA.

Reaction Times

A 2 (Gender) x 3 (Mood) ANOVA was conducted on natural log transformed mean RTs for resource appraisal, because a K-S test revealed that they were not normally distributed ($p <$ .01). Consistent with the prediction (H2b-ii) that males would use a more effortful processing strategy than women due to less coping knowledge, males had longer RTs ($M = 2.30$, $SD = .32$) than females ($M = 2.18$, $SD = .36$; main effect for gender, $F (1, 122) = 4.18$, $p < .05$). Thus, the prediction that males and females would both use substantive processing, and thus have similar RTs (H3-ii), was not supported. There was also a trend for participants in the positive affect condition to take longer to appraise their resources than those in the neutral affect condition, ($M = 2.32$, $SD = .36$ vs. $M = 2.15$, $SD = .31$; main effect for affect condition, $F (2, 122) = 2.67$, $p < .08$; Tukey test, $p = .05$), though neither group differed from those in the negative affect condition ($M = 2.25$, $SD = .36$).

The RT data were also subject to a regression analysis, which included PA, NA, gender, and all possible interactions as predictor variables. In contrast to the ANOVA results, no effects were significant.

Study 1 Discussion

The goal of Study 1 was to examine whether familiarity in thinking about coping resources, as an index of general coping knowledge, might underlie gender differences in how affect influences the way in which people identify and appraise their coping resources. Below I describe the predictions and discuss the extent to which the present data supported them, first with respect to resource listing and then resource appraisals. As the findings were not as straightforward as predicted, I present them in a way that sheds light on the patterns that were found rather than in the original order of the predictions. To accomplish this goal, within each section, I first discuss the results in terms of the AIM, focusing on whether gender influenced processing strategies and hence the use of affect. Then, I focus on whether familiarity accounted for these effects. Lastly, I discuss the data with respect to the Broaden and Build Model.

Resource Identification

The AIM. Recall that the AIM suggests that affect influences judgments when individuals use substantive or heuristic processing, but not direct access or motivated processing. Further, the Broaden and Build Model predicts that PA will enhance resource identification and building (H1a). Because I argue that females might have more general coping knowledge than males, and thus be more familiar with the task, I predicted (H2a) that males and females would use different processing strategies to list resources. Specifically, males would use the more effortful substantive processing, and thus affect, especially PA, whereas females would use a direct access strategy, and thus no affect (H2a-i). Contrary to the predictions, there was a trend for NA, not

PA, to influence resource listing; and NA influenced females, not males. Specifically, when NA was low, females listed more resources than males. However, as NA increased, females tended to list fewer resources than when NA was low, resulting a number comparable to males. It is also interesting that males and females did not differ in reaction times for listing, as was predicted (H2a-ii). Females took the same amount of time to list as males, though they listed more and were influenced by their NA.

Though inconsistent with the specific predictions, the fact that affect, specifically NA, influenced females alone sheds light on the processing strategies used in context of the AIM and lends some support to the hypothesis that females have more general coping knowledge than males. According to the AIM, because females were influenced by NA, they must have used either heuristic or substantive processing. I argue females used heuristic processing because their RTs did not differ from males'. Had females used substantive processing, their RTs should have been longer relative to males, as males did not use their affect, and thus could not have used substantive processing according to the AIM. Recall that heuristic processing is generally used when the target of the judgment is simple or typical, there are no specific motivational goals, cognitive capacity is limited, or accuracy or detailed processing of the situation is not required (Forgas, 1995). Assuming women used heuristic processing because the task was simple or typical for them, this pattern may lend support to my argument that women have enhanced general coping knowledge relative to males. That is, instead of assuming that their coping knowledge would result in women using a direct access strategy where a list of resources was predetermined and affect was not influential, their knowledge might have resulted in them finding the task to be simple, though not predetermined, thus promoting the use of heuristic processing. This finding is consistent with some of the organizational literature, which suggests

that managers and experts are likely to use heuristics when making decisions (for example, see Krabuanrat & Phelps, 1998).

This explanation is also consistent with the finding that women listed more resources than males when NA was low, in that women have more knowledge and thus can more easily list resources when they are not under high levels of NA. However, high NA might have limited their ability to access resources in memory due to a narrowed attentional focus (Fredrickson, 1998, 2001). It should be noted, however, that even when NA was high, females listed just as many resources as males, suggesting that NA is only detrimental to women's ability to list resources relative to when NA is low.

According to the AIM, because males did not use affect to list resources, they used either a direct access or motivated processing strategy, though this is contrary to my original prediction that males would use substantive processing and be influenced by affect. Males might have a small number of resources in memory, perhaps those that they use consistently. Thus, males may have used a direct access strategy to retrieve them if they were not particularly invested in the task or experienced no particular situational demands to produce an extensive list. There are several lines of research supporting the idea that individuals have a core set of resources that they seek to accumulate and preserve. For instance, research on proactive coping suggests that individuals learn particular coping skills that they use often and know to be effective and also develop and maintain networks of social support (Aspinwall & Taylor, 1997). This is consistent with the idea that people have a core set of resources they know to be effective when coping and can draw from when necessary. In addition, Hobfoll (1989) argues for a model of resource conservation and suggests that individuals strive to accrue and maintain a set of resources that they can use to offset and deal with stress. His model is based on the assumption that people are

actively aware of and consistently monitor the resources they possess, which supports the idea that individuals should be able to directly retrieve these resources from memory. Thus, I argue that in the present study, males used a direct access strategy to retrieve their core set of resources from memory. The use of a motivational strategy seems unlikely as the study instructions should not have inspired any particular motivation for identifying a certain type or number of resources. In addition, Forgas (1995) largely describes motivated processing as operating in the service of mood repair, in that a targeted search through memory is performed to retrieve information that will correct an unpleasant affective state. This, too, makes it seem unlikely that males used motivated processing, however, it is not possible to rule it out with the present data. Thus, the use of a direct access strategy is most plausible.

Familiarity. To lend support to my argument that women possess more general coping knowledge than males, I created a measure of the extent to which participants think about their coping resources and like thinking about their resources as one facet of general coping knowledge. I predicted (H2a-iii) that females would be more familiar with thinking about resources than males, and that this familiarity would promote resource listing. While females did list more resources than males, ratings of familiarity did not account for this difference. Furthermore, ratings of familiarity did not correlate with the number of resources listed, which indicates that familiarity, as measured here, did not influence how many resources people list. Thus, familiarity, as one index of general coping knowledge, did not differentiate males and females. Further, because gender did not predict familiarity ratings, and familiarity was not associated with the number of resources listed, familiarity could not account for the effect of gender and affect on resource listing, as predicted.

Though scores on the familiarity measure cannot explain the gender difference in listing[2], it is still possible that women possess more general coping knowledge than men. Perhaps general coping knowledge is an unconscious construct that cannot be tapped by a self-report measure. In support of this idea, Nisbett and Wilson (1977) reviewed evidence that people are often not good at describing higher order mental processes, like memory processes for example. Thus, it is reasonable that men and women do differ in general coping knowledge, as indicated by the fact that women listed more resources, but that they are not consciously aware of or able to accurately report this knowledge. Rather than simply asking participants to report how often they think about resources as an indication of coping knowledge, I next examined whether a direct manipulation of coping skill would better capture general coping knowledge. Perhaps when people are asked to think about a particular coping situation, those who have high skill with the situation can access a larger store of the resources available to them outside of conscious awareness than can those with low skill.

To test this idea, in Study 2, I examined another facet of general coping knowledge by manipulating skill with a particular coping scenario. Manipulated coping skill should influence knowledge of the resources that one would use to navigate a situation, which could shed light on why males and females indicated the same level of conscious familiarity, yet differed in the number of resources identified. Thus, if general coping knowledge can be tapped by manipulating skill with a particular coping situation, the gender difference in Study 1 should be replaced by a high situational coping skill versus a low skill difference in Study 2 (H2ab-iv).

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[2] Note that women also scored higher than males on trait measures of cooperation (t (126) = -4.06, $p < .001$; M_M = 5.25, SD_M = 2.01, M_F = 6.66, SD_F = 1.90), agreeableness (t (126) = -3.84, $p < .001$; M_M = 7.54, SD_M = 1.40, M_F = 8.43, SD_F = 1.22), and conscientiousness (t (126) = -4.10, $p < .001$; M_M = 6.50, SD_M = 1.66, M_F = 7.63, SD_F = 1.44). But of these three measures, only cooperation scores positively correlated with the total number of resources listed (r (128) = .18, $p < .05$). Furthermore, scores on the cooperation measure did not mediate the relationship between gender and the number of resources listed (Sobel test = 1.44, $p = .15$), so these findings do not offer a complete explanation for the finding that females listed more resources than males.

The Broaden and Build Model. Finally, based on the Broaden and Build Model of Positive Emotion, I predicted that PA would be more influential that NA in resource identification, and more specifically that PA would promote identification (H1a). In contrast to the predictions, PA was not influential. While this finding does not support the Broaden and Build model, it does not refute it either. Resource identification and building may be a long term processes not captured in the present lab study. As Fredrickson (1998, 2001) suggests, it is may be that only with repeated experiences of positive affect in the context of coping that people begin to build their repertoire of resources.

One of the goals of the present study was also to determine whether NA would be influential in the process of resource identification, for Fredrickson (1998, 2001) indicates that NA might serve to narrow one's attentional focus, and thus decrease access to resources. The result that NA influenced women such that they listed fewer resources when NA was high compared to when NA was low is consistent with the theory. Thus, while the influence of PA on resource building might be a long term process, the findings suggest that NA might decrease the number of resources listed for women in the short-term.

Resource Appraisals

The AIM. The findings for resource appraisals suggest that men and women used different processing strategies to make their appraisals and lend some support to my argument that women have more general coping knowledge than men. Recall that there was a competing prediction (H2b and H3) regarding whether there would be any gender differences in the processing strategies used for appraisals. Both men and women used affect to make their appraisals, such that both men and women used PA, and there were trends that women also used NA. Men also made appraisals slower than women, though this ANOVA finding was not

replicated in the regression analysis. According to the AIM, these findings suggest that men used substantive processing and women used heuristic processing, because men were slower than women. I intended to examine the RT findings further in Study 2 to lend more support to my argument that men and women likely used different processing strategies to appraise resources.

In support of the prediction that males would use substantive processing (H2b) and that PA would help them appraise their resource more positively (H1b, H2b-i), PA did facilitate more positive RE appraisals for both males and females, and there were trends that males drove this effect. PA increased RE appraisals for males such that when PA was high, male ratings of RE increased and were equated with those of females. If it is the case that females had higher appraisals because they have more general coping knowledge than males, this result indicates that PA might serve to help level the playing field in that PA made males feel just as confident in their resources as females.

However, contrary to the idea that females used a direct access strategy, and thus no affect, to make appraisals (H2b-i), the data suggested that females used heuristic processing. Similar to the effect found for resource listing, the data indicated that NA led to more negative RE appraisals, in that NA also decreased the number of resources listed by females relative to when NA was low. Women also made their decisions faster than men, indicating that women probably did not engage in substantive processing. Thus, it appears that females used heuristic processing and were particularly sensitive to NA in both listing and RE appraisals. Though inconsistent with predictions, the use of heuristic processing for women, lends some support to my argument that women have more general coping knowledge. This is because the use of

heuristic processing suggests that the task was likely simple or typical, requiring little processing, which is consistent with having knowledge about a topic.

In terms of SE appraisals, the data only provide mixed support for the prediction that PA would lead to more positive appraisals (H1b). While those who were high in PA had more positive ratings, PA interacted with NA to alter SE. When NA was low, high PA participants had more positive appraisals than low PA participants. However, when NA was high, high PA and low PA participants did not differ. Thus, it appears that SE ratings were highest when PA or NA were also high, and that strangely, high NA did not lower appraisals as the AIM and Broaden and Build Model would suggest. Perhaps high NA made participants think of times during which they experienced stress or negative feelings, but then high PA made them think of times when they successfully used their resources to cope, which would account for the high ratings. I am, however, unable to account for the fact that high NA and low PA also led to high ratings, as I would have expected low ratings in this situation. In addition, it is unclear why affect interacted with gender to predict RE appraisals, but did not interact with gender to predict SE appraisals, as I would have expected a similar pattern across both types of appraisals.

Familiarity. Because gender did not influence ratings of familiarity, it was clear that familiarity could not explain the differential use of processing strategies for men and women in appraisals (H2b-iii). Thus, the familiarity measure was not examined further. As noted, in Study 2, I manipulated situational coping skill to examine another facet of general coping knowledge that might account for the gender differences.

The Broaden and Build Model. Finally, based on the Broaden and Build Model of Positive Emotion, I predicted that PA would lead to more positive resource appraisals (H1b), and that NA would not be as influential. The data for RE appraisals partially support these

predictions. PA did lead to more positive appraisals for men and women. Furthermore, while women had more positive appraisals than men, trends indicated that high PA equated male and female ratings. Thus, not only did PA lead to positive appraisals, but I argue that it equated appraisals of resource effectiveness between those with low (males) and high (females) coping knowledge. While unexpected, the evidence that NA led to less positive RE appraisals for females is also consistent with the model. NA may have produced less positive ratings by narrowing women's attentional focus, making it difficult to recall positive ratings from memory. The data for SE ratings lend mixed support to the model in that high PA did lead to more positive ratings when NA was low. However, the finding that when NA was high, ratings were also high regardless of PA, is not consistent with the model.

Conclusions

In sum, the data suggest that women and men used different processing strategies in resource identification and appraisals, and thus were differentially influenced by their affect. Overall, females listed more resources, appraised their resources more positively, and made their appraisals more quickly than males. The data also suggest that women likely used heuristic processing both to list and appraise their resources, and males likely used a direct access strategy to list and substantive processing to appraise. It may be that females found the listing and appraisal tasks to be simple and typical, and so used heuristic processing. Conversely, males may have had a predetermined set of resources available in memory, and thus used a direct access strategy. The use of a substantive processing strategy for appraisals, however, suggests that forming appraisals was likely unfamiliar and challenging for men, necessitating effortful processing, which facilitated affective influence during retrieval. When combined, these findings suggest that females may possess greater general coping knowledge than males, though

the familiarity measure did not explain this difference. I argue that familiarity did not capture general coping knowledge because it was likely to direct a measure of a largely unconscious process. Furthermore, while the findings for resource listing do not lend support to the Broaden and Build Model, the findings for resource appraisals do in that PA led to more positive RE appraisals, for males in particular. Specifically, PA equated male and female perceptions of confidence in resource effectiveness. A replication of this finding would suggest that PA might give males comparable confidence in resources as females.

It should be noted that there were several unexpected patterns in the data, as well as several marginally significant findings, that I sought to replicate in Study 2 before accepting as robust findings. First, when NA was high women both listed fewer resources and appraised their RE less positively relative to when NA was low. Though marginally significant, the findings were consistent across listing and appraisals. This pattern was unexpected; however it suggests that NA has a particular influence on women, which is explored further in Study 2. Second, the pattern of data for RE lent support to the prediction that PA would enhance appraisals, but the evidence was mixed for SE. With respect to SE, because participants listed resources outside of a specific coping situation, perhaps they listed resources they know they are able to use well. Thus, affect may not have interacted with gender to influence SE because all participants listed resources they were confident in using, which made the judgment less amenable to the influence of affect. For RE, however, it might have been necessary for participants to think more about instances in which each resource was effective, which increased the possibility that affect would influence judgments by priming information in memory. Thus, in Study 2, I attempted to examine the robustness of this unexpected finding via replication. Third, though previous research on coping and the use of differential processing strategies supports the idea that women

have more general coping knowledge than men, there were no gender differences in familiarity. In Study 2, I move beyond a measure of familiarity in thinking about coping resources to a manipulation of coping skill, which should shed more light on why women and men likely differed in their use of processing strategies and thus affect. Specifically, if men and women differ in general coping knowledge, then manipulating this knowledge should eliminate existing gender differences.

<div align="center">Study 2 Method</div>

Participants

Two-hundred sixty one students completed the study for class credit. Three participants were excluded from the analyses for failing to follow instructions, and three were excluded because they were extreme outliers on at least one of the key dependent measures. Final data analyses were done on 255 participants, 126 males and 129 females (average age $M = 9.18$ years, $SD = 1.25$).

Design

The study used a 2 (Gender: male, female) x 3 (Mood: positive, negative, neutral) x 2 (Coping Skill: high, low) between-subjects factorial design.

Procedures

The procedure mirrored that of Study 1, except prior to listing their resources, participants received a coping skill manipulation. Participants in the high skill condition imagined themselves in a situation in which they were good copers, whereas those in the low skill condition imagined themselves in a situation in which they were not good copers. Those in the high skill condition received the following instructions:

I'd like you to imagine for a moment a situation in which you would

consider yourself to be very good at coping. In other words, this would be

a situation that is stressful, but for which you feel very well prepared and

equipped to deal with it. This might be a situation in an academic,

personal relationship, or work-related domain.

Those in the low skill condition received this set of instructions:

I'd like you to imagine for a moment a situation in which you would

consider yourself very poor at coping. In other words, this would be a

situation that is stressful because you don't feel that you are very well

equipped or good at dealing with it. This might be a situation in an

academic, personal relationship, or work-related domain.

The experimenter then reminded participants of the definition of resources and asked them to

write a sentence or two describing the situation they imagined (to ensure that they followed the

instructions) and then to list resources that they possess which might help them in the situation.

After completing the listing task, participants completed a coping skill manipulation

check containing seven items ($\alpha = .89$; refer to Appendix D for specific items) and answered the

exploratory questionnaires described in Study 1.

<div align="center">Study 2 Results</div>

Below is a table containing all of the variables from Study 2, their correlations, means,

and standard deviations.

Table 2

Study 2 Correlations, Means, and Standard Deviations

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
1. Gender	1											
2. Mood	-.01	1										
3. Cope Skill	.01	.05	1									
4. PA	-.09	.69**	-.01	1								
5. NA	.04	-.64**	-.03	-.86**	1							
6. Skill MC	.00	.10	.46**	.05	-.06	1						
7. Familiarity	.03	-.03	-.06	-.01	.05	.03	1					
8. # Resources	.12	.03	-.03	-.01	-.01	-.01	.13*	1				
9. List RT	-.17**	.05	-.01	.10	-.08	.02	-.11	-.32**	1			
10. RE	-.02	-.03	.21**	-.01	-.01	.22**	.15*	-.12	.03	1		
11. SE	.00	-.08	.14*	-.05	.01	.25**	.22**	-.05	-.08	.74**	1	
12. App RT	-.02	-.05	-.12*	-.05	.04	-.05	-.05	-.19**	.55**	-.11	-.26**	1
Mean				4.70	4.47	6.66	6.24	4.84	2.76	8.07	8.01	2.37
SD				2.55	2.47	1.93	1.55	2.44	.52	1.14	1.14	.30

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

Note: For gender, males were coded as 0 and females as 1. Mood refers to the manipulated mood variable, where 1 represents negative mood, 2 neutral mood, and 3 positive mood. Cope Skill refers to the manipulated situational coping skill variable, where 0 represents low skill and 1 represents high skill. PA and NA refer to self-reported affect from the manipulation check. Skill MC refers to self-reported coping skill from the manipulation check. Familiarity refers to the same measure as in Study 1, which is the average familiarity rating at the beginning of the study. # Resources to the total number of resources listed, List RT to the average time spent listing each resource, RE to average rated response-efficacy, SE to average rated self-efficacy, and App RT to the average amount of time spent appraising each resource. Both RT measures were subjected to a natural log transform prior to analysis to eliminate skew.

Mood Manipulation Check

To determine the success of the mood manipulation, participants' responses were averaged across the three positive (PA: α = .93) and three negative (NA: α = .79) items embedded in the media questionnaire. A 2 (Gender: male, female) x 3 (Mood: positive, negative, neutral) x 2 (Coping skill: high, low) x 2 (Affect: PA, NA) repeated measures ANOVA, with repeated measures on the last factor, was conducted on these ratings. As

expected, the mood manipulation was successful. The test of within-subjects effects revealed a significant interaction between Mood and Affect, $F(2,243) = 120.54$, $p < .001$. Examination of the simple effects showed that in the positive mood condition, ratings of PA ($M = 6.82$, $SD = 1.83$) were significantly higher than ratings of NA ($M = 2.85$, $SD = 1.70$; $p < .001$). In the negative condition, NA ($M = 6.68$, $SD = 1.69$) was higher than PA ($M = 2.50$, $SD = 1.79$; $p < .001$). In the neutral condition, PA ($M = 4.88$, $SD = 1.91$) was somewhat higher than NA ($M = 3.80$, $SD = 2.13$; $p < .01$), but this is to be expected given that most people are happy most of the time (Diener & Diener, 1996).

Coping Skill Manipulation Check

A factor analysis, using principle axis factoring with a varimax rotation, on the seven manipulation check items indicated that a one factor solution best fit the data. Average ratings ($\alpha = .89$) were analyzed with a 2 (Gender) x 3 (Mood) x 2 (Coping Skill) ANOVA. Participants in the high skill condition had higher ratings of coping skill ($M = 7.50$, $SD = 1.32$) than did those in the low skill condition ($M = 5.73$, $SD = 2.07$, $F(1, 243) = 68.55$, $p < .001$), indicating that the manipulation was effective. Also, PA and NA did not differentially alter coping skill ratings for males verses females. While there was a significant gender by mood condition interaction ($F(2, 243) = 3.48$, $p < .05$, see Table 4), the effect was due to the neutral condition. Specifically, in the neutral mood condition, males had higher ratings of coping skill ($M = 7.13$, $SD = 1.36$) than did females ($M = 6.34$, $SD = 2.21$; Tukey tests, $p < .05$). Importantly, male and female ratings did not significantly differ in any of the other mood conditions.

Table 3

Mean Coping Skill Ratings by Gender and Mood Conditions

	Mood condition		
Gender	Positive	Neutral	Negative
Males	6.67 (2.17)	7.13 (1.36)	6.09 (2.08)
Females	6.84 (1.48)	6.34 (2.21)	6.63 (2.03)

Resource Identification

Manipulated Mood. It was hypothesized (H2a-i) that coping skill would moderate the effect of mood on the number of resources listed, because high and low skill copers would use different processing strategies to complete the task. Further, I predicted that PA would facilitate resource listing for low skill copers (H1a). An ANOVA conducted on the number of resources listed revealed that just as in Study 1, females listed more resources ($M = 5.15$, $SD = 2.57$) than males ($M = 4.54$, $SD = 2.28$, $F (1, 243) = 3.89$, $p = .05$). Contrary to the predictions, neither mood nor coping skill moderated the effect of gender on listing.

Self-reported Affect: The Differential Effects of PA and NA. To examine the unique, independent influence of PA and NA on resources listed, a regression analysis was conducted. Similar to the ANOVA, it was predicted that PA more so than NA, would predict the number of resources listed for low skill copers, but not for high skill copers. Gender, coping skill (the manipulated categorical variable), NA, PA, and all the interactions were included as predictors, and the total number of resources listed as the outcome variable. The initial analyses revealed a multicolinearity problem involving PA and NA, despite the fact that no such problem existed in Study 1. As suggested by Cohen et al. (2003), multicolinearly is a problem if the tolerance statistic is less than .10 and the VIF statistic is greater than 10, and here tolerances ranged from .06 to .36 and VIFs ranged from 2.81 to 17.79 for all analyses.

To eliminate this issue, I re-ran the analyses, first controlling for PA and then for NA. This type of analysis resolves the problem because it controls for the overlap in variance between the two predictors, such that the unique contribution of each can be determined. Note that this procedure was used for all Study 2 regression analyses, and thus, it was not possible to examine interactions between PA and NA[3].

First, I conducted these analyses controlling for NA. Being female tended to predict listing more resources ($\beta = .17$, p < .08) than being male. Though marginal, this finding replicated the ANOVA results and the analyses in Study 1.

Next, I reran the regression controlling for PA. Again, women tended to list more resources than men ($\beta = .17$, $p < .08$). As in Study 1, there was a marginally significant interaction between NA and gender, but this time it tended to be qualified by coping skill ($\beta = -.23$, $p < .09$). Just as in Study 1, females were influenced by NA, as there was a marginally significant NA by coping skill interaction amongst women ($\beta = -.24$, $p < .07$), but not amongst men. For high skill females, as NA increased, fewer resources were listed ($\beta = -.51$, $p < .03$), whereas NA did not influence low skill females. While coping skill did not influence resources when NA was low, there was a trend such that those with high coping skill actually listed fewer resources than those with low coping skill when NA was high ($\beta = -.21$, p = .09). For males there were no significant effects (as shown in Figure 6).

Figure 5

Females: Interaction Between NA and Coping Skill on Resources Listed, Controlling for PA

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[3] Note: Because of the multicolinearity issue, it is reasonable to assume that PA and NA may reflect opposite ends the same continuum. If so, then the PA and NA measures could be combined and treated as one single measure. When this was done and all the analyses rerun, the results were largely the same as what is reported in the following sections for resource listing and appraisals. The only effect that did not replicate was the significant gender x NA x coping skill interaction ($p = .146$) on the number of resources listed.
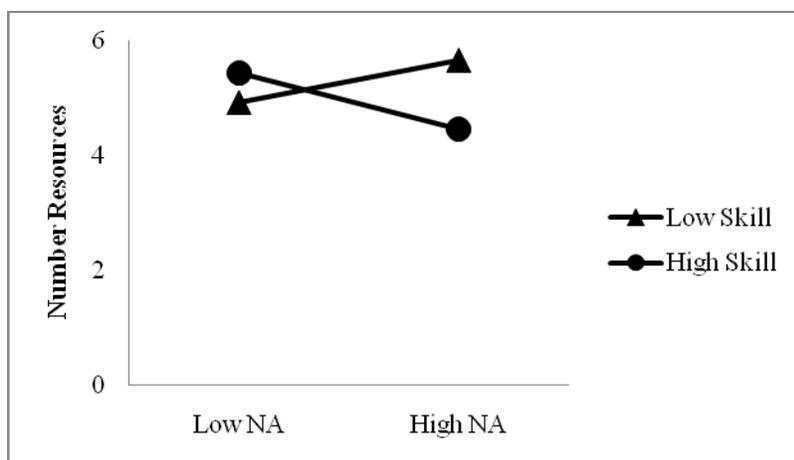
Note: points represent estimated values for participants falling one standard deviation above and below the mean on self-reported NA.

Figure 6

Males: NA, Coping Skill, and Resources Listed, Controlling for PA
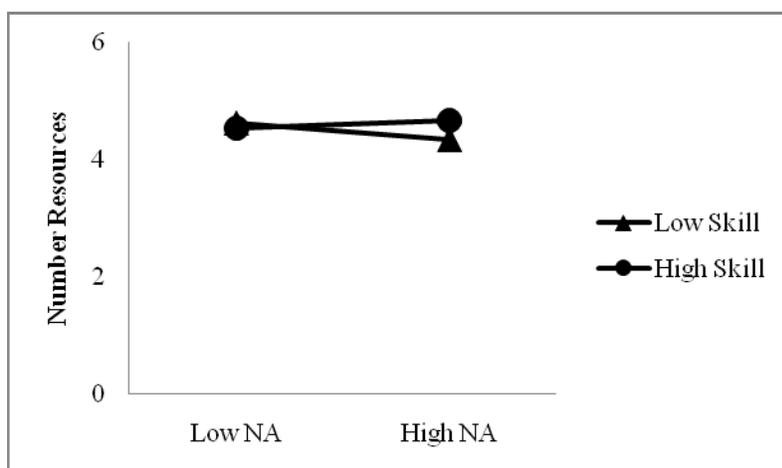
Note: points represent estimated values for participants falling one standard deviation above and below the mean on self-reported NA.

Reaction Times

To test the prediction (H2b-ii) that highly skilled copers use a direct access strategy, resulting in shorter RTs, whereas low skilled copers use a substantive processing strategy, resulting in longer RTs, analyses were conducting on the average time spent listing each resource. These data were subjected to a natural log transform, as a K-S test revealed that the

data was not normally distributed ($p < .01$). Unlike Study 1 where this transformation eliminated the skew, here it only lessened it. Thus, these RT results should be interpreted with caution. Results indicated that not only did females list more resources than males, the ANOVA revealed that women had faster RTs ($M = 2.67$, $SD = .47$) than males ($M = 2.85$, $SD = .55$, $F (1, 243) = 7.59$, $p < .01$). [4] The two regression analyses (first controlling for NA, the second controlling for PA) replicated this finding, with women listing resources faster than men ($\beta = -.20$, $p < .03$, both analyses). Thus, the findings do not support the predictions about RTs and coping skill, in that high skilled copers were not faster than low skilled copers. The data do, however, lend further support to some of the gender differences found in Study 1[5]. The fact that women were faster than men supports the hypothesis that women were more familiar with the task and thus might have used a heuristic processing strategy

Resource Appraisals

Manipulated Mood. To test the hypothesis (H2b-i) that affect would only influence resource appraisals for low skill copers because they will have used a substantive processing strategy that allowed for the infusion of affect into their judgments, two separate 2 (Gender) x 3

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[4] There was also a significant interaction between affect and coping skill ($F (2, 243) = 5.31$, $p < .01$). As it does not shed light on the finding that females listed more resources than males, or the interaction between NA, gender, and coping skill, it is not noted in the text. An examination of the means and post hoc Tukey tests revealed that this interaction occurred because neutral moods appeared to speed up reactions times for high skilled copers, because high skilled copers in neutral moods were faster ($M = 2.59$, $SD = .50$) than low skilled copers ($M = 2.90$, $SD = .61$; Tukey tests, $p < .01$), and faster than high skilled copers in the positive ($M = 2.84$, $SD = .45$) and negative ($M = 2.82$, $SD = .48$) mood conditions, (Tukey tests, $p's < .04$). Thus, the prediction that high skilled copers would be faster at listing resources than low skilled copers, was only supported in the neutral mood condition. The addition of mood appeared to slow down reaction times, such that high skilled copers processed the material just as much as low skilled copers.

[5] Note that just as in Study 1, females in Study 2 also scored higher than males on trait measures of cooperation ($t (253) = -3.31$, $p = .001$; $M_M = 5.63$, $SD_M = 2.07$, $M_F = 6.48$, $SD_F = 2.01$), agreeableness ($t (253) = -2.89$, $p < .01$; $M_M = 7.73$, $SD_M = 1.67$, $M_F = 8.29$, $SD_F = 1.45$), and conscientiousness ($t (253) = -2.94$, $p < .01$; $M_M = 6.85$, $SD_M = 1.46$, $M_F = 7.39$, $SD_F = 1.48$). Further, as agreeableness was related to the number of resources listed, $r (255) = .22$, $p = .001$, I examined whether agreeableness mediated the relationship between gender and the number of resources listed. Gender predicted the number of resources listed ($\beta = .12$, $p < .06$) as well as agreeableness ($\beta = .18$, $p = .004$). When I controlled for the influence of agreeableness, gender was no longer a significant predictor of the number of resources listed ($\beta = .08$, $p = $ n.s., Sobel test $= 2.15$, $p < .04$). However, this finding was not replicated for Study 1, and cooperation and conscientiousness did not mediate this relationship in either study. Thus, it is not likely that differences in these trait measures can fully account for the gender difference.

(Mood) x 2 (Coping Skill) ANOVAs were conducted on average ratings of response efficacy (RE; α = .83) and self-efficacy (SE; α = .86). As predicted, the coping skill manipulation had the desired effect, with those high in coping skill reporting higher RE (M_{HS} = 8.30, SD_{HS} = 1.05, M_{LS} = 7.82, SD_{LS} = 1.19; F (1, 243) = 11.18, $p < .01$) and SE (M_{HS} = 8.17, SD_{HS} = 1.10, M_{LS} = 7.85, SD_{LS} = 1.16, F (1, 243) = 5.03, $p < .05$) than those low in coping skill. This mirrors the finding from Study 1 that women, who I argue have more general coping knowledge, had higher RE and SE ratings than did men, who I argue have less general coping knowledge. Thus, there is evidence that the coping skill manipulation did replace the gender difference in appraisals (H2b-iv). However, the expected influence of mood on the ratings of low skill copers was not found, indicating that mood did not exert a greater influence on low skill copers than high skill copers.

Self-reported Affect: The Differential Effects of PA and NA. To further test the hypothesis that PA would be more influential than NA (H1b) in predicting RE and SE appraisals for low skilled copers (H2b-i), several regression analyses were conducted, first controlling for NA and then PA. In terms of RE, both analyses replicated the results of the ANOVA and revealed trends that as coping skill increased, RE ratings also increased (controlling for NA: β = .16, $p < .08$; controlling for PA: β = .15, $p < .09$). Thus, in support of the predictions, both the ANOVA and regressions revealed that coping skill increased RE ratings. No other effects were found, indicating that the prediction that PA would influence RE ratings for low skilled copers was not supported. However, my manipulation of coping skill might have made ratings less amenable to affective influence. Specifically, because I asked participants in both the high and low coping skill conditions to list resources they thought would work in specific situations, I may have prompted them to list resources they knew would be effective. So the manipulation alone may have influenced ratings of RE, making them less amenable to the influence of affect.

Next I performed the same analyses on ratings of SE. Controlling for NA, the only significant predictor of SE ratings was an interaction between PA and coping skill (β = -.26, *p* < .04), which is depicted in Figure 7. Follow-up analyses revealed when PA was low, high skill conferred an advantage, such that high skilled copers felt more confident that they could use their resources effectively than did low skilled copers (β = .25, *p* < .01). Just as predicted, high PA eliminated the effect of coping skill on SE ratings, such that it equated ratings for high and low skilled copers. This mirrors the finding from Study 1 that PA equated RE ratings for men (low knowledge) and women (high knowledge). Unfortunately, additional analyses revealed that the PA and coping skill effect did not stem from PA increasing SE ratings for low skilled copers (*ns*). Thus, consistent with the prediction that PA would lead to more positive ratings, it equated ratings for high and low skill copers. While the Study 1 effect occurred for RE ratings, and the Study 2 effect occurred for SE ratings, there is some evidence that the gender difference in Study 1 was replaced by a coping skill difference in Study 2 (H2b-iv).

Figure 7

Interaction Between PA and Coping Skill on Ratings of Self-Efficacy: Controlling for NA
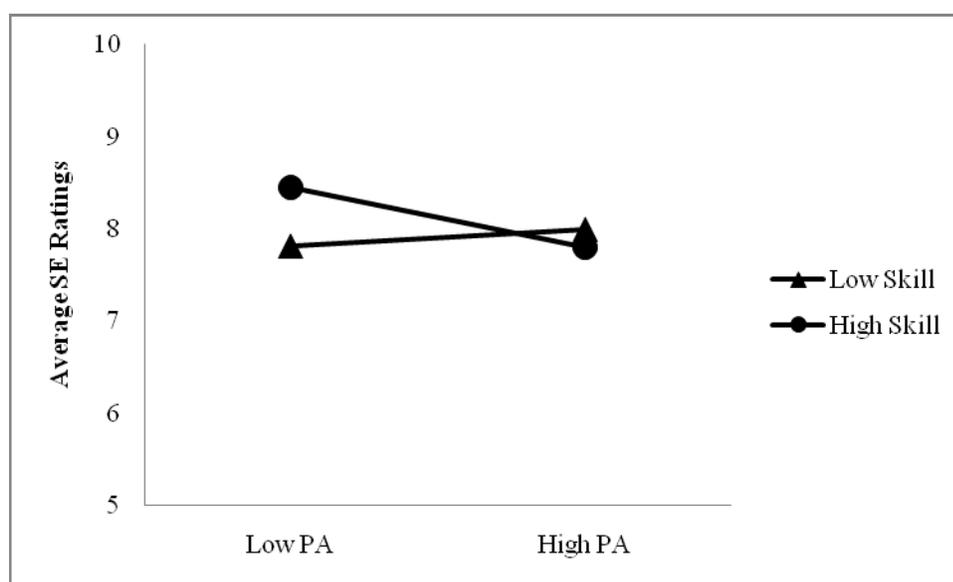
Note: points represent estimated values for participants falling one standard deviation above and below the mean on self-reported PA.

Next I followed the same procedure except this time controlling for PA. The analyses revealed no significant predictors of SE ratings. Thus, it appears that PA was more influential than NA in resource appraisal processes, as NA did not offer any unique contribution in predicting SE ratings once the effects of PA were taken into account.

Appraisal Reaction Times

To test the hypothesis (H2b-iv) that high and low skilled copers used differential processing strategies to appraise their resources, which would result in longer RTs for low skilled copers than for high skilled copers, mean appraisal RTs were computed for each participant. A K-S test revealed that the RTs were not normally distributed ($p < .01$), and thus scores were subjected to a natural log transform. Next, a 2 (Gender) x 3 (Mood) x 2 (Coping Skill) ANOVA was conducted on the transformed RTs, which indicated there was a trend for low skilled copers to have longer RTs ($M = 2.41$, $SD = .29$) than high skill copers ($M = 2.34$, $SD = .30$, $F (1, 243) = 3.73$, $p < .06$). The natural log transformed average RTs were also subjected to two subsequent regression analyses, first controlling for PA and then for NA as described above. Both analyses replicated the ANOVA and revealed that coping skill was the only marginally significant predictor of appraisal RTs (controlling for NA, $\beta = -.16$: $p = .08$; controlling for PA: $\beta = -.16$, $p < .08$).[6] Thus, the coping skill manipulation was effective, because low skill copers made their appraisals slower than high skilled copers.

General Discussion

In order to highlight the patterns found across Studies 1 and 2 and aid in the interpretation of the data, I combined the discussion of Study 2 with the general discussion. Recall that a chief

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[6] When I controlled for PA, there was also significant interaction between Gender and NA ($\beta = -.36$, $p < .01$). However, as this effect does not help to explain any of the findings for appraisals it is not discussed further.

prediction of the AIM (Forgas, 1995) is that the more individuals think about a judgment or engage in substantive processing, the greater the infusion of affect into the judgment. The Broaden and Build Model of Positive Emotion argues that PA is an important part of coping in that it can broaden one's attentional focus and help build on existing stores of resources (Fredrickson, 1998, 2001), as well as lead to more positive appraisals. Further extending this work, I drew from literature suggesting that females might have more general coping knowledge than males (e.g., Tamres et al., 2002) to make the prediction that men may have to think about their resources more than women, and hence be more influenced by affect, especially PA, when identifying and appraising their resources.

Two studies were conducted to test these predictions. Overall, the results indicated that gender does indeed play a role in how affect influences resource identification and appraisals. Specifically, the data suggest that men use a direct access strategy for listing and substantive processing for appraisals, whereas women use heuristic processing for both. Additionally, men seem to be influenced by PA alone; whereas women are influenced by NA and PA. Unfortunately, the data provide mixed evidence when it comes to the assumption that coping knowledge underlies these differences and that PA would influence the coping process more than NA. Below, I discuss the findings in more detail, starting out with how these findings inform the AIM; then I turn to their implications for the Broaden and Build Model of Positive Emotions.

The AIM

Building on extant work suggesting that women have more general coping knowledge than men, I predicted that gender would moderate the influence of affect on judgment (H2ab). Specifically, because of their low coping knowledge, men would use substantive processing to list their resources and make their appraisals. Substantive processing would encourage affective

influences (H2ab-i), particularly that of PA (H1ab), such that high levels of PA would facilitate resource listing and positive resource appraisals. In contrast, because of their high coping knowledge, women would use a direct access strategy for both resource listing and appraisals, and thus show no evidence of affect infusion. The data only partially support these predictions. I first focus individuals with low coping knowledge and then move on to those with high coping knowledge.

Low Coping Knowledge (Men in Studies 1 and 2, and Women with Low Coping Skill in Study 2). Only partial support was found for the hypothesis that individuals with low coping knowledge would use substantive processing and thus show evidence of affect infusion. Specifically, these predictions were partially supported by the appraisal data, but not by the listing data. The data suggest that individuals with low coping knowledge use direct access processing when listing resources and substantive processing when appraising them. With respect to listing resources, there was no evidence of affective influence in either Study 1 or Study 2. Based on this finding, the AIM would argue that low knowledge individuals used either a direct access or motivated strategy to list resources. Motivated processing is used when individuals experience specific motivational pressures to achieve a judgmental outcome, and thus engage in a targeted information search in memory. For instance, participants may have been motivated to do the task quickly, hence writing only a small number of resources. Because I have no evidence that the listing task produced a specific type of motivation in participants, I think it more likely a direct access strategy was used.

According to the AIM, a direct access strategy involves the retrieval of stored, predetermined information from memory, such that affect is not involved in processing, and is used when individuals feel little personal involvement in a task or perceive no particular

situational demands to process extensively. Contrary to my original prediction that low knowledge would lead to effortful processing, these data suggest that low knowledge might have led to low personal involvement. This low involvement might have resulted in individuals directly retrieving a predetermined subset of resources, perhaps those they use most, rather than spending time and effort to think of novel resources. My contention that people have a core set of resources in memory that are actively monitored, built upon, and retrieved when needed has some support in the proactive coping literature (Aspinwall & Taylor, 1997) and research on resource conservation (Hobfoll, 1989). As a result of directly retrieving these resources from memory, individuals were not influenced by their affective state.

The hypothesis that low knowledge would lead to substantive processing and mood effects was supported in the appraisal data, however. There are three pieces of evidence that support this claim. First, in Study 1, PA led to more positive RE appraisals, for men in particular, who also had the slowest reaction times. Assuming men have less general coping knowledge, they likely perceived the resource appraisal task to be complex or atypical, and so used substantive processing. According to the AIM, PA likely facilitated the retrieval of positive resource evaluations from memory, and even more importantly, led to positive evaluations of resources despite less general coping knowledge. Second, in Study 2, PA influenced SE appraisals in that it equated ratings for high and low skilled copers, and once again low skilled copers had slower RTs than high skilled copers. However, it should be noted that unlike Study 1, where PA clearly raised appraisals of those with low coping knowledge (i.e., men), here PA equated appraisals but did not significantly raise them for those low in coping skill. Finally, men (Study 1) and participants with low coping skill (Study 2) tended to have the slowest reaction

times, which is consistent with substantive processing. Thus, it seems that men and low skilled copers may have used substantive processing to make appraisals.

High Coping Knowledge (Women in Study 1 and High Coping Skill Women in Study 2). No support was found for the prediction that individuals with high coping knowledge would use a direct access strategy, such that affect would not influence their listing and appraisals of resources. Instead, the results suggest that they used heuristic processing and were influenced by both NA and PA. Recall that according to the AIM, heuristic processing is used when the situation is simple or typical and does not require extensive processing. Due to their high coping knowledge, women may have found the task to be simple or typical and thus used heuristic processing to list resources. Three pieces of data support the contention that women used heuristic processing to list resources. First, when NA was low women listed more resources than men in Study 1. They probably did so because they had more general coping knowledge. Second, according to the AIM, affect is only influential when people use substantive or heuristic processing. It appears that women did not use substantive processing because if they did so, then they would have had longer reaction times than males, who did not use affect, not shorter (Study 2) nor equivalent reaction times (Study 1). Third, there is evidence that women in Study 1 automatically thought of situations in which they had high coping skill when thinking about resources. Recall that while NA influenced all women in Study 1, NA only influenced females in the high coping skill condition in Study 2. Because the patterns for these two groups so closely mirrored each other, it is likely that women in Study 1 automatically thought of themselves as high skilled copers, just as the high skill women were instructed to do in Study 2. Thus, in Study 2, the high skill coping condition would mirror Study 1, which it did. However, the low coping skill manipulation likely eliminated the use of heuristic processing for women

and, thus the mood effect. In sum, it appears that the women's coping knowledge led to heuristic processing and listing more resources when NA was high rather than low.

There are three pieces of evidence supporting the contention that individuals with high coping knowledge used heuristic processing to make appraisals. First, women had more positive appraisals and made their appraisals faster than men in Study 1, and high skilled copers had more positive appraisal ratings and made their appraisals faster than low skilled copers in Study 2. This finding supports the idea that women and high skilled copers likely perceived they had high coping knowledge, and thus found the task to be simple or typical, which is consistent with heuristic processing. Second, affect clearly influenced women's judgments in Study 1 such that PA facilitated positive RE appraisals, and trends indicated that NA decreased RE appraisals. When combined with the finding that women made appraisals faster than men, this suggests that women used heuristic processing. Further, the pattern for NA is interesting because it was mirrored for resource identification. Finally, in Study 2, the results suggest that PA likely influenced SE ratings for high skilled copers. When PA was low, high skilled copers had higher ratings than low skilled copers, but when PA was high, ratings were equated. Because high skilled copers had faster RTs than low skilled copers, high skilled copers likely used heuristic, motivated, or direct access processing. I argue they used heuristic processing because the use of this strategy fits the best with the data.

Thus far I have focused on how the use of affect sheds light on processing strategies in the context of the AIM; however, I have not specifically addressed what type of affect influenced processing. Thus, I turn to the Broaden and Build Model of Positive Emotion.

Broaden and Build Model of Positive Emotion

The Broaden and Build Model of Positive Emotions predicts that PA should facilitate resource identification and lead to positive appraisals. The present studies offered no evidence that PA influenced resource listing, but offered some evidence that PA facilitated positive appraisals. Specifically, in support of the theory, PA facilitated more positive RE appraisals, particularly for men, in Study 1, and equated SE ratings for participants high and low in coping skill in Study 2.

While the present studies did not indicate that PA was involved in resource listing, it may be that the short-term lab context could not capture how PA facilitates resource building. The influence of PA in resource building is likely more of a long term process in that perhaps only with repeated experiences of PA, and the broadening of attention, do people begin to build upon their resources and develop adaptive coping strategies. In support of the idea that resource building is a long-term process, Fredrickson and Joiner (2002) found that experiences of PA and broad minded coping reciprocally influenced each other over time, and enhanced well-being.

Though resource building was not captured in the present lab studies, the findings for resource appraisals do lend support to the Broaden and Build Model and suggest that PA can facilitate positive resource appraisals in the short-term. Specifically, in Study 1, PA led to more positive RE appraisals for both men and women, and had a particular influence on men such that it increased their appraisals to be as positive as those of women. In Study 2, when PA was low, high skilled copers rated their SE more positively than low skilled copers; however when PA was high, ratings were equated. PA likely exerted these effects because it helped participants retrieve positively valenced information from memory that they used to make a judgment. These results extend upon research indicating that PA is important for coping in that people can only

cope effectively if they are able to identify their resources (Aspinwall & Taylor, 1997) and appraise their RE and SE favorably (Schwarzer, 1998).

Further, the Broaden and Build Model (Fredrickson, 1998, 2001) also indicates that NA might serve to narrow one's attentional focus, thus reducing the number of resources identified and leading to more negative appraisals. Interestingly, for women, trends indicated that NA had particular influence on listing (Studies 1 and 2) and appraisals (Study 1). This narrowed attentional focus would have been particularly influential in a short term context, which may be why NA influenced both resource identification and appraisals, though PA was only influential in appraisals. According to the Broaden and Build Model, NA might have had these effects because it narrowed women's attentional focus, reducing their ability to retrieve resources from memory. Similarly, for appraisals, NA may have made it difficult to retrieve information from memory to form an evaluation or inhibited access to positive information, which would lead to negative evaluations.

In addition, the finding that women were more susceptible to influence by NA is consistent with the literature on gender and rumination and has implications for coping. Research indicates that women are more likely to engage in rumination over their negative feelings than are men (Nolen-Hoeksema et al., 1993; Mor & Winquist, 2002), and that this rumination is strongly associated with NA (see Mor & Winquist, 2002, for a review). It is possible that females who perceived they had coping knowledge or skill, but who were also high in NA, experienced a discrepancy between their coping knowledge and feelings. Thus, they ruminated about their NA (Nolen-Hoeksema et al., 1993), which inhibited their ability to list resources, as discussed above. The findings of the present studies contribute to this literature, as they suggest that experiences of NA might be particularly detrimental for women when coping

because NA decreased the number of resources listed and led to more negative appraisals. Thus finding ways for women to decrease NA, and perhaps rumination over NA, would likely facilitate adaptive coping.

General Coping Knowledge and Gender

I defined coping knowledge as high awareness of one's coping resources and available coping strategies. The results of the present studies lend some support to my argument that women possess more general coping knowledge than men, and that this knowledge influenced processing strategies and affect use in resource identification and appraisals. However, because the familiarity measure did not differentiate men and women, and the coping skill manipulation did not influence resource listing, only appraisals, I believe that neither were adequate operationalizations of coping knowledge. The results suggest that in the context of resource listing, coping knowledge may be better conceptualized as accessibility of a large number of resources, whereas for appraisals, it is perceptions of coping skill. I argue that women do possess greater coping knowledge than men, and that this knowledge results in the easy accessibility of a larger number of resources during resource identification This argument is consistent with the literature suggesting that women use more types of coping strategies than men overall (Tamres et al., 2002) because in order to select and implement such a wide range of coping strategies, women likely have a large number of accessible resources. With regards to resource appraisals, I argue that conscious perceptions that one has coping skill explains the use of processing strategies and affect in this process. Below I describe the failure of the familiarity measure and coping skill manipulation to tap into resource accessibility and suggest how the present data may still support my contention that women possess enhanced coping knowledge relative to men.

The familiarity measure and the coping manipulation may have failed to account for the gender differences on resource identification because neither of them captured differences in the number of readily accessible resources. That is, a key aspect of general coping knowledge may be the extent to which a large number of resources are accessible in memory. The familiarity measure may have failed because self-reported amount of thinking and liking to think about resources may not tap into the number of objects classified as resources or how easily those objects are retrieved from memory, as both are likely unconscious processes. In support of this claim, Nisbett and Wilson (1977) argue that people have little conscious access to higher order mental process responsible for evaluative and judgmental processes, as well as process involving memory. Thus, assessing familiarity with resources using an explicit measure may not have captured this knowledge. The coping manipulation also may not have tapped into differences in having a large number of accessible resources. It likely influenced confidence in perceptions that one can negotiate a coping situation, but not necessarily the number of resources or speed at which they were retrieved from memory. Indeed, if coping skill were responsible for an increase in the number of accessible resources, then one would expect high skill copers to list more resources than low skill copers, however this finding did not occur. Thus, I contend that the general coping knowledge responsible for the gender difference in listing might be better operationalized as accessibility of resources, which were not captured with either the familiarity measure or coping skill manipulation.

Several lines of research on coping suggest that individuals have stores of readily accessible resources that they retrieve from memory when it is necessary to cope. For instance, the literature on proactive coping (Aspinwall & Taylor, 1997) suggests that people are able to cope with impending stressors because they can draw upon built up stores of resources when

necessary. Research by Hobfoll (1989) also suggests that people have stores of resources of resources in memory, because he argues in his resource-oriented model that people often monitor their store of resources, try to avoid resource loss, and also try to build upon resources. Let us assume that a larger number of resources are more easily accessible for women than men. When asked to list them, the greater accessibility should result in women finding the task to be simple, typical, and not require extensive cognitive resources. Because the task was simple for them, they used heuristic processing to engage in resource listing and were influenced by their affect. That is, in the present studies, NA influenced the degree to which they could readily retrieve them. In contrast, because men were not as involved in the task or perceived no specific motivational pressures to process more extensively, and because they were not influenced by their affect, they must have relied on direct access processing. Thus, they directly accessed and listed the resources that were readily accessible, but this number was not as large as that of women. To further assess whether enhanced resource accessibility explains the gender differences in listing, in the future, researchers may want to assess both quantity and ease of resource accessibility more directly. For instance, researchers could use a paradigm where people make judgments about whether or not particular objects are resources as quickly as they can. To the extent that resources are more accessible, an individual would be likely classify more objects as potential resources and also classify the objects they would use as resources quickly.

Even though the coping manipulation did not eliminate the gender differences in resource listing, it did eliminate them for appraisals. This finding may have occurred because appraising resources involves different processes than retrieving them. When appraising resources, one may use their confidence and knowledge about the resource to make judgments. Given that the coping

manipulation may have altered confidence in resources, then it makes sense that it would eliminate the gender differences that only influenced resource accessibility. This argument is consistent with the fact that high skilled copers used heuristic processing and low skilled copers used substantive processing to make appraisals, and that both used PA. With regards to future research on coping, if one is interested in changing how people evaluate their resources, it would be fruitful to investigate factors that enhance people's confidence in and their knowledge about their resources.

Limitations

Self-Reported Affect Versus Manipulated Mood. While the mood checks indicated that the mood manipulation was successful in both studies, it was only the ratings of self-reported affect that indicated affect might be involved in the processes of resource identification and appraisal. There are several possibilities why self-reported affect might have been more influential than manipulated mood. First, statistically, as there is more variability in people's ratings of their affective state compared to which mood condition they were in, it is logical that the regressions were able to detect effects that the ANOVAs could not. Second, the mood manipulation may have been too obvious (Gasper & Isbell, 2007; Schwarz & Clore, 1983), such that people attributed their feelings to the manipulation rather than to the task itself. As a result, manipulated mood would not have influenced their responses on the subsequent tasks that followed the manipulation. Third, participants may not have experienced their mood as being relevant to the task (Gasper & Bramesfeld, 2006). That is, perhaps when evaluating resources, individuals rely on feelings that are specifically experienced as relevant to coping, whereas the feelings produced by the mood manipulation were not experienced as relevant to a coping situation.

I manipulated mood to obtain more control over participants' affective state, however, I did plan to conduct regression analyses using self-reported PA and NA to test the hypothesis that PA would be more likely than NA to uniquely influence resource identification and appraisals. The use of regression allowed me to account for the variance in resource listing and appraisals that was due to the independent influence of PA and NA, as well as their interaction, which is just as important to my original hypotheses as were the effects of manipulated mood. While there was no effect of manipulated mood in the present studies, individual experiences of positive and negative affectivity did allow me to examine how affect influenced resource identification and appraisals. However, the self-report measures are problematic because they leave open the possibility that individual differences in levels or experiences of affectivity are responsible for the results. While future work can explore a more effective manipulation of mood in this context in order to establish a causal role of mood in these processes, the present studies are an important first step.

Multicollinearity Between PA and NA. PA and NA were highly correlated and, in Study 2, could not be analyzed simultaneously in the regressions due to multicolinearity. This multicolinearity might be due to several factors. For the mood check, pairs of positive and negative items (i.e., positive, negative) were listed in succession, which may have made participants' responses on the second item very dependent upon their responses to the first. Also, the mood manipulation clips might have influenced positive and negative mood reciprocally such that the positive mood clip simultaneously increased PA and decreased NA, and vice versa for the negative clip. Because PA and NA could not be analyzed together in Study 2, it was also not possible to determine if some of the results from Study 1 (e.g., the PA by NA interaction on SE ratings) would replicate in Study 2. However, I did analyze Study 1 using

the same procedure as in Study 2 (running separate regressions in which PA and NA were controlled for). The data basically yielded the same key results indicating that the findings are robust enough to hold up using both analytic techniques. Thus, despite the problem of multicollinearity, the key findings likely capture the influence of PA and NA in these processes.

Inconsistent Findings for SE and RE Appraisals. Across both studies, while I expected affect to have a similar influence on RE and SE ratings, this did not occur. In Study 1, coping knowledge and affect interacted to influence RE appraisals, but not SE appraisals; whereas in Study 2, coping knowledge and affect did not interact to influence RE appraisals, but did interact to influence SE appraisals. Regarding SE in Study 1, perhaps when participants listed resources outside of a specific coping situation, they tend to list resources they are able to use well in general. Thus, perhaps affect did not interact with gender to influence SE appraisals because all participants listed resources they were relatively confident in using, rendering this judgment less amenable to the influence of affect. For RE, however, participants might have had to think more about instances in which each resource was effective, thus increasing the possibility that affect would influence judgments via a search through memory. With regards to RE in Study 2, it is possible that affect did not influence ratings because the manipulation of coping skill for both conditions asked participants to think of resources they thought would be effective in navigating a particular situation. Thus, despite the fact that the high skill participants imagined themselves to be good at coping with the situation, whereas the low skill participants imagined themselves to be poor at coping, they were all asked to list resources they were confident would help them. Consequently, ratings of RE, or resource effectiveness, should have been less amenable to affective influences than ratings of SE, or beliefs about one's ability to use those resources well. To make appraisals of SE, participants would have had to search for more information in

memory that they could use to make a judgment, thus rendering their judgments more susceptible to the influence of affect.

Statistical Significance of Findings. It should be noted that several of the findings reported here were of marginal statistical significance; however, they were reported because they replicated across both studies, are consistent with previous research, and help shed light on the overall pattern of findings. For instance, the finding that high NA decreased the number of resources listed for females in Study 1 ($f^2 = .10$)[7], decreased the number of resources listed for high skill females in Study 2 ($f^2 = .05$), and decreased RE appraisals for females in Study 1 relative to when NA was low ($f^2 = .06$) were marginal and had small effect sizes, though they represented a consistent pattern in the data. The finding that high PA also led to more positive RE appraisals for men alone was consistent with the predictions, though statistically it only reached marginal significance ($f^2 = .07$). These results may have been marginal because they are subtle effects that require more statistical power to detect. Thus, while several of the results were marginal and had rather small effect sizes, these findings were replicated across the studies or were consistent with the literature and predictions and thus seemed to warrant discussion.

Pilot Study Versus Present Studies. There were several inconsistencies between the findings of the pilot study and the present studies. Regarding affective influences, in the pilot study affect did not influence women for resource listing, whereas NA influenced women in the present studies. Further, in the pilot, PA alone predicted more positive resource appraisals, whereas in the present studies both PA and NA were influential. There are several possible reasons for this discrepancy. First, I did not manipulate mood in the pilot study, though I did in the present studies. Thus, individual differences in the propensity to experience PA and NA may

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[7] The f^2 statistic is the conventional measure of effect size for regression analyses. Cohen (1988) suggests that effect sizes of 0.02, 0.15, and 0.35 are considered small, medium, and large, respectively.

have had an effect. For instance, if most women came into the pilot study in relatively positive moods, then perhaps the mood manipulation in the present studies increased variability in the extent with which women experienced NA, thus increasing the likelihood of finding this effect. Second, Study 2 was conducted the week the tragic shooting at the Virginia Polytechnic Institute and State University occurred, which might have influenced student perceptions of their resources in a way that resulted in different findings. For example, PA had more of a consistent influence on resource appraisals in Study 1 than it did in Study 2, which might have been attributable in part to student difficulties in maintaining feelings of PA during Study 2. It should be noted that in looking at the participant descriptions of the coping situations that they thought about for Study 2, only one person explicitly mentioned the Virginia Tech shootings. Thus, there is no concrete evidence that the Virginia Tech influenced the results of Study 2, but it cannot be ruled out as a possibility.

Differences between the pilot study and present studies in the way resource appraisals were measured could also account for some of the inconsistencies. To appraise resources in the pilot, participants rated how good each resource was for each of the six functions in the definition (i.e., "This resource helps me cope with and fix the bad things in life"), rather than rate their global RE and SE, as in the present studies. Perhaps the complex nature of the questions in the pilot led both men and women to use substantive processing, which is consistent with the fact that both used affect to make appraisals. Conversely, judgments of RE and SE in the present studies were simplified. Thus, for women and high skilled copers, due to their high coping knowledge, it is possible that they used heuristic processing to make judgments. However, due to their low coping knowledge, men and low skilled copers continued to use substantive processing.

Possible Gender Differences in Coping Context. Differences between men and women in the types of coping contexts they thought of during the listing task and in awareness of social resources in the present studies could also account for some of the findings. For instance, because women have more knowledge of coping strategies, they may have thought of complex coping contexts that required more resources than did those of men. Thus, when asked to list resources, the fact that women think about coping in complex ways in combination with the fact that they perceive coping to be typical or familiar might have led women to use affect as a cue about how many resources they should list and how to appraise them, which is consistent with the use of heuristic processing. For men, because they think about coping in a less complex way and were not motivated to process extensively while listing, they might have used a direct access strategy to list the first resources that came to mind. However, when asked to appraise resources, in order to do the task they had to systematically think about the use of each resource, which prompted the use of substantive processing. A second possibility is that, women may also have listed more resources because they listed more social support resources than men, which is supported by previous research (Tamres et al., 2002; Greenglass, 2002).

Both the possibility that women thought of more complex coping situations and were able to list more social resources could explain why women listed more resources than men overall and are consistent with my arguments about the processing strategies they likely used to complete the tasks. Note that while visual inspection of the resources listed by men and women in both studies lend some support to the idea that women listed more specific social resources than men, visual inspection of the coping situations described in Study 2 does not support the idea that women thought of more complex coping situations than men. While the coping skill manipulation in Study 2 should have increased confidence in one's resources for those in the

high skill condition relative to low skill, it should not have led to differences in the complexity of the coping situations listed by high or low skill copers. In sum, it is possible that differences in the types of coping contexts that men and women thought of while listing resources along with perceptions of coping skill, rather than differences in general coping knowledge, can account for some of the findings, though future research should address this possibility more systematically.

Concluding Comments.

This research was a first step in examining how gender and coping knowledge might moderate the way in which affect influences people's ability to identify resources and make appraisals of them. The findings suggest that general coping knowledge may underlie the difference between males and females in their use of processing strategies and affect during resource identification and appraisals, but the findings were not as straightforward as expected. I predicted that men would use substantive processing and hence affect, and women would use a direct access strategy and hence not use affect to list (H2a) and appraise (H2b) their resources, though there was a competing prediction that both men and women would use substantive processing to appraise resources (H3). The data suggest that men used a direct access strategy and affect for listing and substantive processing for appraisals, whereas women use heuristic processing and affect for both. Additionally, when affect was used, it was predicted that PA would be more influential than NA (H1ab). While the data indicated that PA alone influenced men, both NA and PA influenced women. Finally, though the familiarity measure did not help explain the gender differences (H2ab-iii), coping skill did replace the gender difference for appraisals (H2ab-iv).

With respect to the Broaden and Build Model, several patterns in the data were consistent with the model, though the prediction that PA would be influential in enhancing resource listing

(H1a) and appraisals (H1b), and that NA would not be as influential, was not entirely supported. Specifically, for resource appraisals, PA led to more positive appraisals overall, equated the positivity of appraisals for women and men, and equated the positivity of appraisals for high and low skilled copers. The unexpected finding that women listed fewer resources when NA was high relative to when NA was low also supports the model because Fredrickson (1998, 2001) argues that NA might serve to narrow attentional focus. In sum, while the present data do not suggest that PA facilitates resource building in a short-term context, PA can help people feel more confident in the effectiveness of their resources and ability to use them in the short-term, which could level the playing field for people with high and low coping knowledge.

Let's turn back for a moment to our senior who is looking for a job, often a new experience for those graduating from college, and one where perceptions of coping skill are lacking. To successfully navigate this situation and cope with the stress, our student must identify available resources and positively evaluate them. The results of this investigation suggest that if our student is female, she will rely on heuristic processing, and increased levels of NA will lessen her ability to think of resources. In contrast if our student is male, he will use direct access and not be influenced by affect when thinking of resources. More importantly, for both men and women, cultivating feelings of PA and coping skill will likely lead to positive evaluations of resources. Women make these positive evaluations quickly, whereas men make them after a more extensive search through information in memory. While more research must examine the processes of resource identification and appraisals, this investigation is an important first step in beginning to understand these processes. The present studies indicate that men and women may differ in how resources are stored in and retrieved from memory. They also shed

light on how PA and perceptions of coping skill can facilitate the retrieval of positive resource

appraisals from memory, which can help people cope with stress and achieve positive outcomes.

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Appendix A

Study 1 Listing Familiarity

Instructions: Thinking about the definition of resources that you just read, please answer the following questions about using the scale provided.

1	2	3	4	5	6	7	8	9	10
Not at all									Very much

1. I had never really thought about my resources before. (reverse scored)

2. I often think about the resources I have available to me.

3. Overall, I have a lot of experience thinking about my resources.

4. I often think about the tools/resources I can use to cope with stress.

5. I often think about the tools/resources I can use to achieve my goals.

6. I like to think of a variety of ways to cope with stress.

7. I like to think of a variety of ways to achieve my goals.

8. I am quick to think of resources that will help me cope with stress.

Appendix B

Media Questionnaire

Have you seen this clip before? no   yes

If yes, do you know the title of the video it was from, and what is it? _____

If yes, did you see this clip (circle one):   in another study   on your own   both

Based on the video clip that you saw, do you think you would like the show or movie from which the scene was taken?

0	1	2	3	4	5	6	7	8	9	10
Not at all										Very much

How much do you feel the characters interacted with one another? (0 *not at all* to 10 *very much*)

How **pleasant** do you feel right now, at this moment? (0 *not at all* to 10 *very much*)

How **unpleasant** do you feel right now, at this moment? (0 *not at all* to 10 *very much*)

Based on what you saw, how interested are you in seeing the next scene? (0 *not at all* to 10 *very much*)

Would you watch this clip again if given the opportunity? (0 *definitely no* to 10 *definitely yes*)

How **positive** do you feel right now, at this moment? (0 *not at all* to 10 *very much*)

How **negative** do you feel right now, at this moment? (0 *not at all* to 10 *very much*)

Do you think this clip is an accurate depiction of real-life? (0 *not at all* to 10 *very much*)

Do you think that this clip highlights what is positive and good about the entertainment business or what is negative and bad about it? (0 *negative and bad* to 10 *positive and good*)

How **anxious** do you feel right now, at this moment? (0 *not at all* to 10 *very much*)

How **happy** do you feel right now, at this moment? (0 *not at all* to 10 *very much*)

Would you recommend this show to a friend? (0 *not at all* to 10 *very much*)

Appendix C

Specific Appraisals

Instructions: Now you are going to see each of the resources you listed and will be asked to answer some questions about each. Please rate your agreement with the following statements using the scale below.

0	1	2	3	4	5	6	7	8	9	10
Not at all										Very much

1. This resource helps me achieve my goals. (response efficacy)

2. This resource is effective. (response efficacy)

3. I am able to use this resource. (self-efficacy)

4. I am good at using this resource. (self-efficacy)

Appendix D

Study 2 Manipulation Check

Instructions: Rate the amount of experience you have coping with the situation you imagined.

0	1	2	3	4	5	6	7	8	9	10
Little to none										A great deal

Rate the extent to which coping with the situation you imagined is typical or common for you.

(0 *not at all* to 10 *very much*)

Rate the extent to which you think you are good at coping with the situation you imagined. (0 *not at all* to 10 *very much*)

Rate the extent to which you think you are prepared to cope with the situation you imagined. (0 *not at all* to 10 *very much*)

Rate the how easy it was for you to imagine coping in this situation. (0 *not at all* to 10 *very much*)