EXAMINING SELF-EFFICACY AS A MODERATOR OF THE RELATIONS BETWEEN DIMENSIONAL PERFECTIONISM AND DIETARY RESTRAINT, BINGE EATING, AND BINGE DRINKING

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ABSTRACT

Stacy L. Lin: Examining Self-Efficacy as a Moderator of the Relations Between Dimensional Perfectionism and Dietary Restraint, Binge Eating, and Binge Drinking
(Under the direction of Anna Bardone-Cone)

Dimensions of perfectionism have been linked to the disordered eating and binge drinking in prior research, with evidence that they may be differentially related to these behaviors. Self-efficacy is conceptually related to perfectionism, as perfectionism represents the level at which an individual sets her goals, while self-efficacy represents the individual's judgment of whether she may attain those goals. Few studies have considered self-efficacy as a possible moderator of the relations between dimensions of perfectionism and disordered eating/binge drinking. We considered how dimensional perfectionism and self-efficacy may interact to identify and predict engagement in these behaviors. Using an existing dataset of 406 female undergraduates, we investigated whether self-efficacy moderates the relations between dimensional perfectionism and disordered eating/binge drinking. Overall, self-efficacy was not supported as a moderator of the relations between dimensional perfectionism and disordered eating. However, it moderated the relations between one dimension of perfectionism and a measure of binge drinking.

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INTRODUCTION

College women are at risk for engaging in unhealthy behaviors that potentially carry serious consequences for both physical and mental health. In particular, two types of these unhealthy behaviors, disordered eating and binge drinking, are notably prevalent and often co-occur in this group (Ferriter & Ray, 2011; Gadalla & Piran, 2007). Disordered eating can have physical effects such as insufficient intake of essential nutrients, chronic fatigue, electrolyte imbalances, and menstrual dysfunction (Beals & Manore, 1999; Gibbons, Wertheim, Paxton, & Petrovich, 1995). Disordered eating behaviors are also associated with higher risk of developing a clinical eating disorder, as well as engagement in other unhealthy behaviors such as smoking and substance use (Fisher, Schneider, Pegler, & Napolitano, 1991). Additionally, disordered eating behaviors are associated with adverse psychological effects such as depression, emotional instability, and feelings of failure (Beals & Manore, 1999). Like disordered eating, excessive alcohol consumption has also been linked to a number of negative consequences in college women, including physical injury or death from alcohol-related incidents (Hingson, Heeren, Zakocs, Kopstein, & Wechsler, 2002), increased likelihood of sexual victimization (Lawyer, Resnick, Bakanic, Burkett, & Kilpatrick, 2010), and engagement in risky sexual behavior (Bersamin, Paschall, Saltz, & Zamboanga, 2012).

Given the prevalence of disordered eating and binge drinking in college students, their frequent co-occurrence, and their considerable negative health consequences, it is important to investigate common risk factors that may increase these individuals' vulnerability to engagement in these unhealthy behaviors. By identifying risk factors, we can then identify individuals at risk

for engaging in these behaviors and better target prevention and intervention efforts toward more specialized groups (Striegel-Moore & Bulik, 2007). In this study, we consider how perfectionism and self-efficacy may combine to identify and predict elevated levels of disordered eating and binge drinking.

Prevalence and Co-occurrence of Disordered Eating and Binge Drinking in College Women

College women have been found to engage in disordered eating behaviors at high rates across a number of studies (e.g., Berg, Frazier, & Sherr, 2009; Krahn, Kurth, Gomberg, & Drewnowski, 2005; Lynch, Everingham, Dubitzky, Hartman, & Kasser, 2000; Schwitzer, Rodriguez, Thomas, & Salimi, 2001). One study by Berg et al. (2009) found that 49% of their sample of female undergraduates at a large Midwestern university reported engaging in at least one disordered eating behavior one or more times per week. Krahn and colleagues found that about 22% of their sample of college women were dieting extremely enough to be characterized as "at risk" for an eating disorder, while an additional 44% were "intense" dieters (Krahn et al., 2005).

In addition to reporting high rates of disordered eating, college women also report high rates of binge drinking (e.g., Dawson, Grant, Stinson, & Chou, 2004; Hingson et al., 2002; Nelson, Xuan, Lee, Weitzman, & Wechsler, 2009; Wechsler et al., 2002). In 2001, Wechsler and colleagues (2002) found a 40.9% prevalence of binge drinking reported by female college students sampled from 119 four-year colleges in the United States. Recent reports indicate that not only is the prevalence of binge drinking in college women high, it has also been increasing in the past few decades. An examination of drinking patterns of youth in the United States between 1979 and 2006 revealed an upward trend in binge drinking in young women, with college women 21-23 years old showing larger increases in binge drinking rates than non-students in the

same age group (Grucza, Norberg, & Bierut, 2009). In 2006, the binge drinking threshold for women was lowered from five or more drinks to four or more drinks per episode, further increasing the number of women who reported what is considered to be a dangerous level of drinking (Chavez, Nelson, Naimi, & Brewer, 2011).

Research suggests that disordered eating and binge drinking often occur in tandem in college women, in both clinical and subclinical groups (e.g., Gadalla & Piran, 2007; Krahn et al., 2005). For example, Piran and Robinson (2011) found a significant association between a binge eating, dieting, and purging behavior cluster and a binge drinking, drinking with negative consequences, and cocaine behavior cluster, while Baker and colleagues (2010) found that women with anorexia nervosa (AN) were twice as likely as women without AN diagnoses, and women with bulimia nervosa (BN) were two to three times as likely as women without BN diagnoses, to have alcohol use disorders. Furthermore, a meta-analytic review of the co-occurrence of eating disorders and alcohol use disorders by Gadalla and Piran (2007) found that the strongest associations between the two were found when study participants were drawn from student populations.

Perfectionism

Perfectionism has been consistently identified as an important factor affecting the development and maintenance of eating disorders (e.g., Bardone-Cone et al., 2007; Cassin & von Ranson, 2005; Egan, Wade, & Shafran, 2011; Stice, 2002). Research has found that both individuals with AN and individuals with BN are likely to show clusters of personality traits that include perfectionism (Cassin & von Ranson, 2005). A major component of our theories about the nature of both AN and BN is a shared over-valuation of body weight and body shape as a basis for self-worth (Striegel-Moore & Bulik, 2007), where affected individuals will often strive

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for an "ideal" or "perfect" body and equate it with self-worth. This aspect of holding oneself to an unrealistically high standard has been characterized as intrinsically related to perfectionism (Fairburn, Cooper, & Shafran, 2003) and may lead individuals to set goals for themselves which they are unable to attain. An important consequence of perfectionism is that when an individual fails to attain her unrealistic goals, this causes a negative self-evaluation, which can then trigger further eating pathology (Fairburn et al., 2003).

While previously conceptualized as a unidimensional construct, new multidimensional measures of perfectionism were created during the early 1990s, which consequently led to increased attention to multidimensional perfectionism in the literature. and the identification of varying relations between different dimensions of perfectionism and psychopathology. Most of the multidimensional perfectionism/psychopathology research has focused on anxiety and depression (e.g., DiBartolo, Li, & Frost, 2008; Saboonchi, Lundh, & Ost, 1999), with less known regarding dimensions of perfectionism and eating disorders.

The literature on eating disorders has most commonly used the unidimensional perfectionism subscale of the Eating Disorder Inventory (EDI; Garner, Olmsted, & Polivy, 1983) to assess perfectionism. Though it was created as a unidimensional measure, confirmatory factor analyses now suggest that it might be better understood as a two-factor model of perfectionism, comprising the factors of self-oriented perfectionism and socially prescribed perfectionism (Joiner & Schmidt, 1995; Sherry, Hewitt, Besser, McGee, & Flett, 2004).

As our understanding of perfectionism has progressed, several multidimensional measures of perfectionism have been created to capture different dimensions of the construct. One of the most commonly used measures of multidimensional perfectionism is the Multidimensional Perfectionism Scale (MPS; Hewitt & Flett, 1991a), which separates

perfectionism into three dimensions: self-oriented perfectionism (SOP), representing self-imposed high standards; socially prescribed perfectionism (SPP), representing perceived high standards imposed by others; and other-oriented perfectionism (OOP), representing high expectations for others. This measure is of particular interest as the first two dimensions it was created to capture have also been found in the older EDI-Perfectionism subscale and thus may serve as a link between the older unidimensional research and more recent multidimensional research.

Attempts have been made to classify perfectionism dimensions into the categories of "maladaptive" and "adaptive" based on their relations to negative outcomes. Investigations of self-oriented perfectionism are mixed in their conclusions (Gilbert, Durrant & McEwan, 2006), as it seems that whether self-oriented perfectionism is linked to positive or negative outcomes may be dependent on the specific outcomes examined. Gilbert et al. (2006) found that self-oriented perfectionism was significantly related to self-criticism, and some studies have uncovered an association between self-oriented perfectionism and negative outcomes such as depression and poor adjustment (Hewitt & Flett, 1991b; Hewitt & Flett, 1993). Other studies fail to find a consistent association with anxiety and depression (Bardone-Cone et al., 2007; Dunkley & Blankstein, 2000). Still other research suggests that high self-oriented perfectionism may be adaptive and lead to more progress toward goals (Klibert, Langhinrichsen-Rohling, & Saito, 2005; Powers, Koestner, Zuroff, Milyavskaya, & Gorin, 2011). Literature investigating socially prescribed perfectionism has yielded more consistent results and studies largely characterize it as maladaptive, with links to depression, anxiety, guilt, self-blame, and self-criticism (Bardone-Cone et al., 2007; Gilbert et al., 2006; Hewitt & Flett, 1993; Klibert et al., 2005; Stoeber, Feast, & Hayward, 2009). Other-oriented perfectionism has not been found to relate strongly to

negative outcomes such as depression and disordered eating (Gilbert et al., 2006; Pratt, Telch, Labouvie, Wilson, & Agras, 2001).

The limited research on perfectionism dimensions and eating disorders indicates that these dimensions may be differentially linked to specific eating disorder symptoms. Several studies have suggested that self-oriented perfectionism may be related to elevated symptoms of disordered eating (Bardone-Cone, 2007; Bastiani, Rao, Weltzin, & Kaye, 1995; Cockell et al., 2002; Hewitt, Flett, & Ediger, 1995; Watson, Raykos, Street, Fursland, & Nathan, 2011). More specifically, studies have found that self-oriented perfectionism is strongly related to symptoms of AN, particularly highlighting the symptom of dietary restraint (Bardone-Cone, 2007; Chang, Ivezaj, Downey, Kashima, & Morady, 2008; McLaren, Gauvin, & White, 2001). Further, in two separate studies, participants with AN scored significantly higher on self-oriented perfectionism, as well as socially prescribed perfectionism, than normal controls (Bastiani et al., 1995; Cockell et al., 2002). Both self-oriented perfectionism and socially prescribed perfectionism have been found to correlate with symptoms of BN (Bardone-Cone, 2007; Chang et al., 2008), although in one study socially prescribed perfectionism no longer predicted unique variance in symptoms of bulimia after controlling for negative affect (Bardone-Cone, 2007). Though existing research suggests a link between self-oriented perfectionism, socially prescribed perfectionism, and disordered eating symptoms, further study is necessary to clarify how each of these dimensions of perfectionism relates to specific disordered eating behaviors.

Research on the link between perfectionism and binge drinking is even more limited. The few studies that have investigated this relation were inconsistent in their findings. One study found a negative relation between unidimensional perfectionism and drinking frequency in a mixed-gender sample of undergraduates (Pritchard, Wilson, & Yamnitz, 2007); another study,

also with undergraduates, found the same relation between self-oriented perfectionism and binge drinking (Flett et al., 2008). In contrast, some research has found a positive relation between self-oriented perfectionism and alcohol abuse, but no relation between socially prescribed perfectionism and alcohol abuse (Hewitt & Flett, 1991a). These inconclusive and limited findings indicate that further study is necessary to clarify the relation between perfectionism and binge drinking.

Though preliminary evidence suggests a link between dimensional perfectionism and both disordered eating and binge drinking, there is a lack of research on potential moderators of the relation between dimensional perfectionism and eating disorder symptoms and binge drinking. This is an important area to investigate as not considering moderators may obscure the relations between different perfectionism dimensions and disordered eating. Identifying moderators will help us better understand the nature of disordered eating and binge drinking, as well as identify possible targets of prevention and intervention efforts. For example, past research has examined how unidimensional perfectionism interacts with feeling overweight to identify elevated levels of bulimic symptoms (Joiner, Heatherton, Rudd, & Schmidt, 1997). Regarding alcohol use, stress may interact with socially prescribed perfectionism to increase difficulty controlling drinking when experiencing negative affect (Bardone-Cone, Brownstone, Higgins, Harney, & Fitzsimmons-Craft, 2012). Furthermore, Flett and colleagues (2008) posit that there may be a particular subset of highly perfectionistic individuals (i.e., identified by a moderator) who are more vulnerable to developing drinking problems.

Self-efficacy

One potential moderator of the relation between perfectionism and the unhealthy behaviors of disordered eating and binge drinking is self-efficacy. In the literature, researchers

have described self-efficacy in two ways: general self-efficacy and domain-specific self-efficacy. General self-efficacy can be thought of as a trait reflecting an individual's broad expectation that he/she will be able to perform tasks successfully across a number of situations (e.g., Eden & Zuk, 1995; Sherer et al., 1982); domain-specific self-efficacy, in contrast, refers to an individual's perception of her/his ability to control her/his own engagement in particular behaviors such as binge eating and binge drinking, or to achieve goals in specific situations (Bandura, 1978).

Both general and domain-specific self-efficacy have been linked to disordered eating behaviors in a number of studies, alone and in interactions with other factors (e.g., Ackard, Cronemeyer, Franzen, Richter, & Norstrom, 2011; Bardone, Perez, Abramson, & Joiner, Jr., 2003; Etringer, Altmaier, & Bowers, 1989; Gormally, Black, Daston, & Rardin, 1982; Striegel-Moore, Silberstein, Frensch, & Rodin, 1989). For example, Miller and colleagues found that lower general self-efficacy was associated with more severe binge eating in a sample of overweight individuals (Miller, Watkins, Sargent, & Rickert, 1999). Lower general self-efficacy has also been associated with higher levels of disordered eating in a clinical sample of participants with AN versus healthy controls (Paterson, Power, Yellowlees, Park, & Taylor, 2007). MacNiel and colleagues found lower coping self-efficacy to be associated with overall higher eating disorder attitudes and behaviors in a nonclinical sample of undergraduates (MacNiel, Esposito-Smythers, Mehlenbeck, & Weismoore, 2012). Interestingly, Cain, Bardone-Cone, Abramson, Vohs, and Joiner (2008) found that individuals with high weight/shape self-efficacy exhibited the most dieting in the context of being interpersonally perfectionistic, low in interpersonal self-efficacy, and high in interpersonal stress. Thus, the relation between self-efficacy and specific disordered eating behaviors (i.e., dieting and binge eating) may differ.

Self-efficacy has also been linked to frequency and level of alcohol consumption (e.g., Blume, Schmaling, & Marlatt, 2003; Ilgen, Tiet, Finney, & Moos, 2006; Lozano & Stephens, 2010; Norman, 2011; Oei, Hasking, & Phillips, 2007; Schulenberg, Wadsworth, O'Malley, Bachman, & Johnston, 1996). In their review of self-efficacy in substance use disorder treatment, Kadden and Litt (2011) noted that the vast majority of alcohol studies that have measured self-efficacy have found low self-efficacy, both general and domain-specific, to be significantly associated with more frequent, higher volume alcohol consumption. Oei and colleagues (2007) found that lower general self-efficacy was significantly related to the volume and frequency of alcohol consumption in a clinical sample of participants, but not in their community comparison sample. In another study, Blume, Schmaling, and Marlatt (2003) found that lower drinking self-efficacy, or belief in one's ability to resist alcohol use, was significantly related to more binge drinking episodes at baseline and predicted more binge drinking episodes at follow-up in their sample of young adults.

Self-efficacy is of particular interest in conjunction with perfectionism as it represents an individual's judgment of her own ability to attain goals, while perfectionism affects the level at which an individual sets her goals. According to Bandura and Cervone (1986), whether discrepancies between an individual's goals and her actual level of achievement are interpreted as motivating or discouraging depends on her perception of her ability to close those gaps, or in other words, her self-efficacy. Thus, someone high in self-efficacy who observes a discrepancy between her goals and achievement would be motivated to try harder to attain them, while someone low in self-efficacy who observes this same gap might instead be discouraged from trying harder. Perfectionism may also influence an individual's level of self-efficacy: Burns (1980) posits that perfectionists are more likely to have low self-efficacy, because they

repeatedly fall short of their excessively ambitious goals, which causes them to feel helpless and decreases motivation. Particular combinations of self-efficacy and perfectionism may have different implications for an individual's behavior; for example, an individual with high perfectionism and high self-efficacy might be motivated to try harder to attain her high standards, whereas an individual high in perfectionism but low in self-efficacy might be discouraged by the belief that she does not have the ability to meet those high standards. While a body of research supports domain-specific self-efficacy (e.g., high/low self-efficacy to abstain from drinking) as an important focus in understanding behavioral outcomes, we argue that understanding the effects of general self-efficacy is also important. Indeed, the global nature of general self-efficacy, that is, how capable one feels about meeting goals in general, means it has the potential to explain and predict a number of behaviors across different domains instead of a single focal behavior. Thus, this study focuses on general self-efficacy, in relation to dimensional perfectionism and unhealthy behaviors; hereafter, "self-efficacy" refers to general self-efficacy.

Considering the influence self-efficacy can have on individuals' behavior, it seems reasonable to theorize that we could observe two different pathways through which perfectionism dimensions interact with self-efficacy to identify levels of and potentially predict disordered eating and binge drinking. High self-oriented perfectionism combined with high self-efficacy would represent an individual having high standards for herself, and feeling that she is able to achieve those standards. This could be predictive of higher levels of dieting/restraint because the individual might have the interest in striving toward obtaining a physical beauty ideal of thinness as one index of perfectionism, as well as confidence in her ability to do so, which might facilitate successful dieting. In contrast, high self-oriented perfectionism or socially prescribed perfectionism combined with low self-efficacy would represent an individual feeling

that she has high standards for herself or others have high standards for her, but that she is unable to achieve those standards. This could lead to negative affect (such as discouragement, depression, and anxiety) due to the large discrepancy between the high standards and her self-perception of her ability, which might lead to increased binge eating and binge drinking as ways to cope with those negative feelings. According to Heatherton & Baumeister's escape theory of binge eating, binge eating functions as an escape from the aversive self-awareness that results from falling short of standards (Heatherton & Baumeister, 1991). That is, when individuals fall short of standards set either by themselves or perceived to have been set by others, as might occur for someone high in perfectionism and low in self-efficacy, this leads to an increase in aversive self-awareness. During this state, the individual becomes acutely conscious of negative views of the self and concern over others' perceptions of them. This experience of aversive self-awareness is accompanied by an increase in negative affect, which individuals are motivated to escape due to the discomfort it causes. Binge eating serves as a way through which individuals may escape their heightened negative affect, due to narrowing attention to the immediate physical environment and avoiding high-level thought (e.g., about the self). The tension reduction hypothesis of alcohol use positions binge drinking in a similar way, as a means through which individuals may escape heightened negative affect (Conger, 1956). A proposed model, based on escape theory (Heatherton & Baumeister, 1991), through which high dimensional perfectionism in combination with low self-efficacy may lead to binge eating and binge drinking is depicted in Figure 1. Of note, in the current work we focus on distal factors (e.g., perfectionism), rather than proximal factors (e.g., negative affect), in relation to the outcomes of binge eating and binge drinking.

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Currently, research investigating the moderating effect that self-efficacy may have on the relation between dimensional perfectionism and disordered eating symptoms and binge drinking is minimal. Some research supports the hypothesis that self-efficacy acts as a moderator of the relation between dimensional perfectionism and disordered eating symptoms. For example, Bardone-Cone and colleagues (2008) found that in a sample of individuals with both subthreshold and full diagnoses of BN, three-way interactions that included self-efficacy, dimensional perfectionism, and weight/shape concern were significantly associated with binge eating and vomiting frequency. To our knowledge, no work has examined how perfectionism and self-efficacy may combine to identify and predict binge drinking. More research is needed to examine the relation between dimensional perfectionism, self-efficacy, and the behaviors of food restriction, binge eating and binge drinking.

Current Study

The current study aims to investigate whether self-efficacy acts as a moderator of the relation between self-oriented perfectionism and socially prescribed perfectionism dimensions of perfectionism and two broad domains of unhealthy behaviors: disordered eating and alcohol use. The study uses a longitudinal design and a sample of undergraduate women, a group known to endorse high rates of disordered eating behaviors and alcohol use. Novel aspects of this study include the examination of perfectionism dimensions/self-efficacy interactive models in relation to dietary restraint, binge eating, and alcohol use, both cross-sectionally and longitudinally.

We propose that dimensional perfectionism will interact with self-efficacy to differentially predict dietary restraint, binge eating, and alcohol use as follows:

Hypothesis 1: Individuals high in self-oriented perfectionism and high in self-efficacy will demonstrate the highest levels of dietary restraint concurrently as well as the most elevated

levels of dietary restraint prospectively than any other combination of self-oriented perfectionism self-efficacy. In an exploratory fashion, we will also examine whether self-oriented perfectionism and self-efficacy interact to predict changes in dietary restraint; no specific hypothesis is made for this exploratory aim.

Hypothesis 2: Individuals high in self-oriented perfectionism or socially prescribed perfectionism but low in self-efficacy will demonstrate the highest levels of binge eating and binge drinking concurrently as well as the most elevated levels of binge eating and binge drinking prospectively. Similar to Hypothesis 1, we will also examine whether self-oriented perfectionism or socially prescribed perfectionism interact with self-efficacy to predict changes in binge eating and binge drinking; no specific hypotheses are made for this exploratory aim.

METHOD

Participants

Participants were 426 undergraduate women randomly selected from introductory psychology classes at a large, public Midwestern university, with the only inclusion criterion of being female. Of the 426 participants who began the study, 20 dropped out or were excluded from analyses due to reasons such as illness and habitually late data, leaving a group of 406 completers (95.3% retention rate). Descriptive statistics and analyses will refer to this group.

Participants who completed the study ranged in age from 17 to 25 years old (M=18.6 years, SD = .97 years). Self-reported race/ethnicity was 92.4% Caucasian, 3.2% Asian, 2% Hispanic, 1.2% African-American, and 1.1% other races/ethnicities.

Procedure

Potential participants were contacted by phone and described the study; if they were interested, they were enrolled and scheduled for an in-person baseline session. At baseline in small groups, participants completed questionnaires that included self-report measures of perfectionism, self-efficacy, dietary restraint, binge eating, and binge drinking. The same measures were administered at Time 2, 11 weeks after baseline, again in small groups. There were also weekly questionnaires completed between these two time points; those data are not included in this study. Participants received course credit for their participation. Prior to enrollment, participants were told that they would only receive course credit if they participated through the entire course of the study, which contributed to the high retention rate.

Measures

      Perfectionism. Dimensional perfectionism was measured at baseline using the

Multidimensional Perfectionism Scale (MPS; Hewitt & Flett, 1991a). Analyses in this study used

the Self-Oriented Perfectionism (SOP; 15 items, 1 = *strongly disagree* to 7 = *strongly agree*) and

Socially Prescribed Perfectionism (SPP; 15 items, 1 = *strongly disagree* to 7 = *strongly agree*)

subscales. Subscales were scored by summing individual item responses, with higher scores

reflecting higher levels of each subscale construct. The self-oriented perfectionism subscale

assesses self-imposed high standards, while socially prescribed perfectionism refers to perceived

excessively high standards imposed by others. The third subscale, other-oriented perfectionism,

has not been found to relate to eating behaviors or binge drinking, and was excluded (Flett et al.,

2008; Hewitt et al., 1995). The MPS subscales have demonstrated adequate reliability, with

Cronbach's alpha of .86 for self-oriented perfectionism and .87 for SPP in an undergraduate

sample (Hewitt & Flett, 1991a). The MPS subscales have also demonstrated adequate construct

validity in a sample of undergraduates: self-oriented perfectionism was significantly correlated

with several self-related constructs, including high self-standards and self-criticism, while SPP

was significantly correlated with measures of social behaviors including need for approval,

external locus of control, and fear of negative social evaluation (Hewitt & Flett, 1991a). In the

current study, the alphas at baseline were .89 for self-oriented perfectionism and .85 for SPP.

      Dimensional perfectionism was also measured at baseline using the perfectionism

subscale (EDI-Perfectionism; six items, 1 = *never* to 6 = *always*) of the Eating Disorder

Inventory (EDI; Garner et al., 1983). The EDI-Perfectionism subscale has demonstrated adequate

reliability, with Cronbach's alphas greater than .70 (Eberenz & Gleaves, 1994; Garner et al.,

1983), and convergent validity through its high correlation with a measure of interpersonal

<div align="center">15</div>

sensitivity (Garner et al., 1983). Though the EDI-Perfectionism was not originally developed as a dimensional measure, confirmatory factor analyses in undergraduate samples have since suggested that the EDI-Perfectionism is best represented by a two-factor structure reflecting self-oriented perfectionism and socially prescribed perfectionism, consisting of three items each (Joiner & Schmidt, 1995; Sherry et al., 2004). In this study, these factors were scored by summing individual item responses, with higher scores reflecting higher levels of each factor construct. In the current study, the Cronbach's alphas at baseline were .73 for the self-oriented perfectionism factor and .70 for the socially prescribed perfectionism factor.

Self-efficacy. Self-efficacy was measured at baseline using the General Self-Efficacy subscale (GSES; 17 items, 1 = *disagree* to 5 = *agree*) of the Self-Efficacy Scale (SES; Sherer et al., 1982). This measure was scored by summing individual item responses, with higher scores reflecting higher levels of self-efficacy. The General Self-Efficacy subscale has demonstrated good reliability in a sample of undergraduates, with Cronbach's alpha of .86. It has also demonstrated construct validity through its significant correlations with other personality measures of locus of control, personal control, and self-esteem (Sherer et al., 1982). In the current study, the Cronbach's alpha for this subscale at baseline was .87.

Dietary restraint. Dietary restraint was measured at baseline and at Time 2, using the Cognitive Restraint subscale (21 items, true-false and 1 = *unlikely* to 4 = *very likely*) of the Three Factor Eating Questionnaire (TFEQ-R; Stunkard & Messick, 1985). The items in this subscale assess for conscious control of eating behavior, with higher scores reflecting higher levels of cognitive dietary restraint. The TFEQ-R subscale has demonstrated good reliability, with Cronbach's alpha = .93 in a combined sample of very restrained eaters, very unrestrained eaters, and an intermediate group (Stunkard & Messick, 1985). The TFEQ-R has demonstrated

construct validity, as restraint scores were significantly negatively correlated with daily caloric intake, and positively correlated with more lifetime episodes of dieting (Laessle, Tuschl, Kotthaus, & Pirke, 1989). In the current study, the Cronbach's alpha for this subscale was .91 at baseline and .93 at Time 2.

Dietary restraint was also measured with the Restraint subscale (five items, 0 = *no days in past 28 days* to 6 = *every day in the past 28 days*) of the Eating Disorder Examination— Questionnaire (EDE-Q-R; Fairburn & Beglin, 1994), a self-report measure adapted from the Eating Disorder Examination (EDE; Fairburn & Cooper, 1993). The subscale was scored by computing a mean of the individual item responses, with higher scores reflecting higher levels of dietary restraint behaviors. The EDE-Q-R has demonstrated adequate reliability, with Cronbach's alpha = .85 in a sample of undergraduate women (Luce & Crowther, 1999). It has also demonstrated concurrent validity, with scores on this subscale correlating significantly with scores on the Restraint subscale of the EDE in community samples of women (Fairburn & Beglin, 1994; Mond, Hay, Rodgers, Owen, & Beumont, 2004). In the current study, Cronbach's alpha for the EDE-Q-R at was .83 at baseline and .84 at Time 2.

Binge eating. Binge eating was measured at baseline and Time 2, using the seven-item Bulimia subscale of the EDI (EDI-Bulimia, 1 = *never* to 6 = *always*; Garner et al., 1983). Items in this subscale focus on binge eating behavior and attitudes. This measure was scored by summing individual item responses, with higher scores reflecting higher levels of binge eating. The EDI-Bulimia subscale has demonstrated adequate reliability, with a Cronbach's alpha = .83 in a sample of female undergraduates (Garner et al., 1983). The EDI-Bulimia has demonstrated criterion validity as scores on this subscale were significantly correlated to clinician ratings in a

sample of female AN patients (Garner et al., 1983). In the current study, the alpha for this subscale was .82 at baseline and .79 at Time 2.

Binge eating was also measured using an item from the Eating Disorder Examination Questionnaire (EDE-Q; Fairburn & Beglin, 1994) at baseline and Time 2. Participants reported on the number of days out of the past 28 in which they engaged in binge eating ("On how many days of the past 28 days have you had episodes of overeating…during which you experienced a loss of control?").

Alcohol use. Alcohol use was measured at baseline and Time 2. Items were developed for this study based on the alcohol and binge drinking literature, with three items structured to provide information related to binge drinking. At baseline and Time 2, participants reported on the number of days they drink in a typical week along with the number of drinks they drink on a typical drinking occasion, permitting the computation of the typical number of alcoholic beverages consumed per week. A drink was defined as a glass of wine, a bottle or can of beer, a bottle of wine cooler, a shot glass of liquor, or for mixed drinks, 1.5 ounces of liquor per drink. Additionally, participants reported at both baseline and Time 2 the typical number of occasions per week they drank enough to feel pretty high, with the response options of 1 = *on no occasions*, 2 = *on few occasions*, 3 = *on about half the occasions,* 4 = *on most occasions*, and 5 = *on nearly all occasions*. They also reported at baseline and Time 2 on how many times, in a typical week, they had five or more drinks in a row; response options were 1 = *none*, 2 = *once*, 3 = *twice*, 4 = *three times*, 5 = *four to five times*, and 6 = *six times or more*. In this document, these measures will be referred to as a set of measures of binge drinking, though we acknowledge that only the measure of five or more drinks in a row assesses binge drinking in the technical sense.

Analytic Plan

We computed descriptive statistics for our variables of interest (i.e., means, standard deviations) prior to conducting inferential analyses. We also examined bivariate Pearson correlations among our independent variables (self-oriented perfectionism, socially prescribed perfectionism, and self-efficacy) and dependent variables (dietary restraint, binge eating, and binge drinking). To test our interactive models, we used hierarchical multiple regression analyses. All continuous independent variables entering into interactions in the regression models were centered, as recommended by Frazier, Tix, and Barron (2004). Significant interactions were probed through graphing and simple slope analyses. Main effects were examined when interactions were non-significant.

For our first hypothesis, involving self-oriented perfectionism, self-efficacy, and dietary restraint, Step 1 was the simultaneous entry of self-oriented perfectionism and self-efficacy, both assessed at baseline, and Step 2 was the two-way interaction of self-oriented perfectionism and self-efficacy (SOP x self-efficacy). We tested this interaction using both self-oriented perfectionism from the MPS and the conceptually related self-oriented factor of the EDI-Perfectionism. When this hypothesis was testing concurrent relations, the dependent variable was dietary restraint at baseline; when this hypothesis was testing prospective relations, the dependent variable was dietary restraint at Time 2. For the exploratory aim involving the prediction of dietary restraint at Time 2 by the interaction of self-oriented perfectionism and self-efficacy, after controlling for baseline levels of dietary restraint, the regression steps described above were preceded by the baseline level of dietary restraint (Step 0) and the dependent variable was dietary restraint at Time 2.

For our second hypothesis, testing the relations between self-oriented perfectionism, socially prescribed perfectionism, and self-efficacy, and the behaviors of both binge eating and

binge drinking, we began by conducting a group of regressions where Step 1 was the simultaneous entry of self-oriented perfectionism and self-efficacy, and Step 2 was the two-way interaction of self-oriented perfectionism and self-efficacy (SOP x self-efficacy). We tested this interaction using both self-oriented perfectionism from the MPS and the conceptually related self-oriented factor of the EDI-Perfectionism. When these regressions were testing concurrent relations, the dependent variables were binge eating or binge drinking at baseline; when they were testing prospective relations, the dependent variables were binge eating or binge drinking at Time 2. For the exploratory aim involving the prediction of binge eating or binge drinking at Time 2 by the interaction of self-oriented perfectionism and self-efficacy, after controlling for baseline levels of dietary restraint, the regression steps described above were preceded by the baseline level of binge eating or binge drinking (Step 0) and the dependent variables were binge eating or binge drinking at Time 2. We repeated these analyses with the MPS and EDI-Perfectionism measures of socially prescribed perfectionism.

RESULTS

Descriptive Analyses

The means, standard deviations, and correlations for dimensional perfectionism, dietary restraint, binge eating, and binge drinking are reported in Table 1. The mean MPS self-oriented perfectionism for the study sample was 70.49, with an observed range of 26 to 105. Mean MPS socially prescribed perfectionism was 47.77, with an observed range of 16 to 90. The sample means for MPS dimensional perfectionism were comparable to means observed in similar nonclinical college samples (e.g., Hewitt & Flett, 1991a; Hill, Hall, & Appleton, 2011; Mills & Blankstein, 2000; Saddler & Sacks, 1993). The mean EDI-Perfectionism self-oriented perfectionism for the study sample was 12.12, with an observed range of 4 to 18. Mean EDI-Perfectionism socially prescribed perfectionism was 12.39, with an observed range of 3 to 18. The sample means for EDI-Perfectionism self-oriented perfectionism and socially prescribed perfectionism were comparable to means observed in prior samples described in the literature, falling in an intermediate range between nonclinical samples and clinical samples of eating disorder patients (e.g., Joiner & Schmidt, 1995; Lethbridge, Watson, Egan, Street, & Nathan, 2011; Sherry & Hall, 2009). Mean self-efficacy, measured with the GSES, was 64.50 (observed range: 29-84) and was similar to means observed in similar nonclinical college samples (e.g., Betz & Klein, 1996; DeWitz & Walsh, 2002; DeWitz, Woolsey, & Walsh, 2009).

Sample means for the outcomes of dietary restraint, binge eating, and binge drinking were as follows. The sample mean for the TFEQ-R subscale measuring dietary restraint was 8.96 (observed range: 0-21), similar to reported means in nonclinical samples of college women (e.g.,

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Hardman, Scott, Field, & Jones, 2014; Langlois et al., 2011; Loxton, Dawe, & Cahill, 2011). For the EDE-Q-Restraint subscale, the sample mean was 1.44 (observed range: 0-5.80), similar to the mean reported by Luce, Crowther, and Pole (2008), based on their normative sample of undergraduate women. Mean EDI-Bulimia was 12.45, with an observed range of 7 to 32, comparable to means observed in female college samples (e.g., Kwan et al., 2014; Smith, Hames, & Joiner, 2013). Mean number of binge eating occasions in the past 28 days, measured by the EDE-Q item, was .41 occasions, with an observed range of 0 to 15. These frequencies are comparable to or slightly lower than frequencies reported in other nonclinical college samples (e.g., Nevo, 1985; Smith et al., 2013).

Regarding the indices of binge drinking, the mean typical number of alcoholic drinks per week in the current sample was 9.81 drinks (observed range: 0-96), while the mean frequency of occasions of drinking five or more drinks in a row per week was about once per week (observed range: never to 4-5 times per week). Although the typical number of drinks reported in the current sample and mean number of weekly occasions of drinking five or more drinks in a row were on the high end of the range of means reported in prior research in college samples, it is noted that drinking levels have been found to vary widely between colleges and that the university this sample was drawn from has a reputation for being a school with high alcohol consumption rates, within a region of the U.S. that reports higher levels of college drinking (Nelson, Naimi, Brewer, & Wechsler, 2005; U.S. News & World Report, 2015; Wechsler, Lee, Kuo, & Lee, 2000). That said, the sample means were within a comparable range: our sample means were higher than drinking estimates found on the lower end of the range (around 4-5 drinks per week; e.g., Meilman, Presley, & Cashin, 1997; Wechsler, Molnar, Davenport, & Baer, 1999) and approximately equal to means found on the higher end of the range (around 9-10

drinks per week; e.g., Corbin, Bernat, Calhoun, McNair, & Seals, 2001; Murphy, McDevitt-Murphy, & Barnett, 2005). The mean number of occasions of drinking enough to feel "pretty high" was reported as "on about half of the occasions" in the current sample, with an observed range of no occasions to nearly all occasions. To the author's knowledge, there are no comparison samples currently available for this measure of binge drinking.

Thus, the current sample looked similar to other nonclinical college female samples in terms of perfectionism, self-efficacy, and dietary restraint. The sample was also similar to slightly lower in binge eating frequency compared to similar samples, and similar to slightly higher on binge drinking indices.

MPS self-oriented perfectionism subscale scores were significantly associated with the EDI-Perfectionism self-oriented perfectionism factor scores ($r = .77, p < .001$), and MPS socially prescribed perfectionism subscale scores were significantly associated with the EDI-Perfectionism socially prescribed perfectionism factor scores ($r = .59, p < .001$). The correlation between the MPS self-oriented perfectionism and socially prescribed perfectionism subscales was .47 ($p < .001$), while the correlation between the EDI self-oriented perfectionism and socially prescribed perfectionism subscales was .56 ($p < .001$). In general, bivariate correlations between the perfectionism dimensions and disordered eating variables were positive and significant, with the exception of binge eating frequency in the past week, which was only significantly associated with the socially prescribed perfectionism dimension. In contrast, the perfectionism dimensions generally were not significantly associated with measures assessing binge drinking, but showed mixed patterns of correlations with the typical number of occasions per week participants reported drinking enough to feel "pretty high." Self-efficacy was generally not associated with the measures of disordered eating, with the exception of the EDI-Bulimia,

with which it demonstrated a significant negative correlation. In contrast, self-efficacy was significantly negatively associated with the three measures of binge drinking. The bivariate correlations between the different measures of disordered eating were positive and significant. Similarly, the bivariate correlations between the three measure of binge drinking were also positive and significant.

Interactive Models of Self-Oriented Perfectionism, Self-Efficacy, and Dietary Restraint

Cross-sectional findings. Self-oriented perfectionism did not interact with self-efficacy to identify levels of concurrent TFEQ dietary restraint at baseline, regardless of perfectionism measure used (SOP-MPS: $t(400) = -.50$, $\beta = -.02$, $p = .619$, $\Delta R^2 = .001$; SOP-EDI: $t(401) = .38$, $\beta = .02$, $p = .702$, $\Delta R^2 = .000$; Table 2). There was a main effect of self-oriented perfectionism, such that individuals who reported higher levels of self-oriented perfectionism tended to report higher levels of TFEQ dietary restraint at baseline. There was no main effect of self-efficacy for concurrent TFEQ dietary restraint (ps $> .402$).

Self-oriented perfectionism also did not interact with self-efficacy to identify levels of concurrent EDE-Q dietary restraint at baseline, regardless of perfectionism measure used (SOP-MPS: $t(401) = .11$, $\beta = .01$, $p = .910$, $\Delta R^2 = .000$; SOP-EDI ($t(402) = .70$, $\beta = .03$, $p = .482$, $\Delta R^2 = .001$; Table 2). There was a main effect of self-oriented perfectionism, such that individuals who reported higher levels of self-oriented perfectionism tended to report higher levels of EDE-Q dietary restraint at baseline. There was no main effect of self-efficacy for concurrent EDE-Q dietary restraint (ps $> .055$).

Prospective findings. Self-oriented perfectionism did not interact with self-efficacy to predict levels of dietary restraint as measured by the TFEQ at Time 2, regardless of perfectionism measure used (SOP-MPS: $t(401) = .22$, $\beta = .01$, $p = .823$, $\Delta R^2 = .000$; SOP-EDI:

t(402) = .38, β = .02, *p* = .703, ΔR^2 = .000; Table 3). There was a main effect of self-oriented

perfectionism, such that individuals who reported higher levels of self-oriented perfectionism

tended to report higher levels of TFEQ dietary restraint at Time 2. There was no main effect of

self-efficacy for Time 2 TFEQ dietary restraint (*p*s > .428).

Self-oriented perfectionism also did not interact with self-efficacy to predict levels of

dietary restraint at Time 2 as assessed by the EDE-Q, regardless of perfectionism measure used

(SOP-MPS: *t*(401) = .71, β = .03, *p* = .475, ΔR^2 = .001; SOP-EDI: *t*(402) = .53, β = .03, *p* = .596,

ΔR^2 = .001; Table 3). There was a main effect of self-oriented perfectionism, such that

individuals who reported higher levels of self-oriented perfectionism tended to report higher

levels of EDE-Q dietary restraint at Time 2. There was also a main effect of self-efficacy, such

that individuals who reported higher levels of self-efficacy at baseline tended to report lower

levels of EDE-Q dietary restraint at Time 2.

Interactive Models of Self-Oriented Perfectionism, Self-Efficacy, and Binge Eating

  Cross-sectional findings. Self-oriented perfectionism did not interact with self-efficacy

to identify levels of concurrent binge eating as measured by the EDI-Bulimia subscale at

baseline, regardless of perfectionism measure used to capture self-oriented perfectionism (SOP-

MPS: *t*(401) = .84, β = .04, *p* = .402, ΔR^2 = .002; SOP-EDI: *t*(402) = 1.27, β = .06, *p* = .206, ΔR^2

= .004; Table 4). There was a main effect of self-oriented perfectionism, such that individuals

who reported higher levels of self-oriented perfectionism tended to report higher levels of EDI-

Bulimia binge eating at baseline. There was also a main effect of self-efficacy, such that

individuals who reported higher levels of self-efficacy tended to report lower levels of EDI-

Bulimia binge eating at baseline.

Self-oriented perfectionism also did not interact with self-efficacy to identify frequency of binge eating (EDE-Q) at baseline, regardless of perfectionism measure (SOP-MPS: $t(399)$ = -1.38, β = -.07, p = .170, ΔR^2 = .005; SOP-EDI: $t(400)$ = -.82, β = -.04, p = .413, ΔR^2 = .002; Table 4). There was a main effect of self-oriented perfectionism, such that individuals who reported higher levels of self-oriented perfectionism tended to report higher frequencies of binge eating (EDE-Q) at baseline. There was no main effect of self-efficacy for concurrent frequency of binge eating (EDE-Q; ps > .102).

Prospective findings. Self-oriented perfectionism did not interact with self-efficacy to predict levels of binge eating at as measured by the EDI-Bulimia subscale at Time 2, regardless of perfectionism measure used (SOP-MPS: $t(401)$ = 1.03, β = .00, p = .304, ΔR^2 = .002; SOP-EDI: $t(402)$ = .72, β = .04, p = .470, ΔR^2 = .001; Table 5). There was a main effect of self-oriented perfectionism, such that individuals who reported higher levels of self-oriented perfectionism tended to report higher levels of EDI-Bulimia binge eating at Time 2. There was also a main effect of self-efficacy, such that individuals who reported higher levels of self-efficacy at baseline tended to report lower levels of EDI-Bulimia binge eating at Time 2.

Self-oriented perfectionism also did not interact with self-efficacy to predict frequency of binge eating (EDE-Q) at Time 2, regardless of perfectionism measure used (SOP-MPS: $t(399)$ = 1.05, β = .05, p = .293, ΔR^2 = .003; SOP-EDI: $t(400)$ = .76, β = .04, p = .447, ΔR^2 = .001; Table 5). There was no main effect of self-oriented perfectionism for Time 2 binge eating frequency (EDE-Q; ps > .666). There was a main effect of self-efficacy, such that individuals who reported higher levels of self-efficacy at baseline tended to report lower frequencies of binge eating (EDE-Q) at Time 2.

Interactive Models of Socially Prescribed Perfectionism, Self-Efficacy, and Binge Eating

Cross-sectional findings. Socially prescribed perfectionism did not interact with self-efficacy to identify concurrent levels of binge eating as measured by the EDI-Bulimia subscale at baseline, regardless of perfectionism measure used (SPP-MPS: $t(402) = -1.15$, $\beta = -.06$, $p = .252$, $\Delta R^2 = .003$; SPP-EDI: $t(402) = -.17$, $\beta = -.01$, $p = .869$, $\Delta R^2 = .000$; Table 6). There was a main effect of socially prescribed perfectionism, such that individuals who reported higher levels of socially prescribed perfectionism tended to report higher levels of EDI-Bulimia binge eating at baseline. There was also a main effect of self-efficacy, such that individuals who reported higher levels of self-efficacy at baseline tended to report lower levels of EDI-Bulimia binge eating at baseline.

Socially prescribed perfectionism also did not interact with self-efficacy to identify frequency of binge eating (EDE-Q) at baseline, regardless of perfectionism measure used (SPP-MPS: $t(400) = -.40$, $\beta = -.02$, $p = .689$, $\Delta R^2 = .000$; SPP-EDI: $t(400) = -.41$, $\beta = -.02$, $p = .685$, $\Delta R^2 = .000$; Table 6). There was a main effect of socially prescribed perfectionism, such that individuals who reported higher levels of socially prescribed perfectionism tended to report higher frequencies of binge eating (EDE-Q) at baseline. There was no main effect of self-efficacy for concurrent frequency of binge eating (EDE-Q; ps > .245).

Prospective findings. Socially prescribed perfectionism did not interact with self-efficacy to predict levels of binge eating as measured by the EDI-Bulimia at Time 2, regardless of perfectionism measure used (SPP-MPS: $t(402) = -.86$, $\beta = -.04$, $p = .388$, $\Delta R^2 = .002$; SPP-EDI: $t(402) = -.13$, $\beta = -.01$, $p = .897$, $\Delta R^2 = .000$; Table 7). There was a main effect of socially prescribed perfectionism, such that individuals who reported higher levels of socially prescribed perfectionism tended to report higher levels of EDI-Bulimia binge eating at Time 2. There was

also a main effect of self-efficacy, such that individuals who reported higher levels of self-efficacy at baseline tended to report lower levels of EDI-Bulimia binge eating at Time 2.

Socially prescribed perfectionism also did not interact with self-efficacy to predict frequency of binge eating (EDE-Q) at Time 2, regardless of perfectionism measure used (SPP-MPS: $t(400) = -.43$, $\beta = -.02$, $p = .669$, $\Delta R^2 = .000$; SPP-EDI: $t(400) = -1.43$, $\beta = -.07$, $p = .155$, $\Delta R^2 = .005$; Table 7). There was no main effect of socially prescribed perfectionism for Time 2 frequency of binge eating (EDE-Q; ps > .181). There was a main effect of self-efficacy, such that individuals who reported higher levels of self-efficacy at baseline tended to report lower frequencies of binge eating (EDE-Q) at Time 2.

Interactive Models of Self-Oriented Perfectionism, Self-Efficacy, and Binge Drinking

Typical number of drinks per week.

Cross-sectional findings. Self-oriented perfectionism did not interact with self-efficacy to identify typical number of drinks reported per week at baseline, regardless of perfectionism measure used (SOP-MPS: $t(401) = .81$, $\beta = .04$, $p = .420$, $\Delta R^2 = .002$; SOP-EDI: $t(402) = -.01$, $\beta = .00$, $p = .994$, $\Delta R^2 = .000$; Table 8). There was no main effect of self-oriented perfectionism for concurrent typical number of drinks per week (ps > .238). There was a main effect of self-efficacy, such that individuals who reported higher levels of self-efficacy tended to report fewer typical number of drinks per week at baseline.

Prospective findings. Self-oriented perfectionism did not interact with self-efficacy to predict typical number of drinks reported per week at Time 2, regardless of perfectionism measure used (SOP-MPS: $t(401) = .76$, $\beta = .04$, $p = .449$, $\Delta R^2 = .001$; SOP-EDI: $t(402) = -.40$, $\beta = -.02$, $p = .689$, $\Delta R^2 = .000$; Table 9). There was a main effect of self-oriented perfectionism when measured by the MPS, such that individuals who reported higher levels of MPS self-

oriented perfectionism tended to report fewer typical number of drinks per week at Time 2.

There was no main effect of EDI self-oriented perfectionism on Time 2 typical number of drinks per week (p = .429). There was a main effect of self-efficacy, such that individuals who reported higher levels of self-efficacy at baseline tended to report fewer typical number of drinks per week at Time 2.

  Typical number of occasions of drinking enough to feel "pretty high" per week.

  Cross-sectional findings: Self-oriented perfectionism did not interact with self-efficacy to identify typical number of occasions of drinking enough to feel "pretty high" reported per week at baseline, regardless of perfectionism measure used (SOP-MPS: $t(401)$ = -.46, β = -.02, p = .648, ΔR^2 = .001; SOP-EDI: $t(402)$ = -.16, β = -.01, p = .873, ΔR^2 = .000; Table 8). There was a main effect of self-oriented perfectionism when measured by the MPS, such that individuals who reported higher levels of MPS self-oriented perfectionism tended to report fewer typical occasions of drinking enough to feel "pretty high" at baseline. There was no main effect of self-oriented perfectionism as measured by the EDI for concurrent occasions of drinking enough to feel "pretty high" (p = .752). There was a main effect of self-efficacy, such that individuals who reported higher levels of self-efficacy tended to report fewer occasions of drinking enough to feel "pretty high" at baseline.

  Prospective findings: Self-oriented perfectionism did not interact with self-efficacy to predict typical number of occasions of drinking enough to feel "pretty high" reported per week at Time 2, regardless of perfectionism measure used (SOP-MPS: $t(401)$ = .37, β = .02, p = .714, ΔR^2 = .000; SOP-EDI: $t(402)$ = .24, β = .01, p = .809, ΔR^2 = .000; Table 9). There was a main effect of self-oriented perfectionism when measured by the MPS, such that individuals who reported higher levels of MPS self-oriented perfectionism at baseline tended to report fewer

typical occasions of drinking enough to feel "pretty high" per week at Time 2. There was no main effect of EDI self-oriented perfectionism on Time 2 occasions of drinking enough to feel "pretty high" ($p = .712$). There was no main effect of self-efficacy in the model with MPS self-oriented perfectionism for Time 2 occasions of drinking enough feel "pretty high" ($p = .065$). There was a main effect of self-efficacy in the model with EDI self-oriented perfectionism for Time 2 occasions of drinking enough to feel "pretty high," such that individuals who reported higher levels of self-efficacy at baseline tended to report fewer occasions of drinking enough to feel "pretty high."

Typical number of occasions per week of drinking five or more drinks in a row.

Cross-sectional findings: Self-oriented perfectionism did not interact with self-efficacy to identify typical number of occasions of drinking five or more drinks in a row per week at baseline, regardless of perfectionism measure used (SOP-MPS: $t(401) = 1.57$, $\beta = .08$, $p = .117$, $\Delta R^2 = .006$; SOP-EDI: $t(402) = .98$, $\beta = .05$, $p = .873$, $\Delta R^2 = .002$; Table 8). There was no main effect of self-oriented perfectionism for concurrent typical number of occasions of drinking five or more drinks in a row per week (ps > .342). There was a main effect of self-efficacy, such that individuals who reported higher levels of self-efficacy tended to report fewer occasions of drinking five or more drinks in a row per week at baseline.

Prospective findings: Self-oriented perfectionism did not interact with self-efficacy to predict typical number of occasions per week of drinking five or more drinks in a row at Time 2, regardless of perfectionism measure used (SOP-MPS: $t(401) = -.09$, $\beta = -.01$, $p = .926$, $\Delta R^2 = .000$; SOP-EDI: $t(402) = .09$, $\beta = .01$, $p = .925$, $\Delta R^2 = .000$; Table 9). There was no main effect of self-oriented perfectionism for Time 2 typical number of occasions per week of drinking five or more drinks in a row (ps > .333). There was a main effect of self-efficacy, such that

individuals who reported higher levels of self-efficacy at baseline tended to report fewer occasions per week of drinking five or more drinks in a row.

Interactive Models of Socially Prescribed Perfectionism, Self-Efficacy, and Binge Drinking

Typical number of drinks per week.

Cross-sectional findings: Socially prescribed perfectionism did not interact with self-efficacy to identify typical number of drinks reported per week at baseline, regardless of perfectionism measure used (SPP-MPS: $t(402) = -1.78$, $\beta = -.09$, $p = .076$, $\Delta R^2 = .008$; SPP-EDI: $t(402) = -1.03$, $\beta = -.05$, $p = .303$, $\Delta R^2 = .003$; Table 10). There was no main effect of socially prescribed perfectionism for concurrent typical number of drinks per week (ps > .271). There was a main effect of self-efficacy, such that individuals who reported higher levels of self-efficacy at baseline tended to report fewer typical number of drinks per week at baseline.

Prospective findings: Socially prescribed perfectionism did not interact with self-efficacy to predict typical number of drinks reported per week at Time 2, regardless of perfectionism measure used (SPP-MPS: $t(402) = -1.94$, $\beta = -.09$, $p = .054$, $\Delta R^2 = .009$; SPP-EDI: $t(402) = -.86$, $\beta = -.04$, $p = .391$, $\Delta R^2 = .002$; Table 11). There was no main effect of socially prescribed perfectionism for typical number of drinks per week at Time 2 (ps > .066). There was a main effect of self-efficacy, such that individuals who reported higher levels of self-efficacy at baseline tended to report fewer typical number of drinks per week at Time 2.[1]

Typical number of occasions of drinking enough to feel "pretty high" per week.

Cross-sectional findings: Socially prescribed perfectionism did not interact with self-efficacy to identify typical number of occasions of drinking enough to feel "pretty high" reported per week at baseline, regardless of perfectionism measure used (SPP-MPS: $t(402) = -.49$, $\beta = -.02$, $p = .627$, $\Delta R^2 = .001$; SPP-EDI: $t(402) = -.56$, $\beta = -.03$, $p = .579$, $\Delta R^2 = .001$; Table 10).

There was no main effect of socially prescribed perfectionism when measured by the MPS on concurrent typical number of occasions of drinking enough to feel "pretty high" per week ($p = $ .056). There was a main effect of EDI socially prescribed perfectionism, such that individuals who reported higher levels of EDI socially prescribed perfectionism tended to report fewer typical occasions of drinking enough to feel "pretty high" per week. There was also a main effect of self-efficacy, such that individuals who reported higher levels of self-efficacy at baseline tended to report fewer typical number of occasions of drinking enough to feel "pretty high" per week at baseline.

Prospective findings: Socially prescribed perfectionism did not interact with self-efficacy to predict typical number of occasions of drinking enough to feel "pretty high" reported per week at Time 2, regardless of perfectionism measure used (SPP-MPS: $t(402) = -.24$, $\beta = -.01$, $p = .814$, $\Delta R^2 = .000$; SPP-EDI: $t(402) = .26$, $\beta = .01$, $p = .793$, $\Delta R^2 = .000$; Table 11). There was a main effect of socially prescribed perfectionism, such that individuals who reported higher levels of socially prescribed perfectionism tended to report fewer typical occasions of drinking enough to feel "pretty high" per week at Time 2. There was also a main effect of self-efficacy, such that individuals who reported higher levels of self-efficacy at baseline tended to report fewer typical occasions of drinking enough to feel "pretty high" at Time 2.

Typical number of occasions per week of drinking five or more drinks in a row.

Cross-sectional findings: Socially prescribed perfectionism did not interact with self-efficacy to identify typical number of occasions per week of drinking five or more drinks in a row at baseline, regardless of perfectionism measure used (SPP-MPS: $t(402) = -.38$, $\beta = -.02$, $p = $ .705, $\Delta R^2 = .000$; SPP-EDI: $t(402) = -.36$, $\beta = -.02$, $p = .722$, $\Delta R^2 = .000$; Table 10). There was no main effect of socially prescribed perfectionism for concurrent typical number of occasions

per week of drinking five or more drinks in a row ($ps > .705$). There was a main effect of self-efficacy, such that individuals who reported higher levels of self-efficacy tended to report fewer typical number of occasions of drinking five or more drinks in a row at baseline.

Prospective findings: The interaction of socially prescribed perfectionism as measured by the MPS and self-efficacy significantly predicted typical number of occasions per week of drinking five or more drinks in a row at Time 2, SPP-MPS: $t(402) = -2.06$, $\beta = -.10$, $p = .040$, $\Delta R^2 = .010$; Table 11. Figure 2 depicts the nature of the interaction with high and low levels of MPS socially prescribed perfectionism and self-efficacy representing one standard deviation above and below the mean, respectively. Simple slope analyses indicated that MPS socially prescribed perfectionism was significantly associated with Time 2 occasions of drinking five or more drinks in a row at high levels of self-efficacy ($\beta = -.16$, $t(402) = -2.38$, $p = .018$). However, at low levels of self-efficacy, MPS socially prescribed perfectionism was no longer significantly associated with occasions of drinking five or more drinks in a row at Time 2 ($\beta = .03$, $t(402) = .37$, $p = .712$).

Socially prescribed perfectionism, as measured with the EDI, did not interact with self-efficacy to identify typical number of occasions per week of drinking five or more drinks in a row at Time 2 (SPP-EDI: $t(402) = -1.05$, $\beta = -.05$, $p = .293$, $\Delta R^2 = .003$; Table 11). There was no main effect of EDI socially prescribed perfectionism for Time 2 typical number of occasions per week of drinking five or more drinks in a row ($p = .165$). There was a main effect of self-efficacy, such that individuals who reported higher levels of self-efficacy tended to report fewer typical number of occasions of drinking five or more drinks in a row at Time 2.

Exploratory Change Analyses

One significant interaction emerged from the exploratory analyses investigating prediction of change in dietary restraint, binge eating, and binge drinking at Time 2. Similar to the main body of analyses, socially prescribed perfectionism, as measured by the MPS, interacted with self-efficacy to predict typical number of occasions per week of drinking five or more drinks in a row at Time 2, after controlling for baseline occasions of drinking five or more drinks in a row (SPP-MPS: $t(401) = -2.73$, $\beta = -.09$, $p = .007$, $\Delta R^2 = .01$; Figure 3). Figure 3 depicts the nature of the interaction with high and low levels of MPS socially prescribed perfectionism and self-efficacy representing one standard deviation above and below the mean, respectively. Simple slope analyses indicated that MPS socially prescribed perfectionism was significantly associated with Time 2 occasions of drinking five or more drinks in a row at high levels of self-efficacy, even after controlling for Time 1 occasions of drinking five or more drinks in a row ($\beta = -.15$, $t(402) = -3.48$, $p = .001$). However, at low levels of self-efficacy, MPS socially prescribed perfectionism was no longer significantly associated with occasions of drinking five or more drinks in a row at Time 2 ($\beta = .01$, $t(402) = .16$, $p = .876$). Thus, MPS socially prescribed perfectionism was associated with change in the typical number of occasions of drinking five or more drinks in a row at high self-efficacy but not at low self-efficacy.

DISCUSSION

The current study investigated the moderating role of self-efficacy on the relations between dimensional perfectionism and the risky behaviors of dietary restraint, binge eating, and binge drinking. Results of our analyses indicated that overall, self-efficacy is not supported as a significant moderator of the relations between dimensions of perfectionism and the disordered eating behaviors of dietary restraint and binge eating. However, the picture becomes more complicated when considering the relations between self-efficacy and binge drinking across both the primary and exploratory analyses.

Although self-efficacy did not significantly moderate the relations between dimensions of perfectionism and typical number of alcoholic drinks consumed per week or typical occasions per week participants reported drinking enough to feel "pretty high," it did significantly affect the prospective relations between socially prescribed perfectionism (as measured by the MPS) and typical occasions of drinking five or more drinks per week at Time 2. This moderation effect persisted even after controlling for baseline occasions of drinking five or more drinks per week. The nature of the effect of self-efficacy was consistent across these two significant interactions. MPS socially prescribed perfectionism significantly predicted number of occasions of drinking five or more drinks in a row at Time 2 at high levels of self-efficacy, but not at low levels of self-efficacy. In particular, individuals with high socially prescribed perfectionism and high self-efficacy reported fewer weekly occasions of drinking five or more drinks in a row at Time 2 than individuals high in socially prescribed perfectionism but low in self-efficacy.

Interestingly, the theoretical basis of this study had suggested that an interaction might be found identifying a group of individuals more likely to report high levels of binge drinking—that is, individuals uniquely at risk of engaging in an unhealthy behavior. Thus, the hypotheses were formulated to focus on vulnerable groups. Instead, what was found was a group of individuals who appear to enjoy a protective effect offered by the combination of high socially prescribed perfectionism and high self-efficacy. In considering the case of these particular individuals, it is possible to imagine a prototypical person who perceives that others have high standards for her behavior, one of which is an expectation that she not drink to excess, but remain focused on her academic pursuits. This, combined with high self-efficacy, might create a situation in which the person is both aware of high standards for her conduct, and has the perception that she is able to live up to those high standards, empowering her to moderate her drinking behavior successfully.

That the interaction of socially prescribed perfectionism and self-efficacy was only significant in predicting occasions of drinking five or more drinks in a row suggests this facet of alcohol use may have a unique relationship with self-efficacy. Drinking five or more drinks in a row may be seen as a more objective measure of binge drinking occasions than drinking enough to feel "pretty high," as different individuals are susceptible to the effects of alcohol to different degrees. An amount that causes one person to feel "pretty high" may barely affect another, for example, comparing a person who feels the effects of alcohol after one drink versus someone who feels the effects after five drinks. Drinking five or more drinks in a row may also be a more precise indicator of excessive drinking within a short period of time. The item assessing the typical number of drinks per week captures alcohol use over a longer period of time, without providing information on the rate at which an individual consumes alcohol on a day-to-day basis. Due to these characteristics of the "drinking five or more drinks in a row" measure of binge

drinking, it is potentially the best-positioned to capture the types of drinking occasions that are more concerning behavior-wise.

Surprisingly, the interaction between self-efficacy and socially prescribed perfectionism was not significantly associated with weekly occasions of drinking five or more drinks in a row at baseline, despite being predictive of Time 2 occasions of the same. This may have been due to the timing of the baseline and Time 2 assessments with respect to events of the school semester. Baselines and Time 2 collections occurred in two successive semesters: for some participants, data collection occurred in the fall semester, and for others, data collection occurred in the spring semester. Baselines were collected toward the beginnings of the semesters, and Time 2s were collected toward the ends of the semesters. Due to this timing, it could be expected that the Time 2s were uniformly collected shortly before final exams and end-of-semester assignments were due, at a time when academic stress was higher for the participants. In contrast, the baselines would have been collected at times of lower academic stress, as students are not typically under high academic pressure at the beginning of the semester. Our observed findings may reflect a relation between binge drinking, socially prescribed perfectionism, and self-efficacy that becomes more salient in times of stress.

The findings of this study may also suggest that the way through which individuals arrive at episodes of binge eating and the way through which individuals arrive at episodes of binge drinking may not be the same. While Escape Theory might explain binge eating as a temporary dissociation from what feels like unbearable levels of negative affect, binge drinking is not necessarily interchangeable with binge eating in playing the role of a vehicle for escape. Part of this may be due to the different roles that binge eating and binge drinking have in the lives of college students. While true binge eating episodes are often perceived as shameful, there is a

certain aspect of college culture that encourages excessive drinking in social settings. This dual aspect of binge drinking as being acceptable to many and discouraged by many may add complexities to how drinking behavior manifests in the lives of college women.

There are some reasons that may explain why self-efficacy is not supported as a significant moderator of the relations between dimensions of perfectionism and the disordered eating behaviors of dietary restraint and binge eating. Self-efficacy was measured using an instrument capturing general self-efficacy rather than domain-specific self-efficacy. Due to the general nature of the self-efficacy examined, there may have been a lack of concordance between domains that participants felt perfectionistic about and domains that they felt self-efficacious about. This might be illustrated by situations in which individuals either have high standards for themselves, or perceive that others have high standards for them in general, but do not feel that they have the ability to regulate their engagement in specific activities that may help them to meet those standards. It is also possible that self-efficacy may function as a state-level rather than a trait-level predictor of the disordered eating behaviors. Because the current study did not assess for short-term fluctuations in self-efficacy, it may have been unable to capture more short-term relations between self-efficacy, dimensional perfectionism, and disordered eating.

Main Effects

 Self-oriented perfectionism. The overall pattern of main effects indicated that self-oriented perfectionism was significantly positively related to dietary restraint both concurrently at baseline and prospectively at Time 2, above and beyond any effects of self-efficacy. This effect was present across both measures of dimensional perfectionism and both measures of dietary restraint. Self-oriented perfectionism was significantly associated with binge eating at both baseline and Time 2 when it was measured with the EDI-Bulimia subscale, such that

individuals higher in self-oriented perfectionism reported more binge eating. When binge eating was measured with the item from the EDE-Q assessing frequency, its relations with self-oriented perfectionism became inconsistent, indicating that the EDI-Bulimia may be capturing a facet of binge eating not covered by an item that only measures frequency of binge eating.

In general, self-oriented perfectionism was not significantly associated with alcohol use above and beyond the effects of self-efficacy at baseline. However, self-oriented perfectionism as measured by the MPS showed a significant negative association with number of occasions of drinking enough to feel pretty high at baseline. At Time 2, self-oriented perfectionism as measured by the MPS was significantly predictive of typical number of drinks per week and frequency of drinking enough to feel pretty high per week.

Socially prescribed perfectionism. Socially prescribed perfectionism was positively associated with binge eating at baseline above and beyond the effects of self-efficacy, regardless of measure of socially prescribed perfectionism and binge eating. This pattern of association changed slightly at Time 2, when socially prescribed perfectionism was only predictive of binge eating as measured by the EDI-Bulimia subscale.

In regards to alcohol use, socially prescribed perfectionism was not significantly associated with typical number of drinks per week or occasions per week of drinking five or more drinks in a row above and beyond the effects of self-efficacy. However, there was an overall pattern of a significant negative relationship between socially prescribed perfectionism and occasions per week of drinking enough to feel pretty high, such that individuals reporting higher levels of socially prescribed perfectionism tended to report fewer weekly occasions of drinking enough to feel pretty high both concurrently and prospectively.

Self-efficacy. In general, self-efficacy was not significantly associated with dietary restraint above and beyond the effects of dimensional perfectionism, although there was a significant negative relationship between self-efficacy and EDE-Q Restraint such that individuals reporting lower levels of self-efficacy tended to report higher levels of dietary restraint at Time 2. While there was an overall pattern of a significant negative relationship between self-efficacy and binge eating, this depended somewhat on the time at which binge eating was measured. At baseline, self-efficacy was significantly negatively associated with binge eating only as measured by the EDI-Bulimia. However, at Time 2, self-efficacy was significantly negatively associated with binge eating regardless of binge eating measure used.

There was a significant negative relationship between self-efficacy and all three measures of alcohol use above and beyond the effects of dimensional perfectionism at both time points, such that individuals reporting lower levels of self-efficacy tended to report consuming more alcoholic drinks per week, more weekly occasions of drinking enough to feel pretty high, and more weekly occasions of drinking five or more drinks in a row.

Broadly speaking, dimensional perfectionism tended to be related to disordered eating, while self-efficacy tended to be related to binge drinking. This could suggest that disordered eating and dimensional perfectionism may form a behavior chain separate from that of self-efficacy and binge drinking. Someone high in dimensional perfectionism might attempt to sculpt her body to fit the thin ideal through engaging in dietary restraint; however, she may enter a cycle in which she eventually fails at maintaining dietary restraint, resulting in negative affect, which she may then seek to escape through binge eating, which then causes her to attempt to restrict her eating again. In contrast, individuals may be involved in a separate cycle where

feeling self-efficacious may protect against binge drinking due to these individuals' beliefs in their power to regulate their drinking.

Measurement of Dimensional Perfectionism

Regarding our comparison of the two different measures of dimensional perfectionism, the MPS and the EDI-Perfectionism, results from our analyses suggest that the MPS may be more closely tied to the outcomes of interest than the EDI-Perfectionism, as there were several regressions in which individual dimensions of perfectionism as measured by the MPS seemed to demonstrate a more consistent pattern of association with the behaviors being investigated. There were several cases in which the MPS measure of a dimension of perfectionism was significantly associated with an outcome behavior, but the EDI measure of the same dimension of perfectionism was not when analyzed in a parallel model. There was only one example in which the reverse was true.

Additionally, both of the significant interactions involved the interaction between the MPS-measured socially prescribed perfectionism dimension and self-efficacy, while the EDI-Perfectionism dimension of socially prescribed perfectionism did not significantly interact with self-efficacy to identify the same behavior of weekly occasions of drinking five or more alcoholic drinks at Time 2. Given these results, it is possible that, due to the theoretical conceptualization that drove the development of the MPS and due to the greater number of items on the MPS compared to the perfectionism subscale of the EDI, the MPS may offer more thorough coverage of the constructs of self-oriented perfectionism and socially prescribed perfectionism than the EDI-Perfectionism, which was not created specifically to capture these dimensions.

It should be noted that the overall patterns of association between the dimensions of perfectionism and the behaviors of interest were generally consistent regardless of perfectionism measure used, as they were overwhelmingly in the same direction, even in cases where they differed in strength. Thus, while the MPS may be a more comprehensive measure of self-oriented and socially prescribed perfectionism, investigators who find it prohibitively long in the context of their studies may still gain useful information about the main effects of dimensional perfectionism through the much shorter EDI-Perfectionism scale. Nonetheless, due to increased construct coverage, it is suggested that investigators who wish to replicate an interactive effect involving dimensional perfectionism use the MPS as their measure of self-oriented and socially prescribed perfectionism.

Strengths and Limitations

This study benefits from its large sample size with a high rate of retention, drawn from a population of undergraduate women, a group that has been found to be vulnerable to the unhealthy behaviors of dietary restraint, binge eating, and binge drinking. Dimensional perfectionism has also been found to relate differentially to disordered eating in this population (e.g., Bardone-Cone, 2007) thus facilitating a direct extension of an existing body of literature. The longitudinal design allowed for testing of prospective relations between dimensional perfectionism, self-efficacy, and unhealthy behaviors. A further strength is the theoretical background upon which the hypotheses were built.

As other strengths, two measures of dimensional perfectionism were used in analyses, allowing for an informal comparison of the more comprehensive MPS and the commonly-used EDI-Perfectionism subscale. Concurrent investigation of both disordered eating behaviors and

alcohol use behaviors presents a way to bridge current research on substance use and eating disorders.

This study also had some limitations which should be considered when interpreting the findings. The measure of self-efficacy used was broad, in the sense that it was intended to capture self-efficacy at a general level. Considering the observed differential relations between self-efficacy and the outcome behaviors of dietary restraint, binge eating, and binge drinking, measuring self-efficacy using domain-specific measures (e.g., self-efficacy in the eating behaviors domain) may have offered a more nuanced picture of how the construct might affect individuals' likelihood of engaging in specific behaviors.

Another limitation of this study was that the predictors investigated were considered to be trait-level factors in influencing individual engagement in the target behaviors. While these stable factors may offer important information regarding individuals' propensities for engaging in unhealthy coping behaviors, we lack information about more temporary, state-level factors, such as life stressors, that may interact with trait-level factors to influence how likely an individual is to engage in dietary restraint, binge eating, and binge drinking. For example, individuals experiencing more temporary life stressors such as problems in interpersonal relationships or low test grades might be protected from or vulnerable to engagement in different coping behaviors, depending on their individual levels of dimensional perfectionism and self-efficacy.

Furthermore, while dimensional perfectionism and self-efficacy are considered to be trait-level characteristics, and have been examined as such in the literature, it is possible that there are state-level aspects of these characteristics that were not captured by the study design.

Measurement-wise, there were limitations in assessing the construct of binge drinking. As acknowledged earlier, only one of the alcohol items closely captured binge drinking: the item asking about the frequency of drinking five or more drinks in a single occasion. However, although this operationalization was in use for binge drinking at the time of data collection, the boundary for binge drinking in women has since been lowered to four or more drinks in a single occasion (Chavez et al., 2011). Thus, the data collected from participants in this study may underrepresent the proportion of women who engage in binge drinking, as it is now defined for this group.

Another limitation relates to the absence of a construct theoretically relevant to the escape model. Though negative affect was conceptualized as a vehicle through which the interaction of dimensional perfectionism and self-efficacy might result in the outcome behaviors of dietary restraint, binge eating, and binge drinking, it was not directly measured in this study. As such, we are unable to evaluate a causal mechanism in which perfectionism and self-efficacy lead to negative affect, which then results in unhealthy behaviors.

Finally, as with any investigation involving many regressions analyses, there was an increased potential for Type 1 error due to the number of regressions run. After consultation, we chose not to use an alpha adjustment as it might have compromised our ability to detect true effects. As with other studies, results of these analyses should be replicated in different settings.

Future Directions

Future studies should focus on clarifying the role of self-efficacy through testing the predictive power of domain-specific self-efficacy against that of general self-efficacy for different behaviors. Domain-specific self-efficacy should also be tested as a moderator of the relations between dimensional perfectionism and specific unhealthy coping behaviors to clarify

ways in which these two traits may interact to protect individuals or place them at risk of engaging in unhealthy coping strategies.

Additionally, more detailed data on individual trajectories in disordered eating behaviors and alcohol use would inform our understanding of shorter-term fluctuations and long-term changes in engagement in these behaviors. Repeated measures over longer periods of study would allow for the use of different analytic methods to model individual growth curves of unhealthy coping behaviors over time. These models could incorporate both trait-level factors such as perfectionism and state-level factors such as state self-efficacy and life stressors (e.g., interpersonal problems, poor academic performance, body dissatisfaction), thus facilitating a more nuanced understanding of the interplay between stable characteristics and temporary states that might render individuals more vulnerable to seeking out potentially risky ways of coping.

Studies that directly compare mechanisms of how personality and environmental factors might lead to different unhealthy coping behaviors could inform future efforts in intervention design, to better target interventions toward specific behaviors such as binge eating and binge drinking. Considering the findings of this study, in which differential relations between dimensions of perfectionism and self-efficacy and specific coping behaviors were found, clarifying the pathways through which individual personal characteristics might lead to different coping behaviors would identify potential points of both prevention and intervention.

APPENDIX 1: FOOTNOTE

[1] Two individuals reported extreme outlying scores on the item assessing typical number of alcoholic drinks consumed per occasion (32 and 25 drinks; 6.89 and 5.07 standard deviations above the mean, respectively). As the outcome variable of typical number of alcoholic drinks per week was calculated based on this item, a set of analyses for this outcome were also conducted excluding the two outlying individuals from the sample.

The pattern of results that emerged from these analyses was the same as that found in the analyses run on the full sample, with one exception: when the two outliers were excluded from the sample, the interaction between socially prescribed perfectionism as measured by the MPS and self-efficacy was significantly associated with the typical number of drinks consumed per week at baseline ($t(400) = -2.11$, $\beta = -.103$, $p = .036$, $\Delta R^2 = .011$). Simple slope analyses were conducted to probe the nature of the interaction. These analyses showed that at high levels of self-efficacy (one standard deviation above the mean), socially prescribed perfectionism was not significantly associated with baseline typical number of drinks consumed per week, while at low levels of self-efficacy (one standard deviation below the mean), socially prescribed perfectionism was still not significantly associated with baseline typical number of drinks consumed per week, but approached significance. Given the inconclusive nature of these findings, and the concordance between the pattern of findings in the full sample and the sample excluding the outliers, the results from the analyses conducted on the full sample were retained.

APPENDIX 2: TABLES OF DATA FINDINGS

Table 1. *Descriptive Statistics and Correlations between Dimensional Perfectionism, Self-Efficacy, Dietary Restraint, Binge Eating, and Alcohol Use*

	M(SD)	1	2	3	4	5	6	7	8	9	10	11
1. Self-oriented perfectionism-MPS	70.49 (15.57)	--										
2. Self-oriented perfectionism-EDI	12.12(2.83)	.77***	--									
3. Socially prescribed perfectionism-MPS	47.77(13.88)	.47***	.50***	--								
4. Socially prescribed perfectionism-EDI	12.39(2.94)	.43***	.56***	.59***	--							
5. Self-efficacy	64.50(8.71)	.21***	.13*	-.21***	-.02	--						
6. TFEQ-Restraint	8.96(5.82)	.31***	.24***	.16**	.11*	.07	--					
7. EDE-Q-Restraint	1.44(1.33)	.26***	.23***	.16**	.12*	-.04	.78***	--				
8. EDI-Bulimia	12.45(4.27)	.19***	.22***	.24***	.16**	-.23***	.33***	.48***	--			
9. Binge eating frequency in past 28 days	.41(1.68)	.09	.09	.12*	.12*	-.06	.12*	.20***	.48***	--		
10. Typical # of drinks per week	9.81(11.01)	-.09	-.02	.05	-.05	-.17**	.04	.10	.20***	.18***	--	
11. Typical # occasions per week drank enough to feel "pretty high"	3.13(1.36)	-.13**	-.03	-.07	-.10*	-.13*	.13**	.12*	.13**	.04	.52***	--
12. Typical # of occasions per week drank 5+ drinks in a row	1.90(.98)	-.08	.01	.04	-.02	-.16**	.09	.12*	.18***	.11*	.80***	.60***

Note: MPS = Multidimensional Perfectionism Scale (Hewitt & Flett, 1991a). EDI = Eating Disorder Inventory (Garner et al., 1983). TFEQ = Three Factor Eating Questionnaire (Stunkard & Messick, 1985). EDE-Q = Eating Disorder Examination—Questionnaire (Fairburn & Beglin, 1994). Higher scores reflect higher levels of the construct. Typical # of occasions per week drank enough to feel "pretty high" response options: 1 = *on no occasions,* 2 = *on few occasions,* 3 = *on about half the occasions,* 4 = *on most occasions,* 5 = *on nearly all occasions.* Typical # of occasions per week drank 5+ drinks in a row response options: 1 = *none,* 2 = *once,* 3 = *twice,* 4 = *three times,* 5 = *4-5 times,* 6 = *6 times or more.* * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 2. *Hierarchical Multiple Regression Analyses of the Interaction of Self-Oriented Perfectionism and Self-Efficacy in Relation to Dietary Restraint (Cross-Sectional)*

Step and predictors		B	SE B	β	t (dfs)	ΔR^2
Step 1	DV=T1 TFEQ-Restraint					.10***
SOP-MPS		.12	.02	.31***	6.38 (2, 401)	
Self-Efficacy		.004	.03	.01	.12 (2, 401)	
Step 2						.001
SOP-MPS x Self-Efficacy		-.001	.002	-.02	-.50 (1, 400)	
Step 1	DV=T1 TFEQ-Restraint					.06***
SOP-EDI		.47	.10	.23***	4.71 (2, 402)	
Self-Efficacy		.03	.03	.04	.84 (2, 402)	
Step 2						.000
SOP-EDI x Self-Efficacy		.004	.01	.02	.38 (1, 401)	
Step 1	DV=T1 EDE-Q Restraint					.08***
SOP-MPS		.02	.004	.28***	5.66 (2, 402)	
Self-Efficacy		-.01	.01	-.09	-1.92 (2, 402)	
Step 2						.000
SOP-MPS x Self-Efficacy		.000	.000	.005	.11 (1, 401)	
Step 1	DV=T1 EDE-Q Restraint					.06***
SOP-EDI		.11	.02	.24***	4.90 (2, 403)	
Self-Efficacy		-.01	.01	-.07	-1.37 (2, 403)	
Step 2						.001
SOP-EDI x Self-Efficacy		.002	.002	.03	.70 (1, 402)	

Note. SOP = self-oriented perfectionism. MPS = Multidimensional Perfectionism Scale (Hewitt & Flett, 1991a). EDI = Eating Disorder Inventory (Garner et al., 1983). T1 = Time 1. TFEQ = Three Factor Eating Questionnaire (Stunkard & Messick, 1985). EDE-Q = Eating Disorder Examination—Questionnaire (Fairburn & Beglin, 1994). *** *p* < .001.

Table 3. *Hierarchical Multiple Regression Analyses of the Interaction of Self-Oriented Perfectionism and Self-Efficacy Predicting Dietary Restraint (Longitudinal)*

Step and predictors		B	SE B	β	t (dfs)	ΔR²
Step 1	DV=T2 TFEQ-Restraint					.07***
SOP-MPS		.11	.02	.28***	5.64 (2, 402)	
Self-Efficacy		-.03	.04	-.04	-.79 (2, 402)	
Step 2						.000
SOP-MPS x Self-Efficacy		.000	.002	.01	.22 (1, 401)	
Step 1	DV=T2 TFEQ-Restraint					.05***
SOP-EDI		.47	.11	.22***	4.45 (2, 403)	
Self-Efficacy		-.01	.04	-.01	-.19 (2, 403)	
Step 2						.000
SOP-EDI x Self-Efficacy		.004	.01	.02	.38 (1, 402)	
Step 1	DV=T2 EDE-Q-Restraint					.08***
SOP-MPS		.03	.004	.29***	5.91 (2, 402)	
Self-Efficacy		-.02	.01	-.12*	-2.52 (2, 402)	
Step 2						.001
SOP-MPS x Self-Efficacy		.000	.000	.03	.71 (1, 401)	
Step 1	DV=T2 EDE-Q-Restraint					.07***
SOP-EDI		.13	.02	.27***	5.51 (2, 403)	
Self-Efficacy		-.02	.01	-.10*	-2.00 (2, 403)	
Step 2						.001
SOP-EDI x Self-Efficacy		.001	.002	.03	.53 (1, 402)	

Note. SOP = self-oriented perfectionism. MPS = Multidimensional Perfectionism Scale (Hewitt & Flett, 1991a). EDI = Eating Disorder Inventory (Garner et al., 1983). T2 = Time 2. TFEQ = Three Factor Eating Questionnaire (Stunkard & Messick, 1985). EDE-Q = Eating Disorder Examination—Questionnaire (Fairburn & Beglin, 1994). * *p* < .05. *** *p* < .001.

Table 4. *Hierarchical Multiple Regression Analyses of the Interaction of Self-Oriented Perfectionism and Self-Efficacy in Relation to Binge Eating (Cross-Sectional)*

Step and predictors		B	SE B	β	t (dfs)	ΔR²
Step 1	DV=T1 EDI-Bulimia					.11***
SOP-MPS		.07	.01	.25***	5.25 (2, 402)	
Self-Efficacy		-.14	.02	-.28***	-5.88 (2, 402)	
Step 2						.002
SOP-MPS x Self-Efficacy		.001	.001	.04	.84 (1, 401)	
Step 1	DV=T1 EDI-Bulimia					.12***
SOP-EDI		.38	.07	.25***	5.31 (2, 403)	
Self-Efficacy		-.13	.02	-.26***	-5.54 (2, 403)	
Step 2						.004
SOP-EDI x Self-Efficacy		.01	.01	.06	1.27 (1, 402)	
Step 1	DV=T1 binge eating frequency (EDE-Q)					.02*
SOP-MPS		.01	.01	.11*	2.15 (2, 400)	
Self-Efficacy		-.02	.01	-.08	-1.64 (2, 400)	
Step 2						.01
SOP-MPS x Self-Efficacy		-.001	.001	-.07	-1.38 (1, 399)	
Step 1	DV=T1 binge eating frequency (EDE-Q)					.01
SOP-EDI		.06	.03	.10*	1.97 (2, 401)	
Self-Efficacy		-.01	.01	-.07	-1.46 (2, 401)	
Step 2						.002
SOP-EDI x Self-Efficacy		-.003	.003	-.04	-.82 (1, 400)	

Note. SOP = self-oriented perfectionism. MPS = Multidimensional Perfectionism Scale (Hewitt & Flett, 1991a). EDI = Eating Disorder Inventory (Garner et al., 1983). T1 = Time 1. EDE-Q = Eating Disorder Examination—Questionnaire (Fairburn & Beglin, 1994). *p < .05. ***p < .001.

Table 5. *Hierarchical Multiple Regression Analyses of the Interaction of Self-Oriented Perfectionism and Self-Efficacy Predicting Binge Eating (Longitudinal)*

Step and predictors		B	SE B	β	t (dfs)	ΔR^2
Step 1	DV=T2 EDI-Bulimia					.07***
SOP-MPS		.03	.01	.16**	3.24 (2, 402)	
Self-Efficacy		-.09	.02	-.25***	-5.08 (2, 402)	
Step 2						.002
SOP-MPS x Self-Efficacy		.001	.001	.05	1.03 (1, 401)	
Step 1	DV=T2 EDI-Bulimia					.08***
SOP-EDI		.20	.05	.18***	3.83 (2, 403)	
Self-Efficacy		-.08	.02	-.24***	-4.99 (2, 403)	
Step 2						.001
SOP-EDI x Self-Efficacy		.004	.01	.72	.72 (1, 402)	
Step 1	DV=T2 binge eating frequency (EDE-Q)					.01
SOP-MPS		-.001	.003	-.02	-.43 (2, 400)	
Self-Efficacy		-.01	.01	-.10*	-2.06 (2, 400)	
Step 2						.003
SOP-MPS x Self-Efficacy		.000	.000	.05	1.05 (1, 399)	
Step 1	DV=T2 binge eating frequency (EDE-Q)					.01
SOP-EDI		.000	.02	.000	.01 (2, 401)	
Self-Efficacy		-.01	.01	-.11*	-2.18 (2, 401)	
Step 2						.001
SOP-EDI x Self-Efficacy		.001	.002	.04	.76 (1, 400)	

Note. SOP = self-oriented perfectionism. MPS = Multidimensional Perfectionism Scale (Hewitt & Flett, 1991a). EDI = Eating Disorder Inventory (Garner et al., 1983). T2 = Time 2. EDE-Q = Eating Disorder Examination—Questionnaire (Fairburn & Beglin, 1994). * p < .05. ** p < .01. *** p < .001.

Table 6. *Hierarchical Multiple Regression Analyses of the Interaction of Socially Prescribed Perfectionism and Self-Efficacy in Relation to Binge Eating (Cross-Sectional)*

Step and predictors		B	SE B	β	t (dfs)	ΔR^2
Step 1	DV=T1 EDI-Bulimia					.09***
SPP-MPS		.06	.02	.20***	4.13 (2, 403)	
Self-Efficacy		-.09	.02	-.19***	-3.87 (2, 403)	
Step 2						.003
SPP-MPS x Self-Efficacy		-.002	.002	-.06	-1.15 (1, 402)	
Step 1	DV=T1 EDI-Bulimia					.08***
SPP-EDI		.22	.07	.16**	3.23 (2, 403)	
Self-Efficacy		-.11	.02	-.23***	-4.73 (2, 403)	
Step 2						.000
SPP-EDI x Self-Efficacy		-.001	.01	-.01	-.17 (1. 402)	
Step 1	DV=T1 binge eating frequency (EDE-Q)					.02*
SPP-MPS		.01	.01	.11*	2.18 (2, 401)	
Self-Efficacy		-.01	.01	-.04	-.74 (2, 401)	
Step 2						.000
SPP-MPS x Self-Efficacy		.000	.001	-.02	-.40 (1, 400)	
Step 1	DV=T1 binge eating frequency (EDE-Q)					.02*
SPP-EDI		.07	.03	.12*	2.48 (2, 401)	
Self-Efficacy		-.01	.01	-.06	-1.17 (2, 401)	
Step 2						.000
SPP-EDI x Self-Efficacy		-.001	.003	-.02	-.41 (1, 400)	

Note. SPP = socially prescribed perfectionism. MPS = Multidimensional Perfectionism Scale (Hewitt & Flett, 1991a). EDI = Eating Disorder Inventory (Garner et al., 1983). T1 = Time 1. EDE-Q = Eating Disorder Examination—Questionnaire (Fairburn & Beglin, 1994). * p < .05. ** p < .01. *** p < .001.

Table 7. *Hierarchical Multiple Regression Analyses of the Interaction of Socially Prescribed Perfectionism and Self-Efficacy Predicting Binge Eating (Longitudinal)*

Step and predictors	B	SE B	β	t (dfs)	ΔR^2
Step 1 DV=T2 EDI-Bulimia					.07***
SPP-MPS	.03	.01	.14**	2.93 (2, 403)	
Self-Efficacy	-.07	.02	-.19***	-3.79 (2, 403)	
Step 2					.002
SPP-MPS x Self-Efficacy	-.001	.001	-.04	-.86 (1, 402)	
Step 1 DV=T2 EDI-Bulimia					.06***
SPP-EDI	.10	.05	.10*	2.03 (2, 403)	
Self-Efficacy	-.08	.02	-.21**	-4.43 (2, 403)	
Step 2					.000
SPP-EDI x Self-Efficacy	-.001	.01	-.01	-.13 (1, 402)	
Step 1 DV=T2 binge eating frequency (EDE-Q)					.01
SPP-MPS	.002	.004	.03	.50 (2, 401)	
Self-Efficacy	-.01	.01	-.10*	-2.04 (2, 401)	
Step 2					.000
SPP-MPS x Self-Efficacy	.000	.000	-.02	-.43 (1, 400)	
Step 1 DV=T2 binge eating frequency (EDE-Q)					.02*
SPP-EDI	.02	.02	.07	1.34 (2, 401)	
Self-Efficacy	-.01	.01	-.11*	-2.17 (2, 401)	
Step 2					.01
SPP-EDI x Self-Efficacy	-.003	.002	-.07	-1.43 (1, 400)	

Note. SPP = socially prescribed perfectionism. MPS = Multidimensional Perfectionism Scale (Hewitt & Flett, 1991a). EDI = Eating Disorder Inventory (Garner et al., 1983). T2 = Time 2. EDE-Q = Eating Disorder Examination—Questionnaire (Fairburn & Beglin, 1994).   * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 8. *Hierarchical Multiple Regression Analyses of the Interaction of Self-Oriented Perfectionism and Self-Efficacy in Relation to Alcohol Use (Cross-Sectional)*

Step and predictors	B	SE B	β	t (dfs)	ΔR²
Step 1 DV=T1 Typical # of drinks per week					.03**
SOP-MPS	-.04	.04	-.06	-1.18 (2, 402)	
Self-Efficacy	-.20	.06	-.15**	-3.06 (2, 402)	
Step 2					.002
SOP-MPS x Self-Efficacy	.003	.003	.04	.81 (1, 401)	
Step 1 DV=T1 Typical # of drinks per week					.03**
SOP-EDI	.000	.19	.000	.002 (2, 403)	
Self-Efficacy	-.21	.06	-.17**	-3.35 (2, 403)	
Step 2					.000
SOP-EDI x Self-Efficacy	.000	.02	.000	-.01 (1, 402)	
Step 1 DV=T1 Typical # of occasions per week					.03**
SOP-MPS drank enough to feel "pretty high"	-.01	.004	-.11*	-2.22 (2, 402)	
Self-Efficacy	-.02	.01	-.11*	-2.09 (2, 402)	
Step 2					.001
SOP-MPS x Self-Efficacy	.000	.000	-.02	-.46 (1, 401)	
Step 1 DV=T1 Typical # of occasions per week					.02*
SOP-EDI drank enough to feel "pretty high"	-.01	.02	-.02	-.32 (2, 403)	
Self-Efficacy	-.02	.01	-.13*	-2.53 (2, 403)	
Step 2					.000
SOP-EDI x Self-Efficacy	.000	.003	-.01	-.16 (1, 402)	
Step 1 DV=T1 Typical # of occasions per week					.03**
SOP-MPS of drinking 5+ drinks in a row	-.003	.003	-.05	-.95 (2, 402)	
Self-Efficacy	-.02	.01	-.15**	-2.89 (2, 402)	
Step 2					.01
SOP-MPS x Self-Efficacy	.000	.000	.08	1.57 (1, 401)	
Step 1 DV=T1 Typical # of occasions per week					.03**
SOP-EDI of drinking 5+ drinks in a row	.01	.02	.03	.57 (2, 403)	
Self-Efficacy	-.02	.01	-.16**	-3.20 (2, 403)	
Step 2					.002
SOP-EDI x Self-Efficacy	.002	.002	.05	.98 (1, 402)	

Note. SOP = self-oriented perfectionism. MPS = Multidimensional Perfectionism Scale (Hewitt & Flett, 1991a). EDI = Eating Disorder Inventory (Garner et al., 1983). T1 = Time 1. * *p* < .05. ** *p* < .01.

Table 9. *Hierarchical Multiple Regression Analyses of the Interaction of Self-Oriented Perfectionism and Self-Efficacy Predicting Alcohol Use (Longitudinal)*

Step and predictors	B	SE B	β	t (dfs)	ΔR²
Step 1 DV=T2 Typical # of drinks per week					.05***
SOP-MPS	-.06	.03	-.10*	-1.97 (2, 402)	
Self-Efficacy	.20	.06	-.18***	-3.57 (2, 402)	
Step 2					.001
SOP-MPS x Self-Efficacy	.002	.003	.04	.76 (1, 401)	
Step 1 DV=T2 Typical # of drinks per week					.04***
SOP-EDI	-.14	.17	-.04	-.79 (2, 403)	
Self-Efficacy	-.22	.06	-.19***	-3.92 (2, 403)	
Step 2					.000
SOP-EDI x Self-Efficacy	-.01	.02	-.02	-.40 (1, 402)	
Step 1 DV=T2 Typical # of occasions per week					.03**
SOP-MPS drank enough to feel "pretty high"	-.01	.01	-.12*	-2.48 (2, 402)	
Self-Efficacy	-.02	.01	-.09	-1.85 (2, 402)	
Step 2					.000
SOP-MPS x Self-Efficacy	.000	.000	.02	.37 (1, 401)	
Step 1 DV=T2 Typical # of occasions per week					.01
SOP-EDI drank enough to feel "pretty high"	-.01	.03	-.02	-.37 (2, 403)	
Self-Efficacy	-.02	.01	-.12*	-2.33 (2, 403)	
Step 2					.000
SOP-EDI x Self-Efficacy	.001	.003	.01	.24 (1, 402)	
Step 1 DV=T2 Typical # of occasions per week					.02*
SOP-MPS of drinking 5+ drinks in a row	-.003	.003	-.05	-.97 (2, 402)	
Self-Efficacy	-.01	.01	-.13*	-2.55 (2, 402)	
Step 2					.000
SOP-MPS x Self-Efficacy	.000	.000	-.01	-.09 (1, 401)	
Step 1 DV=T2 Typical # of occasions per week					.02*
SOP-EDI of drinking 5+ drinks in a row	-.01	.02	-.02	-.39 (2, 403)	
Self-Efficacy	-.02	.01	-.14**	-2.74 (2, 403)	
Step 2					.000
SOP-EDI x Self-Efficacy	.000	.002	.01	.09 (1, 402)	

Note. SOP = self-oriented perfectionism. MPS = Multidimensional Perfectionism Scale (Hewitt & Flett, 1991a). EDI = Eating Disorder Inventory (Garner et al., 1983). T2 = Time 2. * *p* < .05. ** *p* < .01. *** *p* < .001.

Table 10. *Hierarchical Multiple Regression Analyses of the Interaction of Socially Prescribed Perfectionism and Self-Efficacy in Relation to Alcohol Use (Cross-Sectional)*

Step and predictors	B	SE B	β	t (dfs)	ΔR^2
Step 1 DV=T1 Typical # of drinks per week					.03**
SPP-MPS	.01	.04	.02	.32 (2, 403)	
Self-Efficacy	-.21	.06	-.16**	-3.23 (2, 403)	
Step 2					.01
SPP-MPS x Self-Efficacy	-.01	.004	-.09	-1.78 (1, 402)	
Step 1 DV=T1 Typical # of drinks per week					.03**
SPP-EDI	-.20	.19	-.05	-1.10 (2, 403)	
Self-Efficacy	-.21	.06	-.17**	-3.40 (2, 403)	
Step 2					.003
SPP-EDI x Self-Efficacy	-.02	.02	-.05	-1.03 (1, 402)	
Step 1 DV=T1 Typical # of occasions per week					.03**
SPP-MPS drank enough to feel "pretty high"	-.01	.01	-.10	-1.92 (2, 403)	
Self-Efficacy	-.02	.01	-.15**	-2.95 (2, 403)	
Step 2					.001
SPP-MPS x Self-Efficacy	.000	.001	-.02	-.49 (1, 402)	
Step 1 DV=T1 Typical # of occasions per week					.03**
SPP-EDI drank enough to feel "pretty high"	-.05	.02	-.11*	-2.19 (2, 403)	
Self-Efficacy	-.02	.01	-.13**	-2.66 (2, 403)	
Step 2					.001
SPP-EDI x Self-Efficacy	-.002	.003	-.03	-.56 (1, 402)	
Step 1 DV=T1 Typical # of occasions per week					.02**
SPP-MPS of drinking 5+ drinks in a row	.000	.004	.01	.14 (2, 403)	
Self-Efficacy	-.02	.01	-.15**	-3.06 (2, 403)	
Step 2					.000
SPP-MPS x Self-Efficacy	.000	.000	-.02	-.38 (1, 402)	
Step 1 DV=T1 Typical # of occasions per week					.02**
SPP-EDI of drinking 5+ drinks in a row	-.01	.02	-.02	-.38 (2, 403)	
Self-Efficacy	-.02	.01	-.16**	-3.16 (2, 403)	
Step 2					.000
SPP-EDI x Self-Efficacy	-.001	.002	-.02	-.36 (1, 402)	

Note. SPP = socially prescribed perfectionism. MPS = Multidimensional Perfectionism Scale (Hewitt & Flett, 1991a). EDI = Eating Disorder Inventory (Garner et al., 1983). T1 = Time 1. * p < .05. ** p < .01.

Table 11. *Hierarchical Multiple Regression Analyses of the Interaction of Socially Prescribed Perfectionism and Self-Efficacy Predicting Alcohol Use (Longitudinal)*

Step and predictors	B	SE B	β	t (dfs)	ΔR²
Step 1 DV=T2 Typical # of drinks per week					.04***
SPP-MPS	-.03	.04	-.04	-.84 (2, 403)	
Self-Efficacy	-.23	.06	-.21***	-4.14 (2, 403)	
Step 2					.01
SPP-MPS x Self-Efficacy	-.01	.004	-.09	-1.94 (1, 402)	
Step 1 DV=T2 Typical # of drinks per week					.05***
SPP-EDI	-.30	.16	-.09	-1.85 (2, 403)	
Self-Efficacy	-.23	.06	-.20***	-4.11 (2, 403)	
Step 2					.002
SPP-EDI x Self-Efficacy	-.02	.02	-.04	-.86 (1, 402)	
Step 1 DV=T2 Typical # of occasions per week					.03**
SPP-MPS drank enough to feel "pretty high"	-.01	.01	-.12*	-2.38 (2, 403)	
Self-Efficacy	-.02	.01	-.14**	-2.86 (2, 403)	
Step 2					.000
SPP-MPS x Self-Efficacy	.000	.001	-.01	-.24 (1, 402)	
Step 1 DV=T2 Typical # of occasions per week					.03**
SPP-EDI drank enough to feel "pretty high"	-.05	.02	-.11*	-2.28 (2, 403)	
Self-Efficacy	-.02	.01	-.12*	-2.47 (2, 403)	
Step 2					.000
SPP-EDI x Self-Efficacy	.001	.003	.01	.26 (1, 402)	
Step 1 DV=T2 Typical # of occasions per week					.02**
SPP-MPS of drinking 5+ drinks in a row	-.01	.003	-.07	-1.33 (2, 403)	
Self-Efficacy	-.02	.01	-.15**	-3.03 (2, 403)	
Step 2					.01*
SPP-MPS x Self-Efficacy	-.001	.000	-.10*	-2.06 (1, 402)	
Step 1 DV=T2 Typical # of occasions per week					.02**
SPP-EDI of drinking 5+ drinks in a row	-.02	.02	-.07	-1.39 (2, 403)	
Self-Efficacy	-.02	.01	-.14**	-2.85 (2, 403)	
Step 2					.003
SPP-EDI x Self-Efficacy	-.002	.002	-.05	-1.05 (1, 402)	

Note. SPP = socially prescribed perfectionism. MPS = Multidimensional Perfectionism Scale (Hewitt & Flett, 1991a). EDI = Eating Disorder Inventory (Garner et al., 1983). T2 = Time 2. * $p < .05$. ** $p < .01$. *** $p < .001$

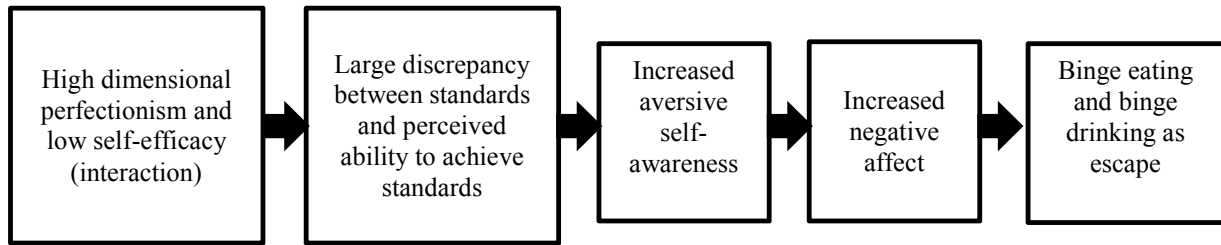| High dimensional perfectionism and low self-efficacy (interaction) | → | Large discrepancy between standards and perceived ability to achieve standards | → | Increased aversive self-awareness | → | Increased negative affect | → | Binge eating and binge drinking as escape |

Figure 1. Proposed model, based on escape theory (Heatherton & Baumeister, 1991), through which high dimensional perfectionism and low self-efficacy lead to increased binge eating and binge drinking.
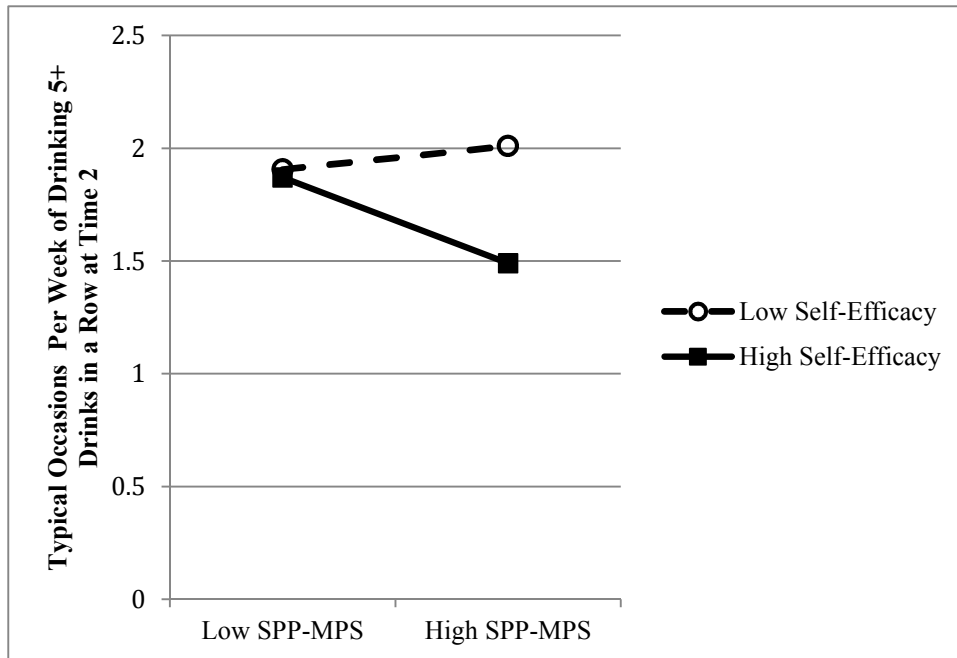
Figure 2. Simple slope graph of self-efficacy as a moderator of the relation between socially prescribed perfectionism from the Multidimensional Perfectionism Scale (SPP-MPS) and typical occasions per week of drinking 5+ drinks in a row at Time 2.
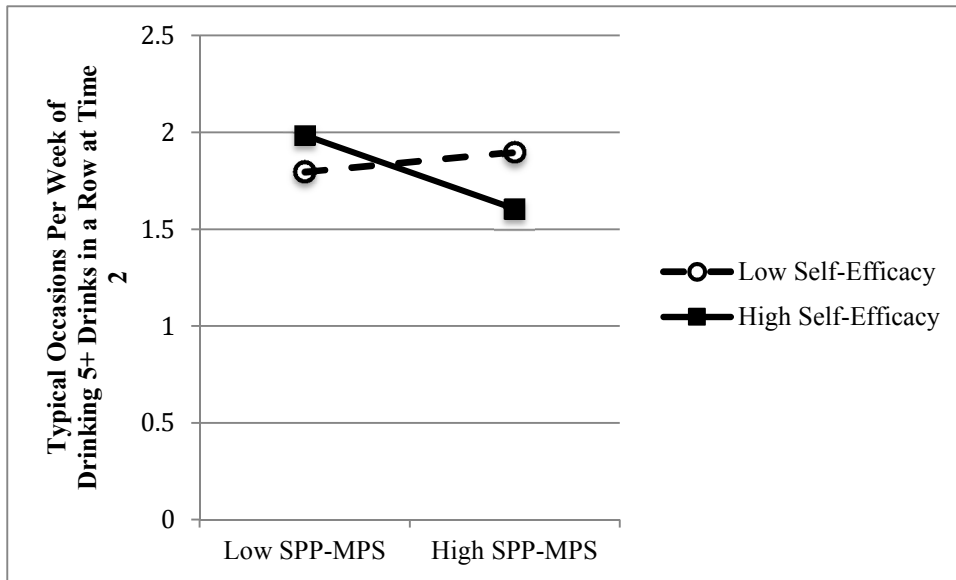
Figure 3. Simple slope graph of self-efficacy as a moderator of the relation between socially prescribed perfectionism from the Multidimensional Perfectionism Scale (SPP-MPS) and typical occasions per week of drinking 5+ drinks in a row at Time 2, controlling for Time 1 typical occasions per week of drinking 5+ drinks in a row.

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