The Role of Standards and Discrepancy Perfectionism in Maladaptive Consumption

SYLVIA SEO EUN CHANG, SHAILENDRA PRATAP JAIN, AND MARTIN REIMANN

ABSTRACT   Perfectionism has been conceptualized as a multidimensional construct, and two of its key dimensions entail striving for high performance standards and focusing on the discrepancy between one's standards and actual performance. Our investigation examines the role of these two dimensions in maladaptive consumption. Results across six studies investigating both trait and state perfectionism across various maladaptive domains support our account that discrepancy-based perfectionism is associated with higher levels of maladaptive consumption than standards-based perfectionism. Additionally, results indicate that feelings of shame and guilt explain these differential effects, with discrepancy perfectionism associated with higher levels of shame and standards perfectionism associated with higher levels of guilt.

If you look for perfection, you'll never be content. (Leo Tolstoy)

Imagine that a consumer seeks to achieve perfection in her personal and professional pursuits. After giving a presentation at work one morning, she believes that she did not reach the high standards she had set for her performance and is consequently experiencing negative emotions. When she returns to her desk after the presentation and it is time for her to order lunch, how likely is she to select a pizza over a salad? When she tries to resume work that afternoon, how likely will she be to instead compulsively shop online? The current research attempts to answer these questions by offering novel and nuanced insights into the phenomenon of perfectionism and its influence on maladaptive consumption.[1]

Perfectionism is defined as setting high standards for performance, along with critical self-evaluations (Frost et al. 1990). In line with this definition, prior literature is split over the valence of the consequences perfectionism can have. While some scholars have highlighted some of perfectionism's positive consequences (e.g., Stoeber and Otto 2006), other investigations have alluded to its potential negative outcomes (e.g., Terry-Short et al. 1995). This research attempts to more

systematically investigate which aspects of state and trait perfectionism might be more or less likely to have negative consequences in terms of maladaptive consumption and provides insight into the underlying mechanisms. Specifically, we ask how and why perfectionism influences maladaptive consumption when consumers face stressors such as performance failure (i.e., when their performance outcome does not meet their standards; Förster et al. 2001).

In extant work, perfectionism has been found to be negatively associated with consumers' psychological and physical well-being (Fedewa, Burns, and Gomez 2005; Boone et al. 2012). However, another line of research has shown that perfectionism, being a multidimensional construct, does not always lead to detrimental consequences. Indeed, prior work has distinguished between two dimensions of perfectionism: (1) positive perfectionism, capturing striving for high standards, and (2) negative perfectionism, reflecting concerns over not meeting high standards (Hamachek 1978; Terry-Short et al. 1995; Stoeber, Harris, and Moon 2007). Aligned with this perspective, Slaney et al. (2001) proposed three central

1. Since addiction is inherently maladaptive, we use the phrase maladaptive consumption/choice to capture addiction as well.

dimensions of perfectionism: (1) striving toward high standards (standards perfectionism), (2) focusing on the discrepancy between one's standards and actual performance (discrepancy perfectionism), and (3) maintaining cleanliness and orderliness (order perfectionism). Standards perfectionism has been conceptualized as positive, whereas discrepancy perfectionism has been viewed as negative (Slaney et al. 2001). Given their opposing valences and associations with a number of outcomes (Stoeber and Otto 2006), our research focuses on standards and discrepancy perfectionism and examines their relationship with maladaptive consumption. Order perfectionism, on the other hand, does not have bearing on the research questions we ask.

We propose that following performance failure, discrepancy perfectionism leads to higher maladaptive consumption compared with standards perfectionism and that these differences are explained by experienced shame in the case of discrepancy perfectionism and experienced guilt in the case of standards perfectionism. We integrate literature on perfectionism, coping, and discrete emotions to make these predictions and theorize that the mechanisms and outcomes reflect how perfectionists cope with stressors (i.e., performance failure). Our research makes several contributions to both consumer and psychology literature. First, our work examines the phenomenon of perfectionism, which is understudied in consumer research but has relevance in various consumption decisions and contexts (Kopalle and Lehmann 2001; He 2016). Second, we also extend the perfectionism literature by holistically investigating how positive perfectionism and negative perfectionism not only are associated with but also are causally linked to various maladaptive choices. Third, we add to the emotion literature by showing that feelings of shame and guilt reflect the underlying processes that drive perfectionists to engage in higher or lower maladaptive consumption. Doing so provides further support to the notion that these two closely tied emotions have *dissimilar* antecedents and consequences in the context of maladaptive consumption.

CONCEPTUAL BACKGROUND AND HYPOTHESES
Perfectionism and Maladaptive Consumption
Perfectionism has long been studied in clinical and personality psychology research and has evolved in its conceptualization from being unidimensional (Burns 1980) to being multidimensional (Frost et al. 1990; Hewitt and Flett 1991; Slaney et al. 2001). Slaney et al. (2001) conceptualized perfectionism as having the three dimensions defined above:

standards, discrepancy, and order. Our research relies on this conceptualization to examine the influence of standards versus discrepancy perfectionism on maladaptive consumption. Note that although both discrepancy perfectionism and standards perfectionism are associated with a striving for excellence, their foci are different; whereas standards perfectionists focus on striving high, discrepancy perfectionists tend to emphasize concerns over not meeting their standards.

Past literature depicts various ways in which perfectionistic tendencies are associated with negative psychological consequences and maladaptive consumption behaviors (Fedewa et al. 2005; Boone et al. 2012). Although most research on perfectionism examines the role of perfectionism as a trait, prior work also suggests that perfectionism may be a state causally driving individuals to engage in unhealthy behaviors (Shafran et al. 2006; Boone et al. 2012). For example, Boone et al. (2012) found that when individuals were experimentally prompted to set and strive for high standards (vs. maintaining a relaxed orientation toward their standards), they were more likely to display eating disorder symptoms, such as restrained eating and bingeing.

Past research has also found that perfectionistic tendencies are not always detrimental in their consequences. Following Hamachek's (1978) observation that there are two types of perfectionists who differ in their underlying motivations for perfection (doing things right vs. fear of failure), the literature has differentiated between two dimensions of perfectionism: (1) positive (also described as normal, healthy) perfectionism, reflecting the striving to set high standards and seek perfection in attaining them, and (2) negative (also described as neurotic, unhealthy) perfectionism, reflecting concerns related to the fear of failure and the discrepancy between the standards set and performance (Terry-Short et al. 1995; Stoeber et al. 2007). This valenced perfectionism model has also found that negative (but not positive) perfectionism is associated with depression and alcohol-related problems (Stoeber and Otto 2006; Rice and Van Arsdale 2010). On the basis of these findings, we hypothesize that adopting perfectionist tendencies may have different outcomes depending on the dimension of perfectionism underlying the perfectionistic behavior. That is, perfectionism may lead to higher or lower maladaptive consumption depending on whether it entails focusing on high standards for oneself or on the discrepancy between one's standards and actual performance. More specifically, we propose that discrepancy perfectionism will result in higher maladaptive consumption compared with standards perfectionism.

The literature on coping also guides us to these predictions, specifically the finding that perfectionists engage in different types of coping strategies in response to stressful situations like performance failure (Dunkley, Zuroff, and Blankstein 2003). Perfectionists who are focused on their high standards engage in problem-focused coping, which directly addresses the stressful situation. However, perfectionists who are preoccupied with thoughts about their deficiencies/imperfections engage in avoidant coping, resulting in them distancing themselves from the stressful situation and demonstrating a lower ability to address the problem directly. Further, avoidant coping seems to underlie the link between negative perfectionism and test anxiety (Weiner and Carton 2012). Drawing on these findings that negative (vs. positive) perfectionists engage in avoidant (vs. problem-focused) coping, which has also been linked to maladaptive outcomes, we propose that, compared with standards perfectionists, discrepancy perfectionists will engage in greater maladaptive consumption as they face performance failure. Stated formally:

> **H1:** Perfectionism is differentially associated with maladaptive consumption, such that discrepancy perfectionism is likely to lead to higher levels of maladaptive consumption compared with standards perfectionism.

Perfectionism, Shame, and Guilt

To understand why the two types of perfectionism might differentially influence maladaptive consumption, we turn to the shame and guilt literature. Shame and guilt are conceptualized as self-conscious emotions, as they involve an evaluation of the self after committing transgressions and/or feeling incompetent (Tangney and Dearing 2002). Although early research posited that both emotions involve similar cognitive processes (e.g., Lazarus 1991), subsequent work has distinguished the two emotions as having different foci and consequences in terms of judgments about the self and others. In particular, while shame is directed toward oneself and involves negative scrutiny of the self, guilt is directed toward one's actions and choices and entails assessment of some specific behavior (or the failure of an action; Tangney and Dearing 2002). Consumer research has also found that these two emotions have differing outcomes for consumer judgments and decisions (Duhachek, Agrawal, and Han 2012).

Importantly, shame and guilt are two emotions that perfectionists are prone to experiencing, both at a trait and at a state level (Fedewa et al. 2005; Stoeber et al. 2007). Given that perfectionists strive for flawlessness, which is realistically not always feasible, both standards and discrepancy perfec-

tionists often confront situations where their high standards and actual performance do not align (i.e., performance failure). However, shame and guilt may be differentially related to perfectionism, depending on the type of perfectionism; negative perfectionists are more likely to feel a sense of shame than guilt, whereas positive perfectionists are more likely to experience guilt than shame (Stoeber et al. 2007).

Shame and guilt also prompt different coping strategies in response to such negative situations (Duhachek et al. 2012). Whereas guilt elicits a motivation to address the situation, shame evokes thoughts of self-inefficacy. Consequently, guilt-laden individuals are more likely to pursue problem-focused coping to address the guilt-eliciting problem, while shame-laden individuals tend to engage in emotion-focused coping to alleviate their feelings of shame (Duhachek et al. 2012). This finding is consistent with research cited above about different types of perfectionism being associated with variant coping strategies that, in turn, led us to predict that discrepancy (vs. standards) perfectionists will engage in higher maladaptive consumption as a means of coping with performance failure. That is, discrepancy (vs. standards) perfectionists feeling shame (vs. guilt) in stressful situations will resort more to maladaptive consumption as a coping means. Therefore, we propose that shame (vs. guilt) experienced by discrepancy (vs. standards) perfectionists will drive their maladaptive consumption choices in response to performance failure. Formally:

> **H2:** The effect of perfectionism on maladaptive consumption is driven by shame versus guilt, depending on the dimensions of perfectionism, such that
>
> **a)** shame underlies the link between discrepancy perfectionism and maladaptive consumption, while
> **b)** guilt underlies the link between standards perfectionism and maladaptive consumption.

Our conceptual model is visualized in figure 1 (separated out by perfectionism dimension).

OVERVIEW OF STUDIES

We tested our account across two exploratory studies (app. A; apps. A–F are available online) and four main studies. The first two exploratory studies (studies A1 and A2) examined how standards perfectionism and discrepancy perfectionism relate to shame and guilt. Participants in both studies responded to the standards and discrepancy perfectionism scales (Almost Perfect Scale-Revised [APS-R]; Slaney et al. 2001). Participants
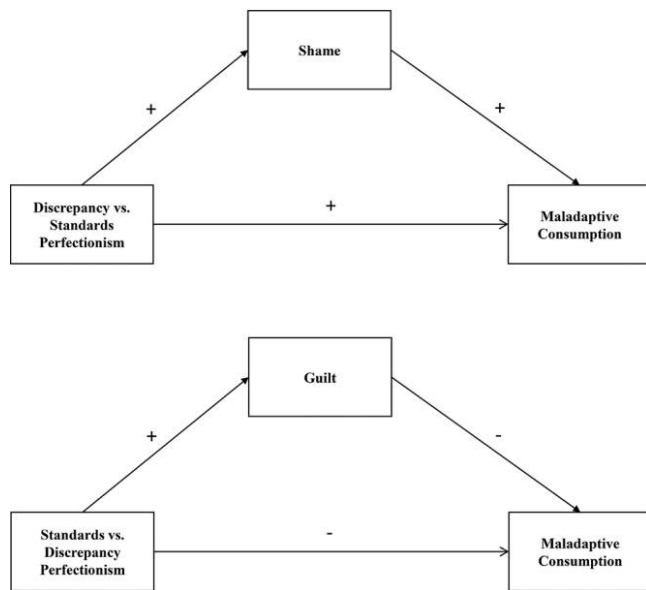
Figure 1. Shame and guilt play differential roles in the effects of discrepancy versus standards perfectionism on maladaptive consumption.

in study A1 also responded to the Test of Self-Conscious Affect (TOSCA-3; Tangney et al. 2000), a well-established measure tapping into an individual's chronic shame and guilt proneness. Participants in study A2 responded to a different measure, the Guilt and Shame Proneness scale (Cohen et al. 2011). Across both studies, results confirmed that perfectionism is differentially related to shame and guilt, depending on the type of perfectionism. Specifically, whereas discrepancy perfectionism is positively correlated with shame but not guilt, standards perfectionism is positively correlated with guilt but not shame. Both studies are described in detail in appendix A.

Next, we report our four main studies. The first two studies employed trait perfectionism and tested the full model depicted in figure 1, including the mediating pathways of shame and guilt. Study 1 examined a consumer-proximate domain of compulsive buying. In study 2, we employed multiple types of harmful behaviors in the measurement (e.g., social media, gaming, and shopping addictions) that are difficult to assess in causal settings. Then, in studies 3A and 3B, we tested the effect of perfectionism on maladaptive consumption by manipulating different dimensions of perfectionism, aiming to establish a causal link between our constructs. Study materials, data, and analysis syntaxes are available here: http://drive.google.com /drive/folders/1FQwLIDYzOe8KN7T9kTN0uvjGrBTB0HXs ?usp=sharing.

STUDY 1
Method
The objective of study 1 was to examine the overall theoretical model with measures of perfectionism, trait shame and guilt, and compulsive buying by testing the prediction that the link between perfectionism and maladaptive consumption (compulsive buying in the current study) is mediated by shame or guilt, depending on the type of perfectionism. Compulsive buying (Faber and O'Guinn 1992) was selected in study 1 for several reasons. First, approximately 6% of the US population putatively engages in such behavior (Koran et al. 2006). Second, it is intricately linked to other kinds of addictive behaviors, such as substance abuse and eating disorders (Black 2007). Third, it can have adverse consequences such as relationship strain (Klaffke 2004), experiences of anxiety, and financial problems (Zumbo 2002).

Design and Participants. One hundred seventy-two Amazon Mechanical Turk (MTurk) participants (M_{age} = 36.78; 51% female) were recruited for a small monetary reward.

Procedures. First, perfectionism was measured using the APS-R (Slaney et al. 2001). Participants rated their agreement on a 7-point scale (1 = strongly disagree, 7 = strongly agree), with seven statements tapping standards perfectionism (α = .92) and 12 statements tapping discrepancy perfectionism (α = .96; app. B); exemplary items were "I have high standards for my performance at work or at school" (standards) and "My best just never seems to be good enough for me" (discrepancy). As part of the original scale, four statements tapping order perfectionism were also measured but are not reported, as order perfectionism does not bear on our theoretical model. Next, shame and guilt were measured using TOSCA-3 (Tangney et al. 2000). Participants were presented with various situations (e.g., performing poorly on an exam) and asked to indicate how likely they were to show different reactions that reflected feelings of shame (e.g., "You would feel stupid") or guilt (e.g., "You would think 'I should have studied harder'"). Finally, participants responded to the Compulsive Buying Scale (Faber and O'Guinn 1992; app. C), which asks respondents to rate various statements describing their spending patterns on 5-point scales (1 = strongly agree, 5 = strongly disagree; 1 = very often, 5 = never). An exemplary item was "If I have any money left at the end of the pay period, I just have to spend it." Ratings were reverse coded so that higher scores indicated higher compulsive buying tendencies, and a composite score of

compulsive buying was computed on the basis of past research (Faber and O'Guinn 1992).

Results

Harman's single-factor test across all measures indicated that the total variance explained by a single factor was less than 50% at 26.37%, alleviating concerns of common method bias. The data were subjected to a standard mediation analysis (PROCESS model 4) with 5,000 bootstrapped samples (Hayes 2013). The results indicated that discrepancy perfectionism was positively correlated with compulsive buying (i.e., greater maladaptive consumption) through shame; standards perfectionism, however, was negatively correlated with compulsive buying (i.e., lower maladaptive consumption) through guilt (see table 1). The zero-order correlations among all key variables also indicated consistent results (app. D).

Discussion

Relying on trait measures, study 1 documented findings consistent with our predictions in a compulsive buying setting. Importantly, it showed discrete emotion-based mediation. Shame explained the association of discrepancy perfectionism with higher compulsive buying, while guilt explained the association between standards perfectionism and lower compulsive buying. Study 2 extended study 1 by replicating and testing the full theoretical model across three kinds of other addictive domains—social media, gaming, and shopping.

STUDY 2

Method

Design and Participants. Two hundred thirty-one participants (M_{age} = 35.13; 42% female) were recruited from MTurk, paid a small monetary incentive, and asked to respond to a series of survey measures. Social media, gaming, and shopping addictions were selected as proxies for maladaptive consumption given their pandemic import and magnitude. Scholars have shown keen research interest in these domains (Clark and Calleja 2008; Van Rooij et al. 2010; Hajli 2014). Furthermore, 30% of US social media users state that they are addicted

to it (Clement 2019); approximately 4% of worldwide gamers (i.e., 10 million people) are estimated to be addicted (World Health Organization 2018), and approximately 5% of shoppers are shopping addicts (Maraz, Griffiths, and Demetrovics 2016). As with compulsive buying, these behaviors are also associated with adverse physical and emotional consequences (Kuss and Griffiths 2012; Moqbel and Kock 2018).

Procedures. As in study 1, perfectionism was measured using APS-R (Slaney et al. 2001), and shame and guilt were measured using TOSCA-3 (Tangney et al. 2000). Then three scales representing different addictive behaviors assessed maladaptive consumption, as follows: the Social Media Addiction Scale (Lemmens, Valkenburg, and Peter 2009), the Game Addiction Scale (Andreassen et al. 2015), and the Bergen Shopping Addiction Scale (Andreassen et al. 2016). All three scales (app. E) had participants rate on 5-point scales various statements describing their relationship to and use of social media, video games, and shopping in the past few months (1 = very rarely, 5 = very often; 1 = completely disagree, 5 = completely agree). Exemplary items included "Tried to cut down on the use of social media without success" (Social Media Addiction Scale; α = .93), "Had fights with others (e.g., family, friends) over your time spent on games" (Game Addiction Scale; α = .94), and "I feel I have to shop/buy more and more to obtain the same satisfaction as before" (Bergen Shopping Addiction Scale; α = .95). To reduce common method bias, we included three filler measures between scales (e.g., "Please tell us the first thing you did when you woke up this morning"), and we created composite measures for each scale by averaging across items.

Results

Harman's single-factor test across all measures indicated that the total variance explained by a single factor was less than 50% at 38.29%, alleviating concerns of common method bias. Data were subjected to a standard mediation analysis (PROCESS model 4) with 5,000 bootstrapped samples (Hayes 2013). Results indicated that discrepancy perfectionism had

Table 1. Indirect Effect Results from Study 1

Analytic path	Indirect effect	SE	LLCI	ULCI
Discrepancy → shame → compulsive buying	.1558	.0627	.0394	.2838
Standards → guilt → compulsive buying	−.1697	.0626	−.0616	−.3030

Note.—LLCI = lower level confidence interval; ULCI = upper level confidence interval.

Table 2. Indirect Effect Results from Study 2

Analytic path	Indirect effect	SE	LLCI	ULCI
Discrepancy perfectionism → shame → addiction:				
Discrepancy → shame → social media	.0901	.0262	.0386	.1428
Discrepancy → shame → game	.0961	.0228	.0544	.1433
Discrepancy → shame → shopping	.1006	.0241	.0560	.1509
Standards perfectionism → guilt → addiction:				
Standards → guilt → social media	−.1149	.0376	−.2008	−.0535
Standards → guilt → game	−.1193	.0355	−.1984	−.0589
Standards → guilt → shopping	−.1469	.0429	−.2424	−.0725

Note.—LLCI = lower level confidence interval; ULCI = upper level confidence interval.

a positive effect on addiction (i.e., more addictive behavior) through shame, and standards perfectionism had a negative effect on addiction (i.e., less addictive behavior) through guilt. This pattern of results was identical across the three types of addiction (see table 2). The zero-order correlations among all key variables were also consistent with these results (app. D).

Discussion

Study 2 extended study 1 by testing the relationships between measured perfectionism, trait shame and guilt, and three behavioral addictions. Findings were consistent across addiction domains, underscoring the robust links among different dimensions of perfectionism, shame and guilt, and addiction. In the next two studies, we manipulated perfectionism to examine its causal link to maladaptive consumption.

STUDY 3A
Method
Design and Participants. Study 3A employed a single-factor (perfectionism: standards vs. discrepancy) between-subjects design. One hundred sixty-six undergraduate students (M_{age} = 20.22; 55% female) from a large US university participated for course credit.

Procedures. In the first part of the study, participants were randomly assigned to one of two perfectionism conditions: standards and discrepancy. Participants in both conditions were provided with a description of perfectionism and how perfectionists set high standards for their performance across various contexts. Those in the standards perfectionism condition were then asked to recall a time when they set very high standards for themselves and tried to achieve excellence in any domain and to write their thoughts and feelings in detail. Those in the discrepancy perfectionism condition were asked

to recall a time when they set very high standards for themselves yet felt that what they had done was insufficient and that they could have done better. The instructions of this manipulation were created specifically for this research and are fully presented in appendix F. Next, to check the effectiveness of our manipulation, participants were asked to rate three statements taken from APS-R regarding the extent to which they described themselves right at the moment (Slaney et al. 2001). The specific items were "I rarely live up to my high standards," "My performance rarely measures up to my standards," and "I am not satisfied even when I know I have done my best"; scores across these items were averaged to create a manipulation check index (α = .75).

Next, in a task ostensibly to assess vocabulary skills, participants engaged in a word unscrambling task. This task, adapted from Förster at al. (2001), prompted participants to experience failure by providing negative feedback on their performance. Participants were presented with five sets of letter strings and asked to unscramble each set of letters to form an actual word (e.g., "mlroebp" could be unscrambled to be "problem"). To test whether this manipulation led participants to experience a sense of failure, a separate pretest was conducted with 200 MTurk participants randomly assigned to a "failure" or "above average" performance feedback condition. When participants were asked to rate three statements reflecting their perceived performance (e.g., "To what extent do you feel like you did a good job in solving the word problems?"; 1 = not good at all, 7 = very good; α = .94), those who received failure feedback as in study 3A (M = 3.94, SD = 2.12) indicated that they did a worse job than those who had received feedback that their performance on the unscrambling task was above average (M = 5.50, SD = 1.42; $F(1, 198)$ = 37.30, $p < .001$), confirming the success of the performance failure manipulation.

Coming back to the main study, after completing the word unscrambling task, all respondents received failure feedback on their performance. They were specifically informed that compared with other people surveyed, they were below the average and in the bottom 20%. The last part of the study asked participants to make a choice regarding what they wanted to consume at the moment, carrot sticks or potato chips, using a 7-point scale (1 = highly likely to choose carrot sticks, 7 = highly likely to choose potato chips; higher scores indicated greater preference for the maladaptive choice). This dependent measure was constructed on the basis of past research showing that consumers view carrots as a healthy choice and potato chips as an unhealthy choice (Klesse, Levav, and Goukens 2015; Woolley and Fishbach 2016).

Results

The manipulation of perfectionism was successful, with participants in the discrepancy perfectionism condition (M = 4.26, SD = 1.32) indicating that they thought about the discrepancy between their standards and their performance significantly more than did participants in the standards perfectionism condition (M = 3.45, SD = 1.30; $F(1, 164)$ = 15.93, p < .001). Next, we conducted a one-way ANOVA with consumption choice as the dependent variable and perfectionism condition as the independent variable. Findings indicated a significantly higher likelihood of potato chips being chosen over carrot sticks in the discrepancy perfectionism condition than in the standards condition ($M_{discrepancy}$ = 4.59, SD = 2.39; $M_{standards}$ = 3.73, SD = 2.32; $F(1, 164)$ = 5.54, p = .020); see figure 2.

STUDY 3B

Study 3B examined how standards and discrepancy perfectionists' maladaptive consumption compares with a control
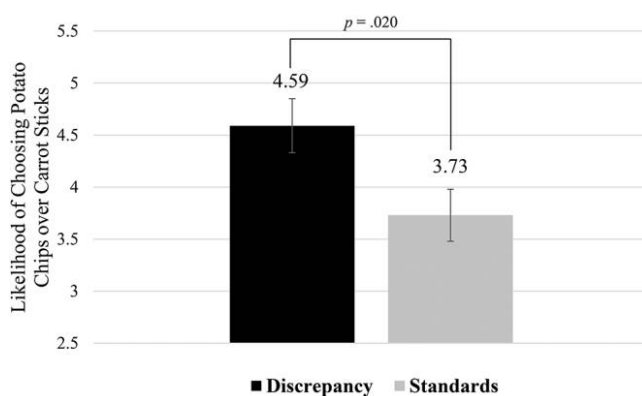

Figure 2. Discrepancy (vs. standards) perfectionism leads to a higher likelihood of choosing a maladaptive choice.

condition where participants did not adopt any perfectionistic mindset.

Method

Design and Participants. Four hundred participants (M_{age} = 38.02; 60% female) were recruited from MTurk for a small monetary incentive (11 additional participants initially started the study but were excluded at the beginning after failing the attention check). The study employed a single-factor (perfectionism: standards vs. discrepancy vs. control) between-subjects design.

Procedures. To reduce potential demand effects, we framed perfectionism manipulation and maladaptive choice as separate studies. Perfectionism manipulation for discrepancy and standards conditions was the same as in study 3A. Participants in the control condition were asked to recall and write about a time in which they adopted a relaxed and easygoing mindset toward their performance in any domain (app. F). Then, to strengthen our manipulation, participants were additionally instructed to adopt the mindset they wrote about (i.e., perfectionist/relaxed) in going through the word unscrambling task. Subsequently, all participants received the failure feedback, followed by manipulation checks, which were the three discrepancy statements used in study 3A (α = .82) and the three standards perfectionism statements from APS-R (Slaney et al. 2001), "I set very high standards for myself," "I expect the best from myself," and "I have a strong need to strive for excellence," the scores of which were averaged (α = .94). Note that between the two perfectionism conditions, we expected differences only in discrepancy statements and not in standards statements. Finally, we used the same consumption choice measure as in study 3A (potato chips vs. carrot sticks).

Results

A one-way ANOVA on the standards manipulation check index indicated a main effect of perfectionism, $F(2, 397)$ = 54.51, p < .001. Post hoc analysis revealed that compared with those in the control condition (M = 4.22, SD = 1.80), discrepancy (M = 5.76, SD = 1.13) and standards (M = 5.76, SD = 1.12) participants adopted a higher standards perfectionism mindset (Fisher's least significant difference [LSD]: both p < .001). A one-way ANOVA on the discrepancy manipulation check index also indicated a main effect of perfectionism, $F(2, 397)$ = 9.89, p < .001. Compared with control (M = 3.63, SD = 1.47) or standards (M = 4.01, SD = 1.54) respondents, discrepancy respondents (M = 4.45,
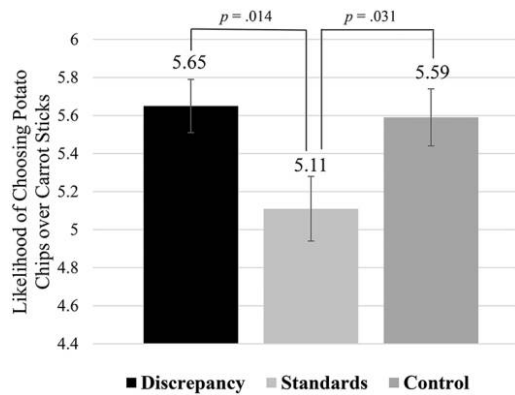
Figure 3. Effect of a discrepancy versus standards versus control mindset on the likelihood of choosing a maladaptive choice.

SD = 1.54) adopted a higher discrepancy perfectionism mindset (Fisher's LSD: both $p < .05$).

A one-way ANOVA on consumption choice revealed a significant effect of perfectionism, $F(2, 397) = 3.67, p = .026$. Post hoc analysis revealed that those in the standards condition ($M = 5.11$, SD = 1.99) indicated a lower likelihood of choosing potato chips compared with those in the discrepancy ($M = 5.65$, SD = 1.66; Fisher's LSD: $p = .014$) and control ($M = 5.59$, SD = 1.72; Fisher's LSD: $p = .031$) conditions. There was no difference between the discrepancy and control conditions (fig. 3).

Discussion

Studies 3A and 3B provided support for the causal link between standards and discrepancy perfectionism and maladaptive choice. Additionally, study 3B, featuring a control condition, indicated that it is standards perfectionism, compared with discrepancy perfectionism, that decreases maladaptive consumption. This finding helps us view the negative and positive effects of perfectionism through the lens of discrepancy and standards perfectionism across both trait and state levels.

GENERAL DISCUSSION

The current research investigated the influence of perfectionism—either situationally induced or measured as a trait—on consumers' maladaptive choices. Across four studies, we demonstrated that discrepancy perfectionism is more likely to lead to maladaptive consumption compared with standards perfectionism. In other words, the dimension of perfectionism matters. Studies 1 and 2 examined whether feelings of guilt

or shame underlie the effect of perfectionism on maladaptive consumption using trait perfectionism and various maladaptive consumption and behavioral addiction scales. Results across all scales showed that whereas discrepancy perfectionism is associated with higher levels of maladaptive consumption through feelings of shame, standards perfectionism is linked to lower levels of maladaptive consumption through feelings of guilt. Studies 3A and 3B tested the effect of state perfectionism on maladaptive choice following performance failure. Both studies found that consumers who focus on the discrepancy between their high standards and their actual performance (i.e., discrepancy perfectionists) are more likely to select the maladaptive option over the adaptive one compared with those who focus on their high standards (i.e., standards perfectionists). Additionally, study 3B showed that compared with a control condition, standards perfectionism reduces maladaptive consumption.

Core Conceptual Contributions

Perfectionism, long studied in clinical and personality psychology, has not been a focal topic in consumer research. Our research represents only a handful of consumer inquiries relating to perfectionism (Kopalle and Lehmann 2001; He 2016) and provides insight about a novel antecedent that influences maladaptive choice. Constructs similar to perfectionism such as a maximizing mindset and a self-enhancement motive have been studied in consumer research, but each differs from perfectionism. For instance, a maximizing mindset is a decision strategy of being motivated to identify and acquire the best option; it involves an extensive search and comparison process (Schwartz et al. 2002). However, this desire to obtain the best option is a perspective that consumers take in making choices and is not germane to personal achievement per perfectionism. Furthermore, the self-enhancement motivation is the desire to maintain, protect, and enhance one's self-esteem and leads people to engage in various strategies that facilitate feeling good about themselves (Leary 2007). Therefore, self-enhancers exhibit different responses when they experience failure, such as thinking that they are better than they actually are (Alicke and Govorun 2005). Such a response contrasts with how perfectionists react, especially discrepancy perfectionists, who dwell on their standards-performance gap.

We extend the perfectionism literature in demonstrating that perfectionist tendencies not only are associated with but also are causally linked to maladaptive choices. Past research has shown either that trait standards perfectionism

and discrepancy perfectionism are differentially related to alcohol-related problems (Rice and Van Arsdale 2010) or that state perfectionism may causally drive individuals to display symptoms of eating disorders (Shafran et al. 2006; Boone et al. 2012). Our investigation tested a theoretical framework using both state and trait perfectionism, as well as various domains of maladaptive consumption, such as food, shopping, gaming, and social media. Accordingly, we have provided a holistic and generalizable investigation of our predictions.

Third, we add to the emotion literature by showing that feelings of shame and guilt drive perfectionists to engage in maladaptive consumption. Past consumer research on guilt and shame has largely focused on the effect of these two emotions on subsequent judgment and persuasion (Duhachek et al. 2012). Our research, however, demonstrates shame and guilt as underlying processes in explaining perfectionism's influence on maladaptive choice across domains, thus linking the two emotions to both predictors and outcomes. In doing so, our work expands the stream of work that differentiates these two closely related emotional states in terms of varying antecedents and consequences.

Current Research versus Related Literature

Our findings share similarities and differences with literature on compensatory consumption, affect regulation, and coping—making our work most similar to a category of phenomenon called displaced coping (Chen and Pham 2019). Lying at the intersection of all three literatures, displaced coping reflects situations in which individuals who are experiencing distinct negative emotions engage in behaviors to implicitly try to change their negative affective states (Raghunathan, Pham, and Corfman 2006).

Our research may be similar to compensatory consumption findings in that both posit consumption behavior to be driven by self-discrepancies between desired and actual self-views (Mandel et al. 2017). However, our findings differ in terms of processes and outcomes following these self-discrepancies. Specifically, whereas compensatory consumption literature notes that the process of reducing self-discrepancies may not necessarily involve any attempts to change one's affective state, our framework accords a central role to emotional states of shame and guilt as the underlying processes driving maladaptive consumption. Additionally, in contrast to symbolic self-completion, which involves consumption occurring in the same domain as the source of self-discrepancy (e.g., preferring fountain pens when feeling less intelligent; Gao, Wheeler, and Shiv 2009), our work shows that self-discrepancy following a perfectionist mindset influences consumption

in distinct, separate domains. Even in fluid compensatory consumption (i.e., affirming oneself in a domain distinct from the one that evokes self-discrepancy), the outcomes differ in that the compensatory consumption may not necessarily be maladaptive in nature (e.g., choosing an aesthetically pleasing product; Townsend and Sood 2012), a key characteristic of our dependent variable.

Affect regulation is a "conscious attempt to influence the nature of one's affective state" (Chen and Pham 2019, 115) and overlaps with coping (i.e., dealing with stressors) in that individuals engage in behaviors aimed at changing their emotions in response to negative affect (i.e., emotion-focused coping; Duhachek et al. 2012). While self-discrepancies may evoke negative emotions, as we propose in our research, our findings are different in that engaging in maladaptive consumption to regulate affect is not necessarily a conscious process. Our research also differs from problem-focused coping in that individuals are not addressing the stressor (i.e., performance failure) directly but are resorting to consumption in an unrelated domain. In sum, our research overlaps with compensatory consumption in terms of antecedents (i.e., self-discrepancies), affect regulation in terms of process, and coping in terms of outcomes (i.e., consumption in domains unrelated to stressors) and is most similar to displaced coping, which combines elements across all three. However, an important difference is our focus on maladaptive consumption, an outcome that is not necessarily involved in displaced coping (e.g., preference for safe options; Raghunathan et al. 2006).

Implications for Consumers

Our findings suggest that consumers' orientations toward their standards and performances influence their subsequent maladaptive consumption, offering insights on how consumers should regulate and cope with stressors such as negative feedback. Studies 3A and 3B indicate that merely recalling past perfectionist striving (standards) versus concerns (discrepancy) influences how consumers cope with subsequent performance failure. Our findings also have implications for nonperfectionists, as our manipulations in studies 3A and 3B indicate that perfectionist mindsets can be easily adopted regardless of consumers' trait levels of perfectionism. Additionally, study 3B's results pertaining to the control condition suggest that the difference between standards and discrepancy perfectionism is driven by standards perfectionism decreasing (rather than discrepancy perfectionism increasing) maladaptive consumption. Therefore, consumers should center their attention on their high standards and be cautious about criticizing themselves for not meeting their standards.

Furthermore, consumers who dwell on their standards-performance gap should divert their attention away from feelings of shame and seek to evaluate the situation in terms of their actions and choices, as indicated by the positive effects of guilt-based coping.

The Larger Theme: Addiction and Maladaptive Consumption

In the latest edition of the *Diagnostic and Statistical Manual of Mental Disorders* (*DSM-5*), the chapter "Substance-Related and Addictive Disorders" was revised to expand the group of included disorders (American Psychiatric Association [APA] 2013). For instance, the chapter now places gambling disorder in a new category of behavioral addictions; in the previous version of the manual (i.e., *DSM-IV*), however, pathological gambling (and sexual promiscuity; van Esch and Cui 2021) was not recognized as such. This new terminology and classification reflect scientific findings that gambling disorder has a neurological basis (e.g., Turel and Bechara 2021), comorbidity, and treatment profile similar to those of substance-related disorders (Leeman and Potenza 2012).

Additionally, these commonalities across addictive disorders allow consumers to enhance their understanding of the challenges in being diagnosed and receiving treatment. Although gambling disorder (Kulow, Kramer, and Bentley 2021) is the only behavioral addiction in *DSM-5* included as a diagnosable condition, internet gaming disorder is listed in a separate chapter that encompasses conditions requiring further research before they can be formally determined as diagnosable. The APA, however, acknowledges that there are numerous research findings that reveal that repeated and persistent consumption of and preoccupation with internet games are associated with negative clinical outcomes. Our findings provide fairly robust insight that the effect of perfectionism is consistent across various domains of maladaptive consumption, ranging from trait-level behavioral addictions, such as internet (Raghubir, Menon, and Ling 2021), gaming, and social media addictions, to possibly less intrusive consumption behaviors, such as snack choices. As the recent changes in *DSM* reflect, maladaptive consumption is becoming more prominent in modern consumer society, and it is important to understand and combat maladaptive consumption through the lens of consumer research (Reimann and Jain 2021).

Our research demonstrates that having or adopting a specific perfectionist perspective influences consumers' likelihood of engaging in negative consumption patterns. We believe that in a broader sense, perfectionism could be classified as a value system that guides consumers' choices and actions. In line with the definition of a value—an abstract entity that is believed to be desirable and guides behavior (Saucier 2013)—high perfectionists find perfection to be valuable and use this quality to direct their behavior. Therefore, acknowledging perfectionism as a value system is important in further understanding how perfectionism can affect decision-making, especially in the context of maladaptive consumption. A recent finding that perfectionism has become more prevalent in the younger generation adds to the importance of comprehending the impact of perfectionism (Curran and Hill 2019).

Future Research

Future research can extend our findings in several ways. First, researchers can examine whether other types of perfectionism have similar effects on maladaptive consumption. Whereas the current research focused on perfectionism that is directed toward oneself (i.e., self-oriented perfectionism), future work can investigate whether perfectionism directed toward close others (i.e., other-oriented perfectionism) or perfectionism imposed by others (i.e., socially prescribed perfectionism) influences consumers' likelihood of engaging in maladaptive consumption (Hewitt and Flett 1991). Second, scholars can address the challenges in studying addiction causally and testing mediation via state shame and guilt. Distinguishing shame and guilt is notoriously difficult, so researchers can try measuring state shame and guilt indirectly by describing the emotions using trait scales. Testing addiction using traditional experimental methods is difficult (Reimann and Jain 2021), but researchers can try recruiting addicted individuals and investigating whether perfectionism influences their behavior, especially given our finding on the potential for standards perfectionism to address this concern. Third, researchers can investigate moderators of our findings, such as the extent to which the domain in which consumers are striving for perfection is important to them or the degree to which consumers rely on their feelings in making consumption decisions. Finally, future research can examine the effect of perfectionism in other contexts, such as following performance success or on adaptive consumption as the dependent variable. While our dependent measures in studies 3A and 3B could also reflect adaptive consumption since participants chose between maladaptive (chips) and adaptive (carrots) options, it would be of interest to explicitly examine how perfectionism dimensions influence healthy consumption. Additionally, examining perfectionists' consumption following performance success could involve different processes (e.g., sense of entitlement) than the coping mechanism we posit in the current research.

REFERENCES

Alicke, Mark D., and Olesya Govorun (2005), "The Better-Than-Average Effect," in *The Self in Social Judgment*, ed. Mark D. Alicke, David A. Dunning, and Joachim Krueger, New York: Psychology Press, 85–106.

American Psychiatric Association (2013), *Diagnostic and Statistical Manual of Mental Disorders*, Arlington, VA: American Psychiatric Publishing.

Andreassen, Cecilie Schou, Joël Billieux, Mark D. Griffiths, Daria J. Kuss, Zsolt Demetrovics, Elvis Mazzoni, and Ståle Pallesen (2016), "The Relationship between Addictive Use of Social Media and Video Games and Symptoms of Psychiatric Disorders: A Large-Scale Cross-Sectional Study," *Psychology of Addictive Behaviors*, 30 (2), 252–62.

Andreassen, Cecilie Schou, Mark D. Griffiths, Ståle Pallesen, Robert M. Bilder, Torbjørn Torsheim, and Elias Aboujaoude (2015), "The Bergen Shopping Addiction Scale: Reliability and Validity of a Brief Screening Test," *Frontiers in Psychology*, 6 (1374), 1–11.

Black, Donald W. (2007), "A Review of Compulsive Buying Disorder," *World Psychiatry*, 6 (1), 14–18.

Boone, Liesbet, Bart Soenens, Maarten Vansteenkiste, and Caroline Braet (2012), "Is There a Perfectionist in Each of Us? An Experimental Study on Perfectionism and Eating Disorder Symptoms," *Appetite*, 59 (2), 531–40.

Burns, D. D. (1980), "The Perfectionist's Script for Self-Defeat," *Psychology Today* (November), 34–51.

Chen, Charlene Y., and Michel T. Pham (2019), "Affect Regulation and Consumer Behavior," *Consumer Psychology Review*, 2 (1), 114–44.

Clark, Marilyn, and Kirsten Calleja (2008), "Shopping Addiction: A Preliminary Investigation among Maltese University Students," *Addiction Research and Theory*, 16 (6), 633–49.

Clement, J. (2019), "U.S. Internet Users Addicted to Social Media 2019, by Age Group," Statista, http://www.statista.com/statistics/1081292/social-media-addiction-by-age-usa/.

Cohen, Taya R., Scott T. Wolf, Abigail T. Panter, and Chester A. Insko (2011), "Introducing the GASP Scale: A New Measure of Guilt and Shame Proneness," *Journal of Personality and Social Psychology*, 100 (5), 947–66.

Curran, Thomas, and Andrew P. Hill (2019), "Perfectionism Is Increasing over Time: A Meta-analysis of Birth Cohort Differences from 1989 to 2016," *Psychological Bulletin*, 145 (4), 410–29.

Duhachek, Adam, Nidhi Agrawal, and DaHee Han (2012), "Guilt versus Shame: Coping, Fluency, and Framing in the Effectiveness of Responsible Drinking Messages," *Journal of Marketing Research*, 49 (6), 928–41.

Dunkley, David M., David C. Zuroff, and Kirk R. Blankstein (2003), "Self-Critical Perfectionism and Daily Affect: Dispositional and Situational Influences on Stress and Coping," *Journal of Personality and Social Psychology*, 84 (1), 234–52.

Faber, Ronald J., and Thomas C. O'Guinn (1992), "A Clinical Screener for Compulsive Buying," *Journal of Consumer Research*, 19 (3), 459–69.

Fedewa, Brandy A., Lawrence R. Burns, and Alex A. Gomez (2005), "Positive and Negative Perfectionism and the Shame/Guilt Distinction: Adaptive and Maladaptive Characteristics," *Personality and Individual Differences*, 38 (7), 1609–19.

Förster, Jens, Heidi Grant, Lorraine Chen Idson, and E. Tory Higgins (2001), "Success/Failure Feedback, Expectancies, and Approach/Avoidance Motivation: How Regulatory Focus Moderates Classic Relations," *Journal of Experimental Social Psychology*, 37 (3), 253–60.

Frost, Randy O., Patricia Marten, Cathleen Lahart, and Robin Rosenblate (1990), "The Dimensions of Perfectionism," *Cognitive Therapy and Research*, 14 (5), 449–68.

Gao, Leilei, S. Christian Wheeler, and Baba Shiv (2009), "The 'Shaken Self': Product Choices as a Means of Restoring Self-View Confidence," *Journal of Consumer Research*, 36 (1), 29–38.

Hajli, Nick M. (2014), "A Study of the Impact of Social Media on Consumers," *International Journal of Market Research*, 56 (3), 387–404.

Hamachek, Don E. (1978), "Psychodynamics of Normal and Neurotic Perfectionism," *Psychology: A Journal of Human Behavior*, 15 (1), 27–33.

Hayes, Andrew F. (2013), *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*, New York: Guilford.

He, Xin (2016), "When Perfectionism Leads to Imperfect Consumer Choices: The Role of Dichotomous Thinking," *Journal of Consumer Psychology*, 26 (1), 98–104.

Hewitt, Paul L., and Gordon L. Flett (1991), "Perfectionism in the Self and Social Contexts: Conceptualization, Assessment, and Association with Psychopathology," *Journal of Personality and Social Psychology*, 60 (3), 456–70.

Klaffke, Pamela (2004), *Spree: A Cultural History of Shopping*, Vancouver, BC: Arsenal Pulp.

Klesse, Anne-Kathrin, Jonathan Levav, and Caroline Goukens (2015), "The Effect of Preference Expression Modality on Self-Control," *Journal of Consumer Research*, 42 (4), 535–50.

Kopalle, Praveen K., and Donald R. Lehmann (2001), "Strategic Management of Expectations: The Role of Disconfirmation Sensitivity and Perfectionism," *Journal of Marketing Research*, 38 (3), 386–94.

Koran, Lorrin M., Ronald J. Faber, Elias Aboujaoude, Michael D. Large, and Richard T. Serpe (2006), "Estimated Prevalence of Compulsive Buying Behaviour in the United States," *American Journal of Psychiatry*, 163 (10), 1806–12.

Kulow, Katrina, Thomas Kramer, and Kara Bentley (2021), "Lady Luck: Anthropomorphized Luck Creates Perceptions of Risk-Sharing and Drives Pursuit of Risky Alternatives," *Journal of the Association for Consumer Research*, 6 (3), in this issue.

Kuss, Daria Joanna, and Mark D. Griffiths (2012), "Internet Gaming Addiction: A Systematic Review of Empirical Research," *International Journal of Mental Health Addiction*, 10 (2), 278–96.

Lazarus, Richard S. (1991), "Progress on a Cognitive-Motivational-Relational Theory of Emotion," *American Psychologist*, 46 (8), 819–34.

Leary, Mark R. (2007), "Motivational and Emotional Aspects of the Self," *Annual Review of Psychology*, 58 (2007), 317–44.

Leeman, Robert F., and Marc N. Potenza (2012), "Similarities and Differences between Pathological Gambling and Substance Use Disorders: A Focus on Impulsivity and Compulsivity," *Psychopharmacology*, 219 (2), 469–90.

Lemmens, Jeroen S., Patti M. Valkenburg, and Jochen Peter (2009), "Development and Validation of a Game Addiction Scale for Adolescents," *Media Psychology*, 12 (1), 77–95.

Mandel, Naomi, Derek D. Rucker, Jonathan Levav, and Adam D. Galinsky (2017), "The Compensatory Consumer Behavior Model: How Self-Discrepancies Drive Consumer Behavior," *Journal of Consumer Psychology*, 27 (1), 133–46.

Maraz, Aniko, Mark D. Griffiths, and Zsolt Demetrovics (2016), "Prevalence of Compulsive Buying: A Meta-analysis," *Addiction*, 111 (3), 408–19.

Moqbel, Murad, and Ned Kock (2018), "Unveiling the Dark Side of Social Networking Sites: Personal and Work-Related," *Information and Management*, 55 (1), 109–19.

Raghubir, Priya, Geeta Menon, and I-Ling (Amy) Ling (2021), "Web Wizard or Internet Addict? The Effects of Contextual Cues in Assessing Addiction," *Journal of the Association for Consumer Research*, 6 (3), in this issue.

Raghunathan, Rajagopal, Michel T. Pham, and Kim P. Corfman (2006), "Informational Properties of Anxiety and Sadness, and Displaced Coping," *Journal of Consumer Research*, 32(4), 596–601.

Reimann, Martin, and Shailendra P. Jain (2021), "Maladaptive Consumption: Definition, Theoretical Framework, and Research Propositions," *Journal of the Association for Consumer Research*, 6 (3), in this issue.

Rice, Kenneth G., and Amy C. Van Arsdale (2010), "Perfectionism, Perceived Stress, Drinking to Cope, and Alcohol-Related Problems among College Students," *Journal of Counseling Psychology*, 57 (4), 439–50.

Saucier, Gerard (2013), "Isms Dimensions: Toward a More Comprehensive and Integrative Model of Belief-System Components," *Journal of Personality and Social Psychology*, 104 (5), 921–39.

Schwartz, Barry, Andrew Ward, John Monterosso, Sonja Lyubomirsky, Katherine White, and Darrin R. Lehman (2002), "Maximizing versus Satisficing: Happiness Is a Matter of Choice," *Journal of Personality and Social Psychology*, 83 (5), 1178–97.

Shafran, Roz, Michelle Lee, Elizabeth Payne, and Christopher G. Fairburn (2006), "The Impact of Manipulating Personal Standards on Eating Attitudes and Behavior," *Behaviour Research and Therapy*, 44 (6), 897–906.

Slaney, Robert B., Kenneth G. Rice, Michael Mobley, Joseph Trippi, and Jeffrey S. Ashby (2001), "The Revised Almost Perfect Scale," *Measurement and Evaluation in Counseling and Development*, 34 (3), 130–45.

Stoeber, Joachim, Rachel A. Harris, and Paul S. Moon (2007), "Perfectionism and the Experience of Pride, Shame, and Guilt: Comparing Healthy Perfectionists, Unhealthy Perfectionists, and Non-perfectionists," *Personality and Individual Differences*, 43 (1), 131–41.

Stoeber, Joachim, and Kathleen Otto (2006), "Positive Conceptions of Perfectionism: Approaches, Evidence, Challenges," *Personality and Social Psychology Review*, 10 (4), 295–319.

Tangney, June P., and Ronda L. Dearing (2002), *Shame and Guilt*, New York: Guilford.

Tangney, June P., Ronda L. Dearing, Patricia E. Wagner, and Richard Gramzow (2000), *The Test of Self-Conscious Affect—3*, Fairfax, VA: George Mason University.

Terry-Short, L. A., R. Glynn Owens, P. D. Slade, and M. E. Dewey (1995), "Positive and Negative Perfectionism," *Personality and Individual Differences*, 18 (5), 663–68.

Townsend, Claudia, and Sanjay Sood (2012), "Self-Affirmation through the Choice of Highly Aesthetic Products," *Journal of Consumer Research*, 39 (2), 415–28.

Turel, Ofir, and Antoine Bechara (2021), "A Triple System Neural Model of Maladaptive Consumption," *Journal of the Association for Consumer Research*, 6 (3), in this issue.

van Esch, Patrick, and Yuanyuan (Gina) Cui (2021), "Does Consumer Promiscuity Influence Purchase Intent? The Role of Artificial Intelligence (AI), Change Seeking, and Pride," *Journal of the Association for Consumer Research*, 6 (3), in this issue.

Van Rooij, Antonius J., Gert-Jan Meerkerk, Tim M. Schoenmakers, Mark Griffiths, and Dike van de Mheen (2010), "Video Game Addiction and Social Responsibility," *Addiction Research and Theory*, 18 (5), 489–93.

Weiner, Brittany A., and John S. Carton (2012), "Avoidant Coping: A Mediator of Maladaptive Perfectionism and Test Anxiety," *Personality and Individual Differences*, 52 (5), 632–36.

Woolley, Kaitlin, and Ayelet Fishbach (2016), "For the Fun of It: Harnessing Immediate Rewards to Increase Persistence in Long-Term Goals," *Journal of Consumer Research*, 42 (6), 952–66.

World Health Organization (2018), "Gaming Disorder," *World Health Organization Newsletter*, http://www.who.int/features/qa/gaming-disorder/en/.

Zumbo, Bruno D. (2002), *Advances in Quality of Life Research*, Dordrecht: Springer.