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# Consumer Wisdom for Personal Well-Being and the Greater Good: Scale Development and Validation

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Historically, wisdom has been considered a leading character strength for guiding personal well-being and the greater good. It has also been routinely considered domain-specific. Hence, consumer researchers should not just borrow conceptualizations or measures of general wisdom from the social sciences or measures of specific wisdom from nonconsumption contexts. Drawing from recent exploratory research on consumer wisdom by Luchs and Mick (*Journal of Consumer Psychology*, 2018, 28(3), 365-392), we use survey data to test and refine their multidimensional framework as we develop a Consumer Wisdom Scale (CWS). Across five studies, we demonstrate the discriminant, nomological, predictive, and incremental validity of our CWS. We show that it explains unique variance across a variety of indicators of well-being (e.g., satisfaction with life) in comparison to other measures previously associated with well-being (e.g., relationship support). Further, we show that our CWS, versus a general wisdom measure, is more associated with select behaviors relevant to personal well-being and the greater good (e.g., exercise, healthy eating, and financial savings). Closing discussion summarizes our findings and limitations, and suggests future research.

**Keywords** Wisdom; Consumer wisdom; Well-being; Scale development; Measurement

## Introduction

Wisdom has been long considered a leading character strength for guiding personal well-being and the greater good (Birren & Svensson, 2005; Csikszentmihalyi, 1995; Schwartz & Sharpe, 2010; Sternberg, 1998). For example, with respect to personal well-being, Nozick (1989, p. 267) defines wisdom as

“what a person requires in order to live well and cope with the central problems and avoid the dangers in the predicaments human beings find themselves in.” From an orientation of flourishing, morals, and the common good, Plews-Ogan, Owens, and May (2012, p. 12) emphasize wisdom’s multicomponent, combinatorial nature and define it as the “integration of knowledge, experience, humility, and compassion into a creative, good life—a life that makes the world a better place.”

Research on wisdom in the social sciences has burgeoned over the last three decades. A considerable focus has been on its qualities, antecedents, correlates, and consequences (Ardelt, 2003; Baltes & Staudinger, 2000; Bangen, Meeks, & Jeste, 2013; Grossmann, 2017; Peterson & Seligman, 2004; Sternberg, 1990; Sternberg & Gluck, 2019; Sternberg & Jordan, 2005; Walsh, 2015). This progress on wisdom has been fostered in part by treating it as an

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individual difference factor that is assessable through self-report scales (Webster, 2019).

Scholarly attention to wisdom in the contexts of marketing and consumer behavior has emerged recently (Luchs & Mick, 2018; Mick, Bateman, & Lutz, 2009; Mick, Spiller, & Baglioni, 2012; Mick & Schwartz, 2012; Ozanne et al., 2021). This development portends important contributions to work on consumer happiness and meaningfulness (Aaker, 2014; Mogilner & Norton, 2015) and on consumer challenges with food and diet, technology and the internet, personal financial management, and pro-environmental consumption, among others.

However, to bolster advances on consumer wisdom and well-being, it would be neither straightforward nor advisable to merely borrow theories, definitions, and measures of wisdom from the social sciences. First, wisdom theorists have underscored that wisdom is domain-specific (Fowers, 2003; Grossmann, 2017). Thus, wisdom within consumer behavior is likely to have some dimensions distinct from general wisdom and/or other specific domains. For example, a consumer who is wiser in their preferences, spending, and lifestyle will differ in some or many qualities of wisdom from a parent nurturing their child, a police officer investigating a crime, or an executive leading a corporate retreat, each ensconced in their own domain-specific performances.

Second, there is sizeable variation and disagreement about the most productive way to conceptualize wisdom (Grossmann, Westrate, Ferrari, & Brienza, 2020). These disparities should compel consumer researchers to develop their own models and conceptualizations of wisdom in consumer behavior. Luchs and Mick's (2018) recent qualitative work is a generative step in that direction.

Third, self-report measures of wisdom by social scientists are also highly varied. While some take a general wisdom approach (e.g., Thomas et al., 2019; Webster, 2007), others concentrate instead on particular domains such as conflict resolution (Brienza, Kung, Santos, Bobocel, & Grossmann, 2018) or groups such as older populations (Ardelt, 2003) and college students (Brown & Greene, 2006). Whether the general approach is appropriate or sufficient for consumer research is currently unknown, while the second, more specific focus has not so far been tailored to consumer behavior. For consumer researchers, one would expect a specifically derived consumer wisdom scale to be more useful than a general or nonconsumption wisdom scale. But this remains to be determined. A reliable and valid consumer wisdom scale, depending on its content, could serve consumer researchers and their

concerns across a diverse band of subareas such as information search, problem solving, price-value considerations, choice and decision making, compulsive buying, materialism, financial management, and many others.

Taking these points together, there is a clear need and opportunity to develop a consumer wisdom scale that draws insights from the social sciences and nascent work in consumer research. Our novel contributions are as follows. First, through scale development and survey data, we test for the first time, and extend and refine, Luchs and Mick's (2018) framework as we develop a Consumer Wisdom Scale (CWS). We demonstrate and discuss how our scale expands Luchs and Mick (2018) from a five- to a six-dimensional framework of consumer wisdom, with certain changes to their dimension boundaries, meanings, and labels. Our scale is, on the one hand, narrowly focused on certain aspects of consumer behavior including values, ethics, goals, preferences, budgeting, spending, and lifestyle—recognizing that consumer issues and behaviors are even wider ranging. On the other hand, it is broadly applicable to numerous areas of personal and collective well-being that those aspects affect, including individual and societal health, household financial management, and sustainability inspired consumption.

Secondly, we demonstrate across five studies the discriminant, nomological, predictive, and incremental validity of our CWS and its dimensions within a network of other theory-logical variables. These variables, which provide mutually supporting new insights for consumer wisdom theory and measurement, include growth mind-set [+], spending self-control [+], elaboration on potential outcomes [+], consumer self-confidence [+], compulsive buying [–], spendthrift tendency [–], and materialism [–], among others. In addition, we show that our CWS is more highly correlated than a general wisdom scale with indicators of well-being such as body mass index (BMI), which relates not only to personal well-being, but also to the greater good in relation to societal costs for the treatment of obesity and its comorbidities (e.g., diabetes, hypertension). Also, our CWS explains unique variance across other indicators of well-being such as satisfaction with life and perceived financial well-being, in comparison to other construct measures previously associated with well-being (e.g., job satisfaction, personal relationship support).

Thirdly, to examine how consumer wisdom works in the everyday world, our final study shows that our CWS, versus a general wisdom scale, is more strongly associated with a variety of

consumer well-being-related behaviors such as exercise, healthy eating, sustainable consumption, financial savings, and beneficial self-gifting, several of which jointly relate to individual, societal, and ecological quality of life. In contrast, and as expected, the general wisdom measure is more associated than the CWS with the nonconsumption issue of friendship intensity. Further, we show that the stronger relationship of CWS with the aforementioned consumer well-being-related behaviors are robust by providing evidence that these relationships persisted during the period of heightened stress presented by the onset of COVID-19 in the United States during the spring of 2020.

We begin with a review of research conceptualizing and measuring wisdom, including Luchs and Mick's (2018) framework in order to build on it and juxtapose our subsequent advances through scale development. We then provide details and the findings of our five studies. We conclude with a discussion of contributions, limitations, and future research to better understand the role and significance of consumer wisdom for personal well-being and the greater good.

### Theorizing, Conceptualizing, and Measuring Wisdom

#### *Social Sciences and Humanities*

Aristotle was among the first major thinkers to argue that human well-being (*eudemonia*) is a function of practical wisdom (*phronesis*; Fowers, 2003). The cultivation of wisdom, he maintained, is crucial to our own happiness as well as the greater good of society (Schwartz & Sharpe, 2010, p. 11). In contemporary times, the psychologist Robert Sternberg (1998) has offered one of the more elaborated theories of wisdom, based on the balancing of multiple interests (e.g., personal, interpersonal, extrapersonal) across short- and long-term orientations to achieve mutual well-being. More recently, Grossmann et al. (2020) have made steps toward a "common model of wisdom" based principally on the roles of metacognition and moral grounding. Overall, across both the social sciences and humanities, wisdom has been defined in many ways (Bangen et al., 2013; Birren & Svensson, 2005; Walsh, 2015). The priorities and disparities include such themes and variables as: rich factual knowledge; tacit knowledge; problem solving; creativity; humor; intuition; humility, learning from mistakes; the balancing of perspectives, interests, and time frames; coping with uncertainties; self-understanding/reflection; self-transcendence; the

role of emotions and the goal of emotional homeostasis; prosocial attitudes and behaviors; and the aspiration to realize compassionate and beneficial outcomes for oneself and others.

Despite the wide variance in wisdom definitions, empirical findings have provided some persuasive and theory-consistent evidence of wisdom's relationship to well-being. These include positive correlations with physical and mental health, happiness, social cooperation, resilience, and purpose in life, as well as negative associations with depression, economic pressure, and fear of mortality (see, e.g., Ardelt, 2003; Kross & Grossmann, 2012; Kunzmann & Baltes, 2003; Peterson & Seligman, 2004; Sternberg & Jordan, 2005; Thomas, Bangen, Ardelt, & Jeste, 2015). As noted earlier, many of these and other insights have been advanced through the development and use of self-report scales of wisdom.

There are at present at least nine self-report scales of wisdom in the social sciences, some general and some domain-specific (Webster, 2019). As Webster's review indicates, psychometric outcomes from efforts to create these self-report measures of wisdom have been varyingly successful, and each has its own strengths and weaknesses. As a group, these scales consistently represent wisdom as a higher-order factor with several different underlying dimensions, with as many as eight (Thomas et al., 2019). Nearly all are based on a Likert format, and the total number of the items within most of them is in the 20s or 30s. It remains to be shown if any of these prior scales can contribute to consumer behavior research, including how they might perform in comparison to an explicitly developed consumer wisdom scale.

#### *Consumer Wisdom Theorizing and Research*

The study of wisdom in consumer behavior is in its embryonic stages. An early conceptual paper by Mick and Schwartz (2012) depicted consumer wisdom as a metafunctional and integrative process to promote well-being by balancing relevant factors and concerns in a flexible, perceptive, and situation-sensitive manner. This view borrows the balance metaphor from Sternberg (1998), but predates Grossmann et al. (2020) in its own emphasis on metacognition and moral grounding. Among specific consumption insights, Mick and Schwartz (2012) note that wiser consumers are not the same as "smart shoppers" whose identity has been exclusively tied to taking personal credit for cost-saving promotions (Schindler, 1998) or "maximizing buyers" who seek constantly and incautiously to optimize utility in their choices (Schwartz, 2015).

Mick et al. (2012) reported the first empirical investigation of consumer wisdom. They asked a group of college students to keep diaries of their purchases and to rate each one for its perceived wisdom. Their analyses revealed that purchases rated wiser had stronger prepurchase intentions, more search for prepurchase information, and more factors considered overall (e.g., usage benefits), which together reflect wisdom's metafunctionality.

Especially pertinent to our present work is Luchs and Mick's (2018) grounded-theory project that unearthed shared qualities of consumer wisdom across an array of adult informants who described a variety of their consumption-relevant experiences. Following the Berlin paradigm of wisdom research (Baltes & Staudinger, 2000), Luchs and Mick recruited and interviewed 31 individuals nominated by peers for their wisdom, and then interpretively inducted a model of five facets of consumer wisdom. Their findings led them to define consumer wisdom as "the pursuit of well-being for oneself and for others through mindful management of consumption-related choices and behaviors, as realized through the integrated application of Intentionality, Contemplation, Emotional Mastery, Openness, and Transcendence" (Luchs & Mick, 2018, p. 384). Their model and definition offer a suitable basis for a next step into developing a wisdom scale that is specific to consumer behavior.

We now overview Luchs and Mick's (2018) five facets as a foundation for our conceptualization and measurement of consumer wisdom, including our extension and refinement of their framework. The first four facets—Intentionality, Contemplation, Emotional Mastery, and Openness—relate most directly but in varying degrees to the self—and, therefore, they guide consumption that enhances personal well-being. They also mirror the overlapping themes of metafunctionality and metacognition in Mick and Schwartz (2012) and Grossmann et al. (2020). Intentionality arises from the continuing awareness of and responsibility for the systematic role that consumer behaviors play in creating, maintaining, and evolving a lifestyle. It represents also a commitment to and practice of lifestyle envisionment as well as the determined management of resources necessary to fulfill the envisionment. Contemplation is the practice of thoughtful consideration through retrospection, prospection, and prudent reasoning as the individual confronts discrete consumer options at a given time. Emotional Mastery, the third facet, is characterized by the awareness and strategic use of consumption-oriented emotions to enhance well-being, constituted

by actively regulating both negative and positive emotions such as regret and guilt or joy and peacefulness, respectively. The fourth facet, Openness, reflects a curiosity and an attraction to uncommon ideas and experiences in consumer behavior. It encompasses a consumption-mediated growth mindset and a willingness to try and adopt alternative consumption practices.

Transcendence, the fifth facet, involves an assiduous concern with the socioecological influences of personal consumption practices based on an appreciation of the interconnectedness of all forms of life. It is therefore more focused on the wider-reaching impact of one's decisions, beyond personal well-being. In doing so, it overlaps in part with Plews-Ogan et al.'s (2012) definition of wisdom ("makes the world a better place") and it channels Grossmann et al.'s (2020) theme of moral grounding.

A limitation of the Luchs and Mick's (2018) wisdom framework is that it has not yet been tested, which is one of our primary goals. We adopt it as a starting point for developing and validating a consumer wisdom scale that especially reflects Grossmann et al.'s (2020) common model motifs of metacognition and moral grounding. Our Consumer Wisdom Scale (CWS) consists of six interrelated but distinct dimensions that separately and jointly address a focused but widely evident subset of central day-to-day aspects of consumer behavior including values, ethics, goals, preferences, budgeting, spending, and lifestyle. To create this new measure, our approach followed the path of prior consumer researchers who have developed individual difference measures within the domain specificity of consumer behavior based on prior general theories in the social sciences. One example is Gomez, Borges, and Pechmann (2013) who created a consumer-oriented health measure based on regulatory focus theory. Another is Haws, Davis, and Dholakia (2016) who drew from self-control theory and produced consumer-related measures of self-control in eating and spending. In sum, we pursue the formation of an individual difference measure that can be used to advance consumer wisdom theory and research by extending what this concept refers to relative to Luchs and Mick (2018), by stipulating how the scale distinctively relates to and informs other important character strengths and behaviors, and by illustrating how the scale can guide and produce new knowledge developments related to personal well-being and the greater good. We turn now to our empirical studies and findings (see Table 1 for a summary of the five studies).

**Study 1: CWS Scale Development, Reliability, and Validity**

Study 1 addresses the following objectives: (a) identify the dimensions of consumer wisdom, (b) identify an optimal subset of scale items, and (c) demonstrate the reliability and discriminant validity of the dimensions.

*Method*

We first generated multiple items representing each of the five facets and the eleven facet-dimensions of consumer wisdom from Luchs and Mick’s (2018) theoretical framework (see their Table 2, p. 371). After drafting candidate items to ensure conceptual breadth within each of Luchs and Mick’s (2018) facet-dimensions, we then selectively developed other items based on a review of related consumer behavior constructs. Through discussion, we revised and reduced our item pool to a set of 120 items. This set of 120 items was administered to an online sample of 286 Prolific Academic participants, consistent with Netemeyer, Bearden, and Sharma (2003) who suggest a sample size in the range of 300 for larger item pools and for multidimensional constructs. Participation was limited to individuals who were at least 22 years old (see Table 1 for participant details).

Ratings were provided for all 120 candidate scale items as presented in a randomized order to each respondent. Following Bass, Cascio, and O’Connor

(1974), for each item the respondents reported “. . .how well (or how often) each of the following statements describes you,” where 1 = never, 2 = occasionally, 3 = sometimes, 4 = often, 5 = frequently, 6 = usually, and 7 = always. Participants also responded to standard demographic questions. Thirty participants were subsequently dropped due to failing one or more attention checks (see MDA 1 for details), leading to a final usable sample of 256.

*Results and Discussion*

*Scale dimensionality*

Given that the five facets proposed by Luchs and Mick (2018) had not been empirically tested before, we proceeded with an exploratory factor analysis using a promax rotation in order to explore possible dimensional solutions. Guided by Netemeyer et al. (2003), we conducted a range of tests to identify the optimal set of factors. These tests suggested a range of solutions, from three factors to fifteen (see MDA 1 for details). Given the different possible solutions, we relied further on Netemeyer et al.’s (2003) guidance, namely, beyond rules of thumb and psychometric criteria, scale development “should use a priori theory and common sense as guides in deciding the number of factors to extract (p. 124).” Based on this guidance, we selected a six-factor solution, which was within the bounds suggested by the aforementioned tests and provides factors that are meaningful while also retaining the theoretical

TABLE 1  
*Summary of Studies, Primary Purpose, and Demographics*

Study	Primary Purpose	n	% female	Age (middle 50%)	Income US \$ (middle 50%)	Source
1	Scale development, reliability, and validity	286	61	29–41	37K–62K	Prolific Academic (4:1 UK vs. USA residents)
2a	Confirmatory factor analysis, nomological network, socially desirable responding, initial evidence of predicting well-being	439	52	28–43	37K–62K	Prolific Academic (3:1 UK vs. USA residents)
2b	Temporal stability and relationship to measures of general wisdom	157	51	28–41	37K–62K	Prolific Academic (3:1 UK vs. USA residents)
3	Incremental predictive validity of well-being	660	50	32–59	35K–110K	Qualtrics Panel; (USA residents, census based quotas)
	Post-test of relationship between CWS/general wisdom and well-being	100	47	29–42	45K–85K	Prolific Academic (USA residents)
4	Discriminant validity of CWS and its dimensions in relation to general wisdom	359	48	28–43	35K–95K	Prolific Academic (USA residents)

scope of all the facet-dimensions within Luchs and Mick's (2018) framework. Thus, our six-factor solution is a refinement of their framework, clarifying the boundaries of their original set of facets and underlying facet-dimensions (see MDA 1 for a mapping of their facets to our dimensions).

#### *Item selection*

As a general rule, we chose items that met guidelines for the following criteria (Bearden, Hardesty, & Rose, 2001; Netemeyer et al., 2003): item-to-total correlations ( $>0.35$ ), average interitem correlations ( $>0.30$ ), factor loadings ( $>0.50$ ), and cross-loadings ( $<0.30$ ). Simultaneously, we selected items in order to ensure the greatest conceptual breadth of each factor, and in several cases chose items that approached, but did not meet, all of the aforementioned guidelines (see MDA 1 for details). We did so, however, while being careful to ensure the integrity of each factor, whose resulting Cronbach's alphas were all 0.80 or higher, exceeding the threshold of 0.70 recommended by Nunnally (1978).

Following this process, we retained 24 items, with four items per factor, which is the minimum of per-factor items recommended by Netemeyer et al. (2003). This is an appropriate number of items given the number of factors as well as our intention to build a scale with a manageable set of items that encourages its use as a whole. We note that in this sense our proposed scale is consistent with a recent scale of general wisdom in psychology that is also a 24-item, six-dimensional self-report scale (Thomas et al., 2019). Next, we assessed our identified 24 items using a principal component analysis with promax rotation. The six-factor solution explained 69% of the variance. We refer to the complete inventory of 24 items as our Consumer Wisdom Scale (CWS); these items are presented in Table 2, organized within each of our proposed dimensions of consumer wisdom, which we formally define as follows:

1. *Responsibility*: Managing spending relative to personal resources toward achieving a realistically envisioned lifestyle
2. *Purpose*: Prioritizing discretionary spending to promote personal growth, health, and relationships
3. *Flexibility*: Being open to alternative forms of consumption, such as renting, sharing, and buying used goods
4. *Perspective*: Using past experiences and imagined potential future consequences to inform current consumption decisions
5. *Reasoning*: Seeking and applying sufficient information to guide consumption decisions
6. *Sustainability*: Favoring pro-environmental and prosocial consumption options

#### *Scale reliability*

The Cronbach alpha estimate of internal reliability for CWS overall was 0.92 and Cronbach's alpha values for each of the six dimensions (see Table 2) were consistently above the threshold of 0.70 recommended by Nunnally (1978). Likewise, the corresponding construct reliability estimates (Fornell & Larcker, 1981) were also above the recommended level of 0.70 (Hair, Tatham, Anderson, & Black, 1998).

#### *Discriminant validity among dimensions*

Correlations between the six proposed dimensions of consumer wisdom are presented in Table 3. Evidence of discriminant validity among the six dimensions was provided through the test recommended by Fornell and Larcker (1981) in which pairwise correlations between the dimensions were compared with the average variance extracted (AVE) estimates for the individual constructs making up each pair. The squared correlations between dimensions ranged from 0.02 for Reasoning-Flexibility to 0.38 for Purpose-Sustainability, with an average value of 0.20. Discriminant validity for the scale measures was affirmed by the results of all 15 comparisons; indeed, the lowest AVE was 0.49 (Purpose), which is still higher than the largest pairwise squared correlation (0.38) among all 15 pairs. In addition, per Anderson and Gerbing (1998), the 95% confidence limits for the correlations between dimensions excluded 0 and 1 for all pairs of dimensions, suggesting that while all pairs are correlated, all six dimensions are distinct (see MDA 1 for details).

### **Study 2a: Confirmatory Factor Analysis, Nomological Network, and Predicting Well-being**

Study 2a addresses the following objectives: (a) identifying the most appropriate structural model for consumer wisdom, (b) assessing the convergent and discriminant validity of CWS within a coherent nomological network, (c) evaluating the susceptibility of CWS to socially desirable responding, and (d) examining the predictive validity of CWS with respect to well-being.

TABLE 2  
 Study 1 - Item and Factor (Dimension) Statistics from Principal Components Analysis Conducted on Final Set of 24 Consumer Wisdom Scale (CWS) Items

Dimensions and items		Factor loading	CA	CR	AVE
Responsibility			0.86	0.87	0.62
1	I have a realistic sense of the lifestyle that I can afford	0.70			
2	I spend my money responsibly	0.79			
3	I find it easy to focus on buying only what I really need without getting tempted by things that others have	0.83			
4	I am able to resist temptation in order to achieve my budget and lifestyle goals	0.82			
Purpose			0.81	0.79	0.49
5	I manage my budget so that I can spend some money on experiences that give me a lot of pleasure and joy	0.79			
6	I prioritize spending some money on unique experiences that help me develop my full potential	0.71			
7	I manage my budget so that I can spend some money on experiences that help me learn new things	0.72			
8	I prioritize spending money on products and experiences that help me build and strengthen relationships with others	0.56			
Flexibility			0.80	0.84	0.57
9	I borrow or rent products to try them out before deciding if I want to buy them	0.75			
10	Before I buy something that I might not use very often, I try to rent it or borrow it from someone instead	0.85			
11	My purchases include used products or clothing even though I could just purchase new things if I wanted to	0.76			
12	I like to share, swap, or trade for things with my friends and neighbors	0.63			
Perspective			0.82	0.82	0.53
13	Before I buy something, I consider my previous experiences with similar purchases	0.71			
14	Before spending money on something, I visualize what the experience of owning and using it is likely to be	0.76			
15	Before I buy something, I consider the possible costs and benefits over time	0.66			
16	Before I buy something, I make an effort to consider my options from multiple perspectives	0.78			
Reasoning			0.81	0.83	0.54
17	I understand which product features are the most important	0.71			
18	I know when I've done enough research to make a good purchase decision	0.71			
19	I know where and how to buy things so that I get the best value	0.80			
20	Before buying something, I know how to get the information that I need to make great choices	0.73			
Sustainability			0.90	0.90	0.68
21	I buy products from companies that promote environmental responsibility, even when they cost more	0.83			
22	My consumption behaviors consistently reflect my concern for the natural environment	0.90			
23	I buy products from companies that demonstrate that they share my ethical values	0.81			
24	I spend time thinking about how we, as a global community, affect each other through our individual consumption choices	0.77			

CA = Cronbach's alpha; CR = construct reliability; AVE = average variance extracted.

"How well (or how often) does each of the following statements describe you?" (1 = never; 2 = occasionally; 3 = sometimes; 4 = often; 5 = frequently; 6 = usually; 7 = always).

### Method

We recruited an online sample of 439 Prolific Academic participants, all of whom were at least 22 years old (see Table 1 for details). In addition to

providing ratings for the 24 CWS items (presented in randomized order as in study 1), participants also gave responses to several other scales representing related constructs from prior literature. These scales were chosen after a review of a wide

TABLE 3

Study 1 – Correlations between the Consumer Wisdom Scale (CWS) and Each of the six CWS Dimensions

	1	2	3	4	5	6
Consumer Wisdom	0.71**	0.79**	0.62**	0.77**	0.67**	0.76**
1. Responsibility		0.42**	0.19**	0.59**	0.58**	0.32**
2. Purpose			0.47**	0.46**	0.43**	0.61**
3. Flexibility				0.26**	0.13*	0.53**
4. Perspective					0.60**	0.46**
5. Reasoning						0.27**
6. Sustainability						

\* $p < .05$ ;

\*\* $p < .01$ .

variety of consumer research scales to ensure that our selection would collectively relate to each of the dimensions of consumer wisdom. Specifically, the following scales were included and expected to be positively correlated with our CWS: consumer spending self-control (10 items; Haws, Bearden, and Nenkov, 2012), elaboration on potential outcomes (6 items measuring the generation/evaluation dimension; Nenkov, Inman, & Hulland, 2008), consumer self-confidence (31 items; Bearden et al., 2001), need for cognition (5-item short version of Cacioppo & Petty, 1982, as presented by Wood & Swait, 2002), growth mindset (3 items; Hong, Dweck, Chiu, Lin, & Wan, 1999), voluntary simplicity (5-item subdimension of Price & Ridgway, 1983), GREEN (6 items; Haws, Winterich, & Naylor, 2014), and socially responsible purchase and disposal (13 items; Webb, Mohr, & Harris, 2008). Participants also provided responses for scales that we expected to be negatively correlated with our CWS: materialism (6-item short form; Richins, 2004), compulsive buying (6 items; Ridgway, Kukar-Kinney, & Monroe, 2008), and spendthrift-tightwad (4 items; Rick, Cryder, & Loewenstein, 2007).

We also included a two-dimensional measure of socially desirable responding (12-item short version of Paulhus', 1991 Balanced Inventory of Desirable Responding, per Steenkamp, De Jong, & Baumgartner, 2010), a frequently used measure of overall well-being (5-item Satisfaction with Life Scale; Diener, Emmons, Larsen, & Griffin, 1985), and a standard set of demographics questions. Twenty-one participants were dropped due to failing one or more attention checks, leading to a final usable sample of 418 (see MDA 2a for details about the aforementioned scales and these attention checks).

## Results and Discussion

### Confirmatory factor analysis, scale reliability, and discriminant validity

Following the exploratory factor analysis in Study 1, we sought to identify the most appropriate structural model for consumer wisdom. Specifically, we tested a model in which a single higher-order consumer wisdom factor predicts the six aforementioned lower-order factors, which would be most consistent with other models of wisdom. Each lower-order factor's measured scale items were constrained to load only on that factor. With this model specification, the fit statistics were as follows: chi-square, 606 (246 df); SRMR, 0.08; RMSEA, 0.06; CFI, 0.93; NNFI, 0.92. These fit statistics satisfied the acceptable maximum threshold of .08 for both SRMR and RMSEA (Browne & Cudeck, 1992; Hu & Bentler, 1999; Netemeyer et al., 2003) and minimum threshold of 0.90 for both CFI and NNFI (Netemeyer et al., 2003), especially given the relatively large number of factors in the model (Brown, 2006).

Alternative factor structures were estimated as well (see MDA 2a for details), but none demonstrated superior goodness of fit. Taken together, these analyses support a hierarchical model with a single higher-order consumer wisdom factor and six lower-order factors, that is, dimensions. Figure 1 provides factor and item loadings for this hierarchical model.

The Cronbach alpha estimate of internal reliability for CWS overall was 0.91 and Cronbach's alpha values for each of the six dimensions were, once again, consistently above the threshold of 0.70 recommended by Nunnally (1978). The corresponding construct reliability estimates (Fornell & Larcker, 1981) also exceeded the recommended level of 0.70 (Hair et al., 1998) (see MDA 2a for details). To confirm the discriminant validity among dimensions, we inspected the average variance extracted (AVE) estimates for the individual constructs making up each pair and, once again, found that these estimates exceeded the square of the correlation between the dimensions making up each pair, thereby suggesting discrimination (Bearden et al., 2001). To provide further support for discriminant validity, we conducted a HTMT (heterotrait-monotrait) analysis which revealed that all of the dimensions of the CWS discriminate from one another according to the recommendations put forth by Henseler, Ringle, and Sarstedt (2015) (see MDA 2a for details).



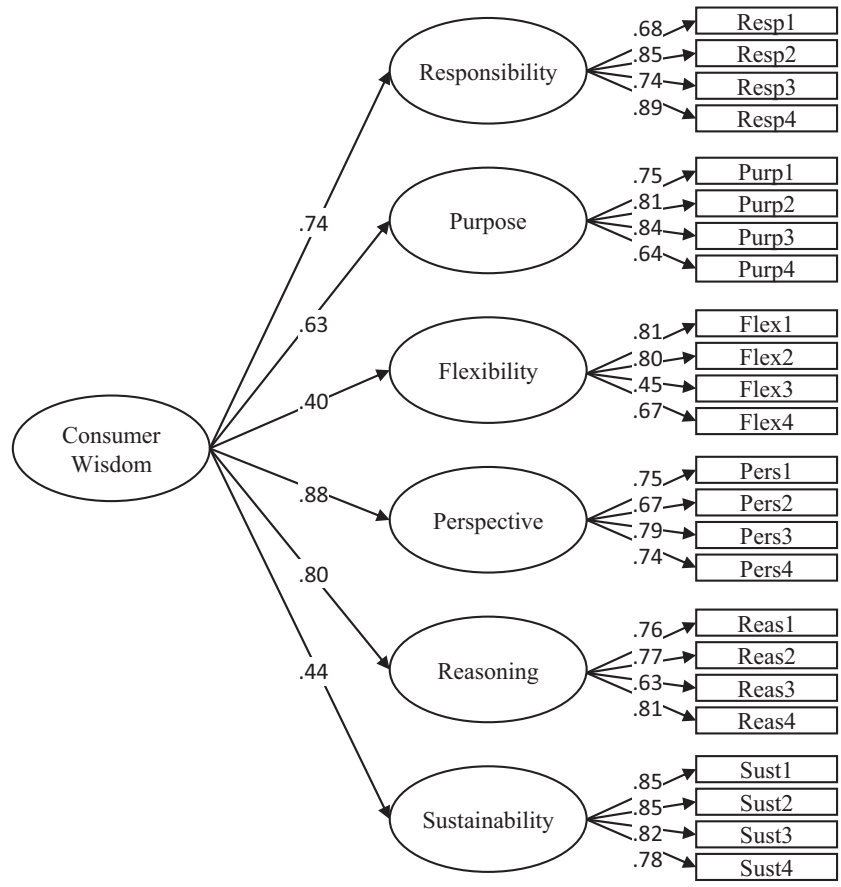


FIGURE 1. Study 2a – Loadings of proposed hierarchical model of Consumer Wisdom

*Nomological network*

Table 4 presents the means, standard deviations, and Cronbach’s alpha estimates for the eight constructs that we expected to be positively related to our CWS (identified as variables *a–h*) and three constructs that we expected to be negatively related to our CWS (identified as variables *i–k*).

As shown in Table 5 (top row), and as would be plausibly anticipated by way of the characterization of the dimensions and their items as shown in Table 2, the CWS is positively and significantly related to consumer spending self-control (0.57), elaboration on potential outcomes (0.50), consumer self-confidence (0.35), need for cognition (0.22), growth mind-set (0.18), voluntary simplicity (0.21), GREEN (0.46), and socially responsible purchase and disposal (0.34). Also, as would be reasonably expected, the CWS is negatively and significantly related to materialism (–0.15), compulsive buying (–0.31), and spendthrift behaviors (–0.39). Further, the correlations with the nomological network measures vary logically and even more strongly with

certain individual dimensions of CWS. For example, the Sustainability dimension was most highly correlated with GREEN (0.73) and socially responsible purchase and disposal (0.59), whereas Responsibility was most highly correlated with consumer spending self-control (0.71), and Flexibility was most closely related to voluntary simplicity (0.51) (see Table 5 for details on all dimensions). In addition to revealing the relationship of CWS within the nomological network, these correlations at the dimension level also accentuate an advantage of our multidimensional measure, that is, it makes it possible for researchers to efficiently study multiple important dimensions of consumer behavior using a single scale rather than depending on an assortment of scales that were developed independently and not intended to be used as a predetermined set. And, if they were, the total of items would be considerably beyond the 24 items in our CWS. However, use of the CWS does not obviate the value of conceptually related scales. Instead, a researcher can use the CWS to efficiently explore a phenomenon broadly, and then employ select other

TABLE 4  
*Study 2a - Consumer Wisdom Nomological Network Scale Statistics Including Correlations between Each Scale and Two Measures of Socially Desirable Responding*

	Mean	SD	$\alpha$	SDE	IM
Consumer Wisdom (CWS)	4.04	0.87	0.91	0.21**	0.19**
(a) Consumer spending self-control	5.27	0.99	0.91	0.30**	0.28**
(b) Elaboration on potential outcomes	5.36	0.93	0.92	0.25**	0.17**
(c) Consumer self-confidence	5.06	0.69	0.93	0.48**	0.29**
(d) Need for cognition	5.02	1.29	0.88	0.12*	0.12*
(e) Growth mindset	4.42	1.63	0.95	0.00	0.10
(f) Voluntary simplicity	3.51	1.32	0.79	-0.01	0.01
(g) GREEN	4.59	1.34	0.94	0.01	0.10*
(h) Socially responsible purchase & disp.	4.31	1.22	0.96	0.06	0.09
(i) Materialism	4.20	1.10	0.78	-0.02	-0.17**
(j) Compulsive buying	2.72	1.19	0.86	-0.15**	-0.28**
(k) Spendthrift	5.10	0.81	0.73	-0.04	-0.17**

SDE = Self-deceptive enhancement; IM = impression management.

\* $p < .05$ ;

\*\* $p < .01$ .

scales—such as those identified in our nomological analysis—guided by the identification of which CWS dimensions appear to be most relevant to the phenomenon under study.

#### *Socially desirable responding*

Next, we assessed the potential susceptibility of our CWS to socially desirable responding. Table 4 includes correlations for a short form of Paulhus' (1991) measures of self-deceptive enhancement (SDE) and impression management (IM). While the CWS is correlated with SDE (0.21) and IM (0.19), these correlations are modest and do not suggest problematic contamination with socially desirable responding.

#### *Predicting well-being*

As an initial demonstration of incremental predictive validity in general, and the relationship between consumer wisdom and well-being in particular, we regressed the composite measure of Diener et al.'s (1985) five-item satisfaction with life scale (SWLS) on several different sets of independent variables. We began by regressing the SWLS on the CWS alone, and then on the CWS

together with both measures of socially desirable responding, SDE and IM. On its own, the CWS is a significant predictor of SWLS ( $\beta = 0.19$ ,  $p < .0001$ ); this result held ( $\beta = 0.17$ ,  $p < .001$ ) while controlling for both SDE and IM. Next, we regressed the SWLS on CWS and the measures of consumer spending self-control (CSSC) and elaboration on potential outcomes (EPO). We chose to focus on CSSC and EPO because they were most strongly correlated with the CWS (see Table 5) and, therefore, they provide the most robust test of the CWS's incremental predictive power among the constructs identified within the CWS nomological net (the pairwise correlations between the CWS, CSSC, and EPO ranged between 0.50 and 0.58). This analysis provided evidence that CWS was a significant predictor of SWLS ( $\beta = 0.19$ ,  $p < .01$ ), while neither CSSC nor EPO was a significant predictor ( $p$ 's  $> .10$ ). This result held when also controlling for both SDE and IM, such that CWS was still a significant predictor ( $\beta = 0.19$ ,  $p < .01$ ), but neither CSSC nor EPO was ( $p$ 's  $> .10$ ). To ensure that these results were not due to issues of multicollinearity, we conducted a series of regressions including only CWS and each of the alternative predictors in turn. Again, the pattern of results was similar. Finally, we conducted a SEM analysis to predict SWLS based on CWS, EPO, CSSC, and their respective scale items. This analysis further confirmed the aforementioned results (see MDA 2a for details). Collectively, these results demonstrate that our CWS distinctively predicts well-being in the presence of other theoretically related construct measures, providing evidence for the relationship of consumer wisdom to a widely used well-being concept and measure (SWLS). We further illustrate the relationship between our CWS and well-being subsequently.

#### **Study 2b: Temporal Stability of the CWS and its Relationship to General Wisdom from the Social Sciences**

Given that we expect consumer wisdom to serve as a fairly stable individual characteristic (absent an explicit intervention, which we return to in the general discussion), we tested in study 2b the stability of our CWS over time. Also, since we are introducing a new domain-specific assessment of wisdom, it is important to examine the relationships between our CWS and existing general assessments of wisdom. Finally, having a temporally separated

TABLE 5  
Study 2a – Correlations between the Consumer Wisdom Scale (CWS), the Six CWS Dimensions, and Each Scale within the CWS Nomological Network

	(1)	(2)	(3)	(4)	(5)	(6)	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
Consumer Wisdom (CWS)	0.68**	0.75**	0.59**	0.78**	0.70**	0.64**	0.57**	0.50**	0.35**	0.22**	0.18**	0.21**	0.46**	0.34**	-0.15**	-0.31**	-0.39**
(1) CWS-Responsibility		0.31**	0.13**	0.54**	0.62**	0.21**	0.71**	0.44**	0.36**	0.18**	0.10*	-0.06	0.18**	0.06	-0.21**	-0.60**	-0.57**
(2) CWS-Purpose			0.48**	0.49**	0.37**	0.43**	0.35**	0.29**	0.16**	0.14**	0.17**	0.14**	0.27**	0.22**	-0.04	-0.04	-0.15**
(3) CWS-Flexibility				0.32**	0.17**	0.36**	0.12*	0.14*	-0.02	0.08	0.09	0.51**	0.27**	0.24**	-0.14**	-0.03	-0.17**
(4) CWS-Perspective					0.57**	0.34**	0.55**	0.56**	0.31**	0.19**	0.13**	0.09	0.27**	0.16**	-0.05	-0.32**	-0.38**
(5) CWS-Reasoning						0.25**	0.52**	0.43**	0.54**	0.22**	0.09	-0.05	0.14**	0.10*	-0.02	-0.26**	-0.24**
(6) CWS-Sustainability							0.14**	0.20**	0.14**	0.12*	0.16**	0.24**	0.73**	0.59**	-0.15**	-0.06	-0.10
(a) Consumer spending self-control								0.54**	0.41**	0.16**	0.13**	-0.01	0.16**	0.08	-0.13**	-0.55**	-0.55**
(b) Elaboration on potential outcomes									0.35**	0.26**	0.09	0.01	0.23**	0.18**	-0.08	-0.25**	-0.26**
(c) Consumer self-confidence										0.27**	0.17**	-0.04	0.10*	0.17**	-0.02	-0.21**	0.00
(d) Need for cognition											0.25**	0.04	0.15**	0.17**	-0.07	-0.20**	-0.07
(e) Growth mindset												0.04	0.15**	0.19**	-0.14**	-0.12*	-0.04
(f) Voluntary simplicity													0.28**	0.26**	-0.18**	0.09	-0.06
(g) GREEN														0.62**	-0.13**	-0.08	-0.12*
(h) Socially responsible purchase & disp.															-0.08	-0.02	0.01
(i) Materialism																0.29**	0.24**
(j) Compulsive buying																	0.63**
(k) Spendthrift																	

\* $p < .05$ ;  
\*\* $p < .01$ .

measure of CWS allows us to address the potential for common methods bias that might arise with respect to our findings in Study 2a.

### *Method*

We invited a random sample of 200 participants from Study 2a to participate in a follow-up survey 8 weeks later. Of this invited pool, 157 (79%) participated in the follow-up survey. In addition to their ratings for the 24 CWS items, participants provided responses for two additional scales of general wisdom from the social sciences (i.e., applicable to one's life overall, rather than a specific domain). These two scales were presented in random order. One was the widely used, 39-item Three-Dimensional Wisdom Scale (3D-WS) developed by Ardel (2003), and the other was Thomas et al.'s (2019) newer 24-item San Diego Wisdom scale (SD-WISE) that draws on recent psychological and neurobiological models of wisdom. Finally, we included the same two-dimensional measure of socially desirable responding as in study 2a and a standard set of demographics questions.

After collecting the data for Study 2b, we merged the data sets for Study 2a and 2b for those respondents who completed both. Twenty-one participants were dropped for failing one or more attention checks or because their participant IDs did not match between studies, leading to a final usable sample of 136. The final data set for these participants included the aforementioned wisdom measures as well as measures from Study 2a for CWS and for each of the nomological network constructs.

## *Results and Discussion*

### *Temporal stability*

The test-retest correlation for the CWS taken 8 weeks apart was 0.75 (LC = 0.66; UC = 0.81), indicating that the CWS has sufficient temporal stability, similar to other consumer behavior scales (e.g., Dholakia, Tam, Yoon, & Wong, 2016; Price, Coulter, Strizhakova, & Schultz, 2018). Test-retest correlations for the six dimensions of the CWS ranged from 0.64 to 0.76 (0.65 for Responsibility, 0.75 for Purpose, 0.64 for Flexibility, 0.65 for Perspective, 0.65 for Reasoning, 0.76 for Sustainability).

### *Relationship to general wisdom*

Although we would expect to find a relationship between our CWS and measures of general wisdom

from the social sciences, we would also expect these measures to be distinct given their different emphases. As a first step, we assessed the overall reliability of the two included measures of general wisdom. Both demonstrated acceptable reliability, with a Cronbach alpha of 0.92 for 3D-WS and 0.88 for SD-WISE (the alpha for CWS was 0.91). Next, we assessed the relationships among these two scales and the CWS (see MDA 2b for details). As expected, while the relationship between 3D-WS and SD-WISE was strong, with a correlation of 0.76 ( $p < .0001$ ), the relationship between each of these scales and the CWS was substantially lower. Specifically, the correlation between CWS and 3D-WS was 0.25 ( $p < .01$ ) and the one between CWS and SD-WISE was 0.35 ( $p < .0001$ ). To provide further support for discriminant validity, we conducted a heterotrait-monotrait ratio of correlations analysis which revealed that each of the three measures of wisdom discriminated from one another per recommendations by Henseler et al. (2015). These findings reinforce the argument that consumer wisdom is a unique and context-specific construct that is worthy of its own theorization and measurement. The findings also underscore why consumer researchers cannot just rely on adopting a general wisdom measure; that is, the CWS is needed to distinctively and successfully provide consumer behavior insights that general wisdom measures cannot.

Finally, we also revisited the relationship between CWS and the various nomological network variables included in Study 2a using the second time-period measurement of the CWS in order to address potential concerns about common method bias; this revealed similar patterns of correlations (see MDA 2b for details).

### **Study 3: Incremental Predictive Validity of Well-being**

Study 3 was designed primarily to demonstrate the incremental predictive validity of the CWS on assessments of well-being, as compared to other established predictors of well-being.

### *Method*

We used an online sample of 660 participants recruited by a third-party vendor. A quota sampling approach was used with target demographics matching those of the latest US Census with respect to gender, age, household income, education, geographic region, ethnicity, and race.

After responding to demographic questions, which were used to enable the quota sample as described above, participants provided ratings for the 24 CWS items. Next, participants provided responses for several measures of well-being. We used different measures of well-being given that some researchers attempt to measure well-being globally (Su, Tay, and Diener [2014] 10-item Brief Inventory of Thriving, or BIT; Diener et al.'s [1985] 5-item Satisfaction with Life Scale, or SWLS), while others emphasize different aspects of well-being of particular interest, such as financial well-being (Netemeyer, Warmath, Fernandes, & Lynch's [2017] inversely related 5-item scales of expected future financial security and current money management stress, which we combined into a single measure of perceived financial well-being, or PFWB). Further, given that consumer wisdom is concerned with both personal well-being and others' well-being (Luchs & Mick, 2018), we also included a measure that emphasizes the latter, namely Steger, Frazier, Oishi, and Kaler (2006) 5-item Meaning in Life Questionnaire (MLQ), based on Seligman's (2002) depiction of a meaningful life as one in which the individual is "using your signature strengths and virtues in the service of something much larger than you are (p. 249)," which is arguably another way of pointing to collective well-being for the greater good.

In order to assess the incremental predictive validity of CWS, we included the same set of predictors of well-being used by Netemeyer et al. (2017): Walen and Lachman's (2000) 8-item personal relationship support scale (PRSS), Netemeyer, Boles, and McMurrian (1996) 3-item job satisfaction scale (JSS), and Huh and Shin's (2014) 4-item health assessment scale (HAS). These scales and the aforementioned well-being scales were presented to participants in random order, in addition to the randomization of items within each scale (see MDA 3 for details).

## *Results and Discussion*

### *Additional scale validation*

Our first step was to provide additional validation of our 24-item CWS. The Cronbach alpha estimate of internal reliability was 0.93, suggesting again that the scale is reliable. A confirmatory factor analysis of the proposed hierarchical model structure provided results consistent with study 2a (chi-square, 1015 [246 df]; SRMR, 0.08; RMSEA, 0.07; CFI, 0.92; NNFI, 0.91). These combined results

provide additional validation of the CWS (see MDA 3 for details).

### *Predicting well-being*

The primary focus of our analysis was on the relationships between the predictors of well-being, including our CWS, and various outcome measures of well-being as illustrated in Figure 2. Specifically, we sought to demonstrate the incremental predictive power of the CWS on well-being, above and beyond that of the other predictors in the analysis. Our study design and analyses closely followed Netemeyer et al. (2017).

Summary statistics and Cronbach's alpha estimates for each of these scales are included in Table 6, along with correlations between each construct measure and the CWS. For our control variables (gender, age, education, and income) we created effects codes to facilitate analysis interpretation as well as to enable comparison with related research that uses similar categorizations. In particular, consistent with Netemeyer et al. (2017), we effects coded age into three categories (Millennials, Generation X, and Baby Boomers; see also Pew Research Center, 2016), education into three tiers (some college or less, 2- or 4-year college graduate, advanced degree), and household income into three relatively equal-sized tiers, similar to the US population as a whole (<\$40K, \$40K–\$89K, and \$90K+). See MDA 3 for a detailed analysis of CWS norms and correlates using this demographic information.

We used hierarchical regression modeling to estimate the effects shown in Figure 2. First, we mean-centered all continuous predictor variables and then hierarchically estimated a series of regression models for each of the four measures of well-being. In the first set of regressions summarized in Table 7, only control variables were included in order to establish the baseline model for comparison. Next, model 1 introduced the predictors of well-being except for the CWS. Note that all three of these predictors are significant for all four measures of well-being ( $\beta$  ranges from 0.13 to 0.47, all  $p < .0001$ ) and, as expected,  $r^2$  increased markedly over each of the four baseline models (from 0.07 to 0.49 for BIT, 0.04 to 0.33 for MLQ, 0.11 to 0.40 for SWLS, and 0.12 to 0.33 for PFWB). Given our focus on demonstrating the incremental predictive validity of our CWS, model 2 adds the CWS to model 1. As expected, the CWS was a significant predictor in model 2 for all four measures of well-being: BIT ( $\beta = 0.30$ ,  $t = 9.35$ ,  $p < .0001$ ), MLQ ( $\beta = 0.32$ ,

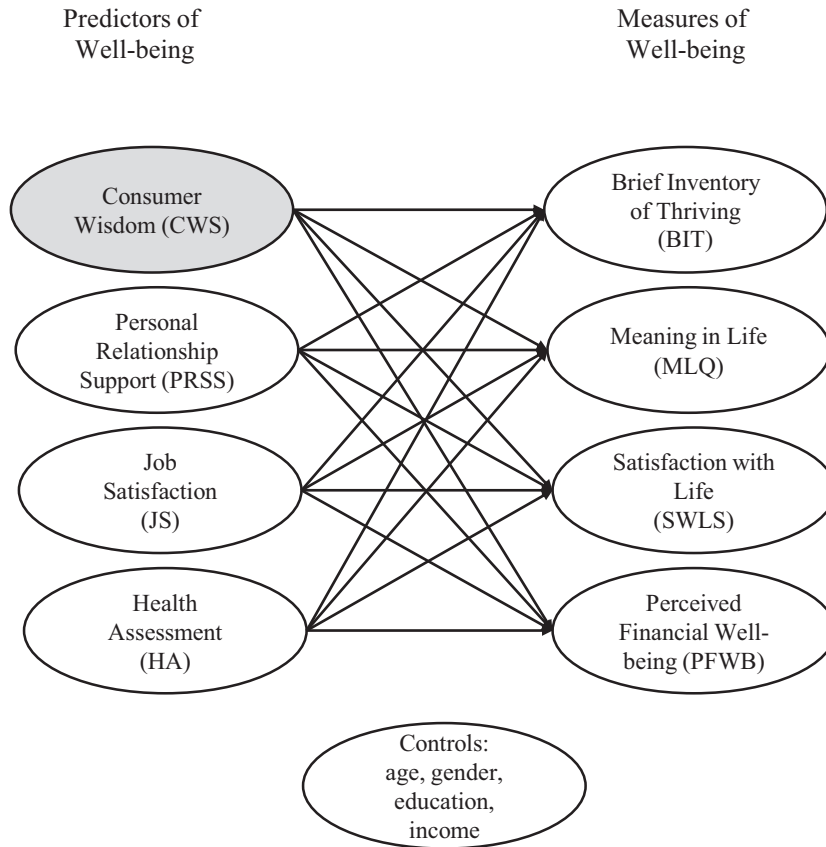


FIGURE 2. Study 3 - Predictors and Measures of Well-being

$t = 7.54, p < .0001$ ), SWLS ( $\beta = 0.28, t = 6.39, p < .0001$ ), and PFWB ( $\beta = 0.16, t = 5.82, p < .0001$ ). Further, the addition of the CWS significantly improved the model for all four measures of well-being, BIT model 2:  $F_{\text{change}} = 87.46, p < .0001; \Delta r^2 = .06$ , MLQ model 2:  $F_{\text{change}} = 56.88, p < .0001; \Delta r^2 = .05$ , SWLS model 2:  $F_{\text{change}} = 40.84, p < .0001; \Delta r^2 = .04$ , and PFWB model 2:  $F_{\text{change}} = 33.82, p < .0001; \Delta r^2 = .03$ . The standardized  $\beta$  values for the CWS are comparable to those of the other three predictors, indicating that consumer wisdom is a consequential facilitator of well-being. See MDA 3 for an analysis and discussion of the relationship between individual dimensions of the CWS and each measure of well-being addressed in the current study.

A related issue is whether CWS uniquely predicts aspects of well-being when compared to general wisdom. Therefore, we conducted a separate post-test of 100 participants via Prolific Academic to assess the relationships of CWS and a leading measure of general wisdom, SD-WISE (Thomas et al., 2019), with select illustrative measures of well-being from study 3; we also added a new

TABLE 6  
Study 3 - Summary Statistics for Predictors of Well-being, Measures of Well-being, and their Correlations with the Consumer Wisdom Scale (CWS)

	Mean	SD	$\alpha$	CWS corr.
Predictors of well-being				
Consumer Wisdom	4.13	1.07	0.93	-
Personal Relationship Support	5.04	1.25	0.86	0.17
Job Satisfaction	4.66	1.70	0.96	0.30
Health Assessment	3.78	0.86	0.86	0.21
Measures of well-being				
Brief Inventory of Thriving	5.20	1.19	0.94	0.46
Meaning in Life	5.10	1.36	0.91	0.39
Satisfaction with Life	4.55	1.46	0.91	0.39
Perceived Financial Well-being	3.27	0.89	0.86	0.34

All correlations significant  $p < .01$ .  
All 7-point scales except for Perceived Financial Well-being which used a 5-pt scale.

measure of well-being, body mass index (BMI), where lower BMI is generally associated with better health. We note that higher BMI is associated with

TABLE 7  
 Study 3 – Regression Results for Three Models (Baseline, Model 1, Model 2), with Each Model Used to Predict Four Measures of Well-being

	Well-being baseline model				Well-being model 1				Well-being model 2			
	BIT	MLQ	SWLS	PFWB	BIT	MLQ	SWLS	PFWB	BIT	MLQ	SWLS	PFWB
<b>Predictor variables</b>												
Consumer Wisdom	–	–	–	–	–	–	–	–	0.30(0.27) **	0.32(0.25)**	0.28(0.20) **	0.16 (0.20)**
Personal Relationship Support	–	–	–	–	0.22(0.23) **	0.26(0.24)**	0.23(0.19) **	0.17 (0.24)**	0.19(0.20) **	0.23(0.21)**	0.20(0.17) **	0.16 (0.22)**
Job Satisfaction	–	–	–	–	0.27(0.39) **	0.30(0.38)**	0.33(0.39) **	0.13 (0.25)**	0.23(0.33) **	0.26(0.32)**	0.29(0.34) **	0.11 (0.21)**
Health Assessment	–	–	–	–	0.47(0.34) **	0.27(0.17)**	0.36(0.21) **	0.20 (0.19)**	0.44(0.32) **	0.24(0.15)**	0.34(0.20) **	0.19 (0.18)**
<b>Control variables</b>												
Gender: Male	0.05(0.02)	–0.11 (–0.04)	0.13(0.04)	0.20 (0.11)**	–0.05 (–0.02)	–0.21 (–0.08)*	0.03(0.01)	0.13 (0.08)*	–0.09 (–0.04)	–0.25 (–0.09)**	–0.01 (0.00)	0.11 (0.06)
Age: Generation X	–0.06 (–0.02)	0.04(0.01)	0.00(0.00)	0.02 (0.01)	–0.02 (–0.01)	0.03(0.01)	0.02(0.00)	0.02 (0.01)	0.04(0.02)	0.10(0.03)	0.08(0.02)	0.06 (0.03)
Age: Baby Boomers	–0.08 (–0.03)	0.13(0.05)	–0.17 (–0.05)	0.16 (0.09)*	0.01(0.00)	0.17(0.06)	–0.09 (–0.03)	0.19 (0.10)**	0.12(0.05)	0.29(0.10)**	0.02(0.01)	0.25 (0.13)**
Education: College graduate	0.21(0.08)*	0.15(0.05)	0.12(0.04)	0.16 (0.09)*	0.10(0.04)	0.05(0.02)	0.00(0.00)	0.11 (0.06)	0.03(0.01)	–0.03 (–0.01)	–0.07 (–0.02)	0.07 (0.04)
Education: Graduate degree	0.38(0.11) **	0.48(0.12) **	0.59(0.14) **	0.26 (0.10)*	0.08(0.02)	0.21(0.05)	0.28(0.07)	0.11 (0.04)	0.02(0.01)	0.14(0.04)	0.22(0.05)	0.08 (0.03)
HH Income: \$40K–\$89K	0.31(0.12) **	0.15(0.05)	0.52(0.17) **	0.23 (0.12)**	–0.02 (–0.01)	–0.15 (–0.05)	0.18(0.06)	0.06 (0.03)	0.01(0.00)	–0.13 (–0.04)	0.20(0.07)	0.08 (0.04)
HH Income: \$90K+	0.57(0.23) **	0.43(0.15) **	0.90(0.29) **	0.58 (0.31)**	0.01(0.00)	–0.10 (–0.03)	0.31(0.10) **	0.29 (0.16)**	0.02(0.01)	–0.08 (–0.03)	0.33(0.11) **	0.30 (0.16)**
r <sup>2</sup>	.07	.04	.11	.12	.49	.33	.40	.33	.55	.39	.44	.36

**Scales used:**  
 Brief Inventory of Thriving (BIT), Su et al. (2014).  
 Meaning in Life Questionnaire (MLQ), Steger et al. (2006).  
 Satisfaction with Life Scale (SWLS), Diener et al. (1985).  
 Perceived Financial Well-Being (PFWB), Netemeyer et al. (2017).  
 Personal Relationship Support Scale (PRSS), Walen and Lachman (2000).  
 Job Satisfaction Scale (JSS), Netemeyer et al. (1996).  
 Health Assessment Scale (HAS), Huh and Shin (2014).  
**Notes:** Reference categories for control variables were "Female", "Millennials", "Some college or less", and "\$39K or less" respectively.  
 Values are unstandardized  $\beta$  coefficients (standardized  $\beta$  coefficients in parentheses).  
 \* $p < .05$ .  
 \*\* $p < .01$ .

being overweight, if not obese, and that such conditions contribute to declining health in a propensity for diabetes, hypertension, stroke, and cardiac disease, among other conditions, which incur excessive medical expenses—and a diminishment of the greater good—in hundreds of billions of dollars annually across the world (Kjellberg, Larsen, Ibsen, & Højgaard, 2017).

Two participants were dropped for failing attention checks, yielding a sample of 98. We found that while both CWS and SD-WISE were positively correlated with SWLS (0.37,  $p < .01$  and .35,  $p < .01$ , respectively), CWS was more positively related to the expected financial security dimension of PFWB (0.46,  $p < .0001$ ) than SD-WISE (0.28,  $p < .01$ ), ( $z = 1.87$ ,  $p = .06$  difference test) whereas SD-WISE was positively related to the low money management stress dimension of PFWB (0.38,  $p < .01$ ) while CWS was not (0.08,  $p = .46$ ). Therefore, each seems differentially related to aspects of financial well-being; future research could help to clarify that divergence. Further, our CWS was negatively related to BMI ( $-0.26$ ,  $p = .01$ ), but SD-WISE was not ( $-0.09$ ,  $p = .40$ ). Taken together, these results suggest that both consumer wisdom and general wisdom can provide unique insights into different aspects of personal and collective well-being. We further address the discrimination of consumer wisdom and general wisdom in study 4.

#### Study 4: Validity of CWS and its Dimensions

Study 4 was designed to further address the discriminant validity of CWS in comparison to a leading measure of general wisdom, the San Diego Wisdom Scale (SD-WISE). While general wisdom is focused on “everyday decision making” (Thomas et al., 2019) and emphasizes the social world of the decision maker, consumer wisdom focuses on consumer decision making and behaviors with an emphasis on the individual’s efforts to thrive in the material world. For example, while both reflect a prosocial orientation, this is manifested primarily toward the individual’s personal social network in the case of general wisdom, or toward socially and environmentally responsible consumption behaviors in the case of consumer wisdom. It is possible that an individual can be both wise generally and as a consumer, but this is not necessarily or strongly the case as suggested by their moderate correlation in study 2b. In study 4, we show how general wisdom and consumer wisdom

differentially relate to a variety of well-being behaviors including exercise, healthy eating, sustainable consumption, use of leisure time, financial savings, beneficial self-gifting, and friendships. Note again that behaviors related to financial savings, exercise, and nutrition go beyond personal well-being to also impact the greater good. For example, the first implicates household solvency, the compromise of which can lead to increases in government welfare (via tax collections). The latter two can involve rising health care costs covered by government and business expenditures when regular exercise and proper nutrition are avoided or under-prioritized by individuals. In addition, study 4 provides an opportunity to demonstrate the additional insights afforded by a dimension-level analysis of these two related, yet different, domains and measures of wisdom.

#### Method

We recruited an online sample of 359 Prolific Academic participants; all were US residents and at least 22 years old. We began by presenting participants with a set of fifteen questions addressing a variety of mostly consumer behaviors, presented in random order; we asked them to provide ratings that reflected their current level of engagement in these behaviors. The set included five questions related to health (exercise, eating vegetables, consuming sweet treats, managing amount of food consumed, eating to promote health); two related to sustainable consumption (plant-based meat consumption and environmental responsibility, which was an index of four items); four related to saving and spending money (percent saved each year, impulse purchases, personal caring [aka romantic] self-gifts, and reward self-gifts); three related to use of leisure time (digital media, hobbies, friends and family); and one focused particularly on maintaining friendship intensity. Most of these questions came directly from or were adapted from existing research (see MDA 4.1 for details). While most of these questions are related to consumption and money related behaviors—and presumably to consumer wisdom—we included the question about friendship intensity with the expectation that it would be solely or especially related to general wisdom.

Next, we repeated the same set of items, but shifted the focus to participants’ assessments of the behaviors during the initial COVID-19 shutdown experienced across most of the United States during



March and April of 2020 (i.e., 6 months prior). This additional set of measures was collected in order to determine whether the pattern of relationships between our two measures of wisdom and the set of behaviors was consistent during an unexpected period of external shock. We were especially interested in determining whether the expected positive relationships between the CWS and many of these behaviors would remain stable during a period of high stress that might otherwise thwart wiser behaviors.

After the entirety of the behavioral measures, participants completed the CWS and the 24-item general wisdom scale of SD-WISE (Thomas et al., 2019), with items presented in random order. SD-WISE was chosen for comparison with CWS because it is one of the more recently validated measures of general wisdom, and it shares a similar structure to our CWS (6 dimensions and a higher-order wisdom factor). Finally, participants responded to a standard set of demographic questions. Our final usable sample included 338 participants after removing fifteen who failed one of the embedded attention checks and six more whose study completion times fell outside the 1% (<6 min) and 99% (>47 min) thresholds.

## Results and Discussion

### Additional scale validation

The Cronbach alpha estimate of internal reliability for the 24-item CWS was 0.91, suggesting again that the scale is reliable. A confirmatory factor analysis of the proposed model structure provided results consistent with prior studies (chi-square, 535 [246 df]; SRMR, 0.09; RMSEA, 0.06; CFI, 0.93; NNFI, 0.92). These combined results provide additional validation of the CWS (see MDA 4.2 for details).

### Correlations of current behaviors with CWS, SD-WISE, and their respective dimensions

We focused first on participants' ratings of their current behaviors and the correlations of these behaviors with CWS, SD-WISE, and their respective dimensions (see Table 8; also see MDA 4.2 for correlations between CWS, SD-WISE, and their respective dimensions). With respect to healthy behaviors, both CWS and SD-WISE were positively related to exercise, however CWS had a higher correlation (0.31,  $p < .0001$ ) than SD-WISE (0.18,  $p < .001$ ), ( $z = 2.15$ ,  $p < .05$  difference test). CWS was

positively related to eating vegetables (0.34,  $p < .0001$ ) whereas SD-WISE was not (0.06,  $p = .25$ ). CWS was unrelated to consuming sweet treats (0.09,  $p = .12$ ), while SD-WISE was negatively related to consuming sweet treats ( $-0.14$ ,  $p < .01$ ). Both were positively related to respondent's consciously managing how much they eat, but CWS had a higher correlation (0.30,  $p < .0001$ ) than SD-WISE (0.19,  $p < .001$ ), ( $z = 1.82$ ,  $p = .07$  difference test). Both were also positively related to consciously managing what they eat in order to promote health, but again CWS had a higher correlation (0.38,  $p < .0001$ ) than SD-WISE (0.24,  $p < .0001$ ), ( $z = 2.38$ ,  $p < .05$  difference test). Overall, CWS is more positively related to healthy behaviors than SD-WISE except for consuming sweet treats. Interestingly, while the otherwise higher correlations of CWS with healthy behaviors compared to SD-WISE appears to have been strongly supported by the CWS dimensions of Responsibility and Purpose, neither of these dimensions was correlated with consuming sweet treats ( $p > .10$ ), suggesting that wiser consumers may have a nuanced and balanced approach to promoting their health while allowing for occasional indulgences, a possibility that needs more directed probing.

With respect to sustainable consumption behaviors, CWS was positively related to consuming plant-based "meats" as an alternative to animal meats, (0.27,  $p < .0001$ ), but SD-WISE was not (0.01,  $p = .89$ ). Both were positively related to the index of environmentally responsible behaviors, but CWS had a much higher correlation (0.47,  $p < .0001$ ) than did SD-WISE (0.15,  $p < .01$ ), ( $z = 5.54$ ,  $p < .0001$  difference test). Not surprisingly, both of these behaviors were most strongly related to the CWS dimension of Sustainability. However, they were also positively related to three other CWS dimensions (Responsibility, Purpose, and Flexibility), providing a fuller, more holistic understanding of the consumer wisdom factors underlying select behaviors related to the greater good.

With respect to saving and spending money, CWS was positively related to annual savings percentage (0.34,  $p < .0001$ ), but SD-WISE was not ( $-0.05$ ,  $p = .38$ ). Neither CWS (0.04,  $p = .43$ ) nor SD-WISE ( $-0.07$ ,  $p = .18$ ) was related to impulse purchases. CWS was also positively related to personal caring self-gifts (0.16,  $p < .01$ ) and reward self-gifts (0.22,  $p < .0001$ ), whereas SD-WISE was not related to either ( $-0.03$ ,  $p = .53$  and  $-0.06$ ,  $p = .28$ , respectively). Overall, only CWS was positively related to saving and to specific spending behaviors, pointing to opportunities for future

TABLE 8  
*Study 4 - Correlations of Current Behaviors with Consumer Wisdom (CWS), the San Diego Wisdom Scale (SD-WISE), and Their Respective Dimensions*

	Consumer Wisdom Scale										San Diego Wisdom Scale					
	CWS	Responsibility	Purpose	Flexibility	Perspective	Reason	Sustainability	SDWISE	Advising	Social	Decisiveness	Regulation	Emotional	Insight	Pro-social	Tolerance
Exercise	0.31**	0.23**	0.29**	0.19**	0.19**	0.13*	0.20**	0.18**	0.12*	0.09	0.21**	0.09	0.06	0.15**		
Eat vegetables	0.34**	0.29**	0.22**	0.21**	0.19**	0.17**	0.28**	0.06	0.09	0.07	0.11	-0.06	-0.03	0.07		
Sweet treats	0.09	-0.07	0.08	0.17**	0.05	0.04	0.07	-0.14**	-0.01	-0.18**	-0.16**	-0.11*	-0.16**	0.11*		
Manage food amt	0.30**	0.19**	0.27**	0.14**	0.19**	0.17**	0.25**	0.19**	0.19**	0.10	0.21**	0.07	0.07	0.10		
Manage food health	0.38**	0.32**	0.32**	0.17**	0.21**	0.18**	0.32**	0.24**	0.19**	0.18**	0.27**	0.14*	0.08	0.08		
Plant-based meat	0.27**	0.16**	0.18**	0.20**	0.04	0.05	0.38**	0.01	0.10	-0.09	-0.02	0.02	-0.05	0.12*		
Enviro. Responsibility	0.47**	0.26**	0.35**	0.27**	0.22**	0.13*	0.61**	0.15**	0.17**	0.05	0.16**	0.05	0.03	0.20**		
% saved	0.34**	0.25**	0.34**	0.22**	0.21**	0.06	0.26**	-0.05	0.04	-0.03	0.07	-0.17**	-0.17**	0.04		
Impulse purch	0.04	-0.26**	0.20**	0.16**	-0.07	0.02	0.08	-0.07	0.14*	-0.12*	-0.10	-0.11*	-0.17**	0.12*		
Personal caring self-gifts	0.16**	-0.12*	0.31**	0.21**	0.01	0.03	0.15**	-0.03	0.13*	-0.07	-0.05	-0.03	-0.18**	0.10		
Reward self-gifts	0.22**	-0.11	0.33**	0.32**	0.08	0.03	0.18**	-0.06	0.13*	-0.12*	-0.02	-0.07	-0.22**	0.10		
Digital media time	0.06	0.01	0.05	0.10	0.03	0.06	-0.01	-0.12*	0.05	-0.16**	-0.05	-0.16**	-0.14*	0.00		
Hobbies time	0.10	-0.07	0.13*	0.19**	0.00	0.00	0.11*	-0.03	0.07	-0.16**	0.04	-0.10	-0.06	0.15**		
Friend & family time	0.23**	0.02	0.24**	0.31**	0.09	0.04	0.19**	0.04	0.20**	-0.07	0.10	-0.10	-0.06	0.10		
Friendship intensity	0.05	-0.08	0.13*	0.04	0.01	0.03	0.03	0.22**	0.23**	0.13*	0.16**	0.09	0.20**	0.12*		

\* $p < .05$ ;  
 \*\* $p < .01$ .

research to understand the ways that wise consumers selectively use consumption to promote their personal well-being (e.g., self-gifts in the short-term to reward behaviors that promote longer term individual well-being). Interestingly, the correlations of specific CWS dimensions with these spending behaviors illustrate their competing influences on spending behaviors (e.g., a conceptual dialectic between Responsibility vs. Purpose and Flexibility).

With respect to leisure time, CWS was not related to time spent using digital media (0.06,  $p = .29$ ), whereas SD-WISE was weakly negatively related ( $-0.12$ ,  $p < .05$ ). CWS was positively (though weakly) related to time spent on hobbies (0.10,  $p = .07$ ), whereas SD-WISE was not ( $-0.03$ ,  $p = .64$ ). Interestingly, CWS was positively related to time spent with friends and family, either in-person or remotely (0.23,  $p < .0001$ ), but SD-WISE was not (0.04,  $p = .49$ ). However, there was a comparatively anomalous result with SD-WISE being related to friendship intensity (0.22,  $p < .0001$ ), but CWS was not (0.05,  $p = .40$ ). One conjecture about these divergent results is that while wiser consumers value time with friends and family, this may entail relatively more diffuse, distal connections (e.g., via social media). The positive relationship of SD-WISE with friendship intensity, as a measure of frequency of contact with friends in particular (“how often have you been in touch with friends”), may suggest that these relationships are qualitatively different, that is, more focused on specific close friendships, consistent with the emphasis of SD-WISE on social connections (see SD-WISE dimensions of Social Advising and Prosocial). Clearly, these are just conjectures at this early phase of using the CWS. More work is needed to parse the nuances.

#### *Correlations of COVID shutdown behaviors with CWS, SD-WISE, and their respective dimensions*

Finally, we inspected the correlations of CWS and SD-WISE with the same set of behaviors reported above, but focused on their reported behaviors during the period of the initial COVID-19 shutdown in the United States (March and April, 2020). This time period represented a compelling context in which to study the effects of high stress on baseline levels of each behavior, as well as on the relationships of CWS and SD-WISE with these behaviors. Indeed, we did find a change in several specific behaviors for all participants in aggregate, comparing the early months of the pandemic to behaviors 6 months later. In the early phase of the

pandemic participants overall reported lower levels of exercise, higher consumption of sweets, lower management of how much they ate and what they ate, reduced spending on impulse items and personal caring self-gifts, and more time spent on digital media (see MDA 4.2 for details). However, the patterns of CWS and SD-WISE correlations with these behaviors were markedly similar in the early phase to the correlations 6 months later. In addition, and most importantly for our purposes, CWS was consistently more positively correlated than general wisdom with healthy eating behaviors, sustainable consumption, saving money, and self-gifting during both time periods (see MDA 4.2 for details). This relative superiority of the CWS during both time periods with respect to these behaviors attests to the robustness of the CWS and to the domain specificity of wisdom and its oft-claimed power to cope with life’s minor and major predicaments (Nozick, 1989).

In summary, study 4 provides evidence that while CWS and SD-WISE are related ( $r = .33$ ,  $p < .0001$  in the current study), they are distinct. Compared to SD-WISE, our CWS appears more fruitful for studying consumer behaviors, perhaps most especially for quality of life concerns such as health, sustainability, financial management, and beneficial indulgences (e.g., self-gifts). Further, our results show how the dimensions of CWS can provide added insights. In some cases, we saw how the CWS dimensions worked in concert with respect to a particular behavior; in other cases, we saw the noninfluence or the countervailing influences of different dimensions. Although a secondary analysis of specific dimensions can offer significant insight, we encourage use of the full CWS scale and would caution against the sole use of specific dimensions and their respective items. To illustrate, we regressed each of the behavioral measures (e.g., plant-based meat consumption) on the full set of individual dimensions and then again on the single dimension with which it was most highly correlated (see Table 8). In every case, the adjusted R-squared was higher when the full set of dimensions was used. For example, although plant-based meat consumption was most highly correlated with the CWS dimension of Sustainability, it was also significantly correlated with the CWS dimensions of Responsibility, Purpose, and Perspective. Focusing just on the expected role of Sustainability in this case would have missed the relevance of other, complementary dimensions. Thus, we recommend the use of the full 24-item CWS scale, with the added benefit afforded by dimension-level

analyses that may provide additional insight into a given phenomenon.

### General Discussion

Wisdom has been a long-honored virtue—a will and a skill as Schwartz and Sharpe (2010) characterize it—that could have valuable influences on consumer behaviors, especially in the pursuit of well-being. To facilitate theory and substantive insights, we developed a reliable and valid 24-item, self-report scale of consumer wisdom (CWS). Its six dimensions are related but distinct, and together they provide a foundation for developing further knowledge on consumer wisdom. Combined, our findings map out future paths for advancing the meaning, merits, and mentoring of wiser consumption.

Our research supported and extended Luchs and Mick's (2018) groundbreaking framework by moving conceptually from five to six refined dimensions, and by empirically confirming their shared and separate nature and value. We also determined that our CWS is positively associated with varied indicators of personal well-being and the greater good (e.g., life satisfaction, perceived financial well-being) beyond other established predictors such as personal relationship support and job satisfaction.

We situated consumer wisdom within a broad nomological network. Specifically, we provided empirical support showing that our CWS is related to but distinct from a variety of established constructs and scales that reflect both desirable and undesirable aspects of consumers' behaviors (+ growth mindset, + spending self-control, + voluntary simplicity, + self-confidence, + elaboration on potential outcomes, – compulsive buying, – materialism). Recognizing these patterns, a consumer researcher in future work can begin with the full 24-item CWS to identify which dimensions are related to a given phenomenon, such as price sensitivity, responding to certain types of promotions, conscientious shopping, responding to stock-outs, etc. Then, the research could proceed by employing specific scales that are most related to the dimensions identified.

Moreover, we addressed the relationship between our CWS and a leading measure of general wisdom, explaining their different orientations and providing empirical insights on their distinctions. First, we showed that our CWS is either uniquely or more strongly associated with conceptually relevant well-being measures such as expected financial security and lower BMI. Second, we provided evidence that our CWS and a leading measure of general wisdom

are distinct by virtue of being differentially related to a variety of well-being promoting behaviors. For example, our CWS is more strongly related to exercise, healthy eating, sustainable consumption, and saving money, whereas the general wisdom scale is more related to a measure of friendship intensity. Third, we showed that the relationships of our CWS to these behaviors are robust by virtue of their consistency during a period of heightened stress, brought on by the onset of the COVID-19 pandemic in the spring of 2020. Fourth, we demonstrated how the dimensions of CWS can provide unique insights into specific behaviors. In some cases, we saw how the CWS dimensions worked in concert with respect to a particular behavior; in other cases, we saw the noninfluence or the countervailing influences of different dimensions.

Collectively, as summarized in Table 9, individual dimensions of our CWS related in varied, logical, and informative ways to the array of variables from consumer behavior and the social sciences that we included in our studies. Overall, our research not only contributes a new measure of consumer wisdom, it also imparts knowledge advances that are theory-convergent and substantively valuable in light of the early conceptualizing of consumer wisdom.

The concept of consumer wisdom and our corresponding CWS offer a rich and inclusive delineation of how consumers might manifest wisdom in their consumption decisions and behaviors, both with respect to promoting their own well-being and the greater good through their consumption behaviors. Hence, our chief contribution to consumer wisdom theory and research may be in helping to “tame the beast” of a complex and aspirational construct through the development of a multidimensional self-report scale to support further sociopsychological studies of wisdom's role in well-being. As such, this contribution could parallel Richins and Dawson's (1992) three-dimensional model and measure of materialism. Their work has generated a trove of findings on the facilitators, mediators, moderators, and consequences of materialism, and stimulated other streams of work as, for example, experiences versus possessions (Van Boven & Gilovich, 2003). We believe that our consumer wisdom scale may likewise propel wide-ranging contributions.

#### *Limitations and further opportunities for wisdom research*

We must acknowledge what our CWS focuses on at this point, and what it does not. For

TABLE 9  
 Relationship of CWS Dimensions to Consumer Behavior Constructs (Study 2a) and to Dimensions of General Wisdom from the Social Sciences (Study 2b)

Consumer Wisdom Dimension	Relationship to consumer behavior constructs: <sup>a</sup> Positive (negative)	Relationship to dimensions of wisdom from the social sciences <sup>b</sup>
<p><b>Responsibility:</b> Managing spending relative to personal resources towards achieving a realistically envisioned lifestyle</p> <p><b>Purpose:</b> Prioritizing discretionary spending to promote personal growth, health, and relationships</p>	<p><b>Consumer spending self-control, Elaboration on potential outcomes, Consumer self-confidence (Compulsive buying, Spendthrift, Materialism)</b></p> <p><b>Consumer spending self-control, Elaboration on potential outcomes, GREEN, Socially responsible purchase and disposal</b></p>	<p>SD-WISE: Decisiveness 3D-WS: Reflective</p> <p>SD-WISE: <b>Tolerance</b>, Social advising, Emotional regulation, Insight, Prosocial 3D-WS: <b>Reflective</b>, Affective, Cognitive (none)</p>
<p><b>Flexibility:</b> Being open to alternative forms of consumption, such as renting, sharing and buying used goods</p> <p><b>Perspective:</b> Using past experiences and imagined potential future consequences to inform current consumption decisions</p> <p><b>Reasoning:</b> Seeking and applying sufficient information to guide consumption decisions</p>	<p><b>Voluntary simplicity, GREEN, Socially responsible purchase and disposal</b></p> <p><b>Elaboration on potential outcomes, Consumer spending self-control, Consumer self-confidence, GREEN, (Spendthrift, Compulsive buying)</b></p> <p><b>Consumer self-confidence, Consumer spending self-control, Elaboration on potential outcomes, Need for cognition (Compulsive buying, Spendthrift)</b></p>	<p>SD-WISE: <b>Tolerance, Insight</b>, Social advising 3D-WS: Cognitive, Reflective SD-WISE: <b>Tolerance, Social advising</b>, Insight, Prosocial, Decisiveness 3D-WS: Reflective, Cognitive SD-WISE: <b>Tolerance</b></p>
<p><b>Sustainability:</b> Favoring pro-environmental and pro-social consumption options</p>	<p><b>GREEN, Socially responsible purchase and disposal, Voluntary simplicity, Elaboration on potential outcomes</b></p>	<p>SD-WISE: <b>Tolerance</b></p>

<sup>a</sup> $r \geq .30$  in bold; otherwise  $r \geq .20$ ; correlations within cells presented in order of coefficient value (largest to smallest).

<sup>b</sup>SD-WISE = San Diego Wisdom scale (Thomas et al., 2019); 3D-WS = Three Dimension Wisdom Scale (Ardelt, 2003).

example, it is largely (and naturally) individual-oriented since it is deliberately characterized as an individual difference factor. Therefore, it is silent on the nature and influences of wisdom in the context of joint or group decision making (e.g., households). It is also limited to specific aspects of consumer behavior including values, ethics, goals, preferences, budgeting, spending, and lifestyle. Further, it emphasizes consumption choices and spending, with comparatively less focus on ownership and disposal behaviors. These other factors and orientations need to be considered for future incorporation into consumer wisdom theory and research.

In addition, we used five data collection events; all respondents participated online and originated from either the United States or the UK. Future research could address potential cultural or ethnic differences in consumer wisdom, which may require adjustments to the content of the CWS and/or how it is administered. Also, each of the six dimensions of the CWS had four items. Future work might look to expand the dimensions and/or the items for additional richness (as done recently

with the SD-WISE scale, Jeste et al., 2020) or reduce them to make the scale more tractable (cf. Richins, 2004, on her materialism scale). Our work was also cross-sectional. Future longitudinal studies could reveal, for example, how some people grow to be wiser consumers through reflecting on prior decision-making and lifestyle choices and experiences. Longitudinal studies could also provide insight into possible relationships between consumer wisdom, age, and education (see MDA 3.2 for associated correlational data).

Additionally, it is worth emphasizing that over the long-haul our CWS may need alterations in the content of the measurement items as cultural and marketing systems evolve (e.g., internet, social media, artificial intelligence, cashless society) that could modify the meaning and dimensions of consumer wisdom. Finally, we focused primarily on consumer wisdom in relation to well-being. Other dependent variables stand to be explored, including attitudes and adoption-decisions regarding innovative technologies, word-of-mouth inclinations and content, reactions to advertising, and the use of social media, among others.

Our CWS could be helpful for studying a variety of other consumption decisions, especially at the intersection of intra-personal and interpersonal welfare. For instance, recent trends reveal an increased willingness to move from solo ownership of physical goods into sharing and co-ownership (Belk, 2009). Within our consumer wisdom construct and CWS, Flexibility is the dimension that relates most explicitly to currently nontraditional or less popular forms of consumption. Thus, it would be worthwhile to investigate how Flexibility (and possibly other CWS dimensions such as Responsibility and Sustainability) correspond to emerging systems of production and consumption such as the Circular Economy that attempts to “close the loop” and eliminate waste in the current, linear system (Geissdoerfer, Savaget, Bocken, & Hultink, 2017).

Another category of behaviors that our CWS may be well-suited to examining is when consumers face goal conflicts and decision trade-offs. These can include goals to improve health versus opportunities for increased social bonding (Dzhoglieva & Lambertson, 2014; Lowe & Haws, 2014) or goals to be environmentally friendly versus saving money or acquiring more effective products (Haws et al., 2014; Luchs, Naylor, Irwin, & Raghunathan, 2010). The consumer wisdom trait overall and specific dimensions may play a favorable role in navigating these difficult trade-offs, which could lead to new instructional and policy programs to help consumers improve their welfare.

It would also be fruitful to investigate consumer wisdom and decision biases, similar to the exploration of how elaboration on potential outcomes impacted contextual biases in investment decision making (Nenkov, Inman, Hulland, & Morrin, 2009). Several dimensions of consumer wisdom—Perspective, Reasoning, Responsibility, and Purpose—reflect the metacognition tendency in which wiser consumers regularly engage in decisions that are more systematic than their less-wise counterparts. If so, wiser consumers may be less vulnerable to decision biases such as myopia, overconfidence, egocentrism, and being attracted to and distracted by irrelevant information. Findings could influence behavioral economics in addition to consumer coaching and protection.

#### *Enhancing consumer wisdom*

We have depicted consumer wisdom as a relatively stable individual consumer trait, with confirming evidence in Study 2b. Nonetheless, consumer wisdom could potentially be elevated

through training or other interventions. Such efforts might be accomplished by following examples in Price et al. (2018, p. 45) for evoking a fresh start mindset, or in Nenkov et al. (2009, p. 137) for encouraging elaboration on potential outcomes regarding the positive and negative outcome of retirement plans. Alternatively, an adaptation of Kross and Grossmann’s (2012) laboratory work to boost wisdom through an ego-detachment prime could point to breakthroughs in methodology on the causal effects of consumer wisdom.

We hope our CWS can play a constructive role in integrating consumer wisdom into a promising horizon of new theory developments and empirical insights. A growing recognition of the need, ability, and education for consuming more wisely could lead to a more holistic, cohesive, and productive path toward promoting well-being in both personal life and the greater good.

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### Supporting Information

Additional supporting information may be found in the online version of this article at the publisher's website:

**Appendix S1.** Methodological Details Appendix