

Journal of Personality and Social Psychology

The Dispositional Basis of Attitudes: A Replication and Extension of Hepler and Albarracín (2013)

Kevin J. Eschleman, Nathan A. Bowling, and Timothy A. Judge

Online First Publication, January 5, 2015. <http://dx.doi.org/10.1037/pspp0000017>

CITATION

Eschleman, K. J., Bowling, N. A., & Judge, T. A. (2015, January 5). The Dispositional Basis of Attitudes: A Replication and Extension of Hepler and Albarracín (2013). *Journal of Personality and Social Psychology*. Advance online publication. <http://dx.doi.org/10.1037/pspp0000017>

The Dispositional Basis of Attitudes: A Replication and Extension of Hepler and Albarracín (2013)

Kevin J. Eschleman
San Francisco State University

Nathan A. Bowling
Wright State University

Timothy A. Judge
Notre Dame

As a departure from traditional situational perspectives, researchers have given increased attention to the dispositional basis of attitudes. Recently, Hepler and Albarracín (2013) introduced a construct that they called “dispositional attitude” and provided validity evidence for a new scale—the Dispositional Attitude Measure (DAM). Although the DAM was introduced as a “new” approach for assessing the dispositional component of attitudes, there is considerable conceptual similarity between it and the Neutral Objects Satisfaction Questionnaire (NOSQ; Judge & Bretz, 1993; Weitz, 1952). In a series of 4 studies, we attempt to replicate the predictive validity of the DAM and empirically examined the distinctiveness of the DAM from the NOSQ. Our findings suggest that the DAM does not consistently predict attitudes (e.g., attitudes toward fictional consumer products, attitudes toward common objects, job satisfaction) after the NOSQ is controlled. As a whole, our results suggest that the DAM and NOSQ assess the same underlying construct and both are valid measures of the dispositional basis of attitudes.

Keywords: Neutral Objects Satisfaction Questionnaire, Dispositional Attitude Measure, attitudes

The dispositional basis of attitudes has become an important area of interest within various subfields of psychology (e.g., McConnell & Leibold, 2001; Pratto, Sidanius, Stallworth, & Malle, 1994; Staw & Ross, 1985). Given the widespread appeal of the dispositional approach, it is important to recognize and incorporate advancements in theory and method from various psychology subdomains. Recently, Hepler and Albarracín (2013) described how one’s average attitude toward stimuli may be used to predict future attitudes. Hepler and Albarracín argue that their conceptualization of a person’s dispositional attitude and development of the Dispositional Attitude Measure (DAM) is a novel and innovative approach to predicting attitudes. The theoretical rationale underlying the DAM, however, has considerable overlap with Weitz’s (1952) discussion of a dispositional attitude and the subsequent development of the Neutral Objects Satisfaction Questionnaire (NOSQ) by Judge and Bretz (1993). Both the DAM and NOSQ assess one’s average emotional response toward a heterogeneous set of everyday objects. Hepler and Albarracín (2013) and Weitz (1952) propose that the respective scales can be used to assess a stable tendency to develop positive, neutral, or negative attitudes.

Weitz’s (1952) approach is most commonly referenced within applied psychology, because the NOSQ was developed to predict

attitudes toward one’s job (Judge & Hulin, 1993), as well as decisions to leave an organization (Judge, 1993). The proposal of a dispositional attitude was groundbreaking because most applied psychologists believed situational factors were the primary determinants of job attitudes until research beginning in the 1980s began to highlight the role of dispositions (e.g., Staw, Bell, & Clausen, 1986; Staw & Ross, 1985). In addition to the NOSQ being used in many studies within applied psychology (e.g., Judge, 1993; Kavanagh & Halpern, 1977; Piccolo, Judge, Takahashi, Watanabe, & Locke, 2005; Schneider, Hitlan, & Radhakrishnan, 2000), it has also begun to be used within other research domains. Specifically, the NOSQ has been used in publications within personality psychology (Carter, 2004; Erez, Johnson, & Judge, 1995; Quirin, Kazen, & Kuhl, 2009), vocational psychology (Zickar, Gibby, & Jenny, 2004), educational psychology (Judge & Bretz, 1993), human sexuality (Hitlan, Schneider, & Walsh, 2006), and psychological reviews (Thoresen, Kaplan, Barsky, Warren, & de Chermont, 2003). Despite the growing popularity of the NOSQ, the assumed novelty of the dispositional basis of attitudes and the DAM (Hepler & Albarracín, 2013) indicates that Weitz’s (1952) seminal research has yet to disseminate to all psychology subdomains.

Although there are several similarities between the DAM and NOSQ—both ask for one’s responses to a set of heterogeneous objects—it is unclear whether the DAM is predictive of attitudes beyond the NOSQ. The introduction of a construct that is primarily different from existing constructs only in name can inhibit scientific progress and can undermine the “new” construct’s usefulness. Thus, it is important to determine the unique contribution of the DAM beyond the more-established NOSQ.

Kevin J. Eschleman, Department of Psychology, San Francisco State University; Nathan A. Bowling, Department of Psychology, Wright State University; Timothy A. Judge, Department of Management, Notre Dame.

Correspondence concerning this article should be addressed to Kevin J. Eschleman, Department of Psychology, San Francisco State University, 1600 Holloway, San Francisco, CA 94132. E-mail: kesch@sfsu.edu

Dispositional Attitude Measure (DAM)

Hepler and Albarracín's (2013) theoretical rationale for a dispositional basis of attitudes is based on the idea that a person's average attitude toward many objects can be used to predict their attitude toward other objects. In other words, the dispositional attitude construct describes an individual difference in the general tendency to like or dislike stimuli. To assess dispositional attitude, Hepler and Albarracín introduce the DAM, which instructs respondents to rate how they feel about 16 heterogeneous items such as, "architecture," "bicycles," "cold showers," and "taxidermy" (see the top half of Table 1 for a complete list of DAM items). Each DAM item uses a 7-point favorability response scale (1 = *extremely unfavorable*; 7 = *extremely favorable*).

Although Hepler and Albarracín (2013) provide strong evidence for dispositional basis of attitude, their evaluation of the utility of the DAM is limited because they did not examine the NOSQ in their research. Given that the NOSQ assesses an established construct that has been used in numerous studies (e.g., Judge, 1993; Kavanagh & Halpern, 1977; Quirin et al., 2009), the onus is on researchers to show that dispositional attitude as measured by the DAM contributes something new to the literature beyond the NOSQ. The Principle of Parsimony and the Jangle Fallacy (e.g., Kelley, 1927; Marsh, 1994) both address the issue of treating two constructs that essentially represent the same phenomenon as though they were distinct. The Principle of Parsimony, or Ockham's Razor, would further suggest that for simplicity sake, it is

Table 1
Descriptive Statistics for the DAM and NOSQ Items

Items	Study 1 <i>M (SD)</i>	Study 2 <i>M (SD)</i>	Study 3 <i>M (SD)</i>	Study 4 <i>M (SD)</i>	Average <i>M (SD)</i>
Dispositional Attitude Measure					
Cold showers	3.60 (1.65)	3.26 (1.84)	3.08 (1.76)	2.46 (1.35)	3.22 (1.71)
Politics	3.10 (1.75)	3.45 (1.90)	3.39 (1.73)	3.41 (1.50)	3.32 (1.76)
Taxidermy	3.64 (1.47)	3.64 (1.81)	3.62 (1.62)	2.95 (1.41)	3.57 (1.60)
Receiving criticism	3.57 (1.54)	3.72 (1.68)	3.65 (1.59)	4.03 (1.37)	3.68 (1.58)
Canoes	4.45 (1.23)	3.79 (1.93)	3.58 (1.99)	4.59 (1.07)	3.96 (1.68)
Public speaking	3.99 (1.73)	4.17 (1.86)	4.05 (1.70)	3.23 (1.69)	3.99 (1.74)
Playing chess	4.93 (1.61)	4.03 (1.59)	3.95 (1.41)	3.87 (1.54)	4.24 (1.52)
Rugby	3.93 (1.31)	4.55 (1.74)	4.65 (1.71)	4.00 (1.32)	4.37 (1.57)
Statistics	4.64 (1.37)	4.30 (1.59)	4.51 (1.38)	3.90 (1.85)	4.45 (1.47)
Soccer	4.50 (1.57)	4.33 (1.64)	4.42 (1.55)	4.84 (1.48)	4.46 (1.57)
Taxes	3.41 (1.70)	5.37 (1.20)	5.31 (1.11)	2.95 (1.56)	4.58 (1.34)
Japan	4.99 (1.18)	4.82 (1.45)	4.86 (1.36)	5.10 (1.14)	4.91 (1.31)
Bicycles	5.56 (1.15)	4.64 (1.36)	4.53 (1.32)	5.38 (1.27)	4.92 (1.28)
Camping	5.00 (1.62)	5.09 (1.57)	4.94 (1.46)	5.31 (1.47)	5.02 (1.53)
Doing crossword puzzles	5.13 (1.58)	5.10 (1.63)	5.09 (1.50)	4.15 (1.39)	5.02 (1.54)
Architecture	5.29 (1.17)	5.28 (1.30)	5.13 (1.18)	5.03 (1.06)	5.20 (1.19)
			Scale average <i>M (SD)</i>		4.31 (1.52)
Neutral Objects Satisfaction Questionnaire					
The way people drive	3.36 (1.58)	3.65 (1.70)	3.59 (1.61)	3.24 (1.40)	3.51 (1.60)
Advertising	4.26 (1.64)	4.25 (1.63)	4.13 (1.64)	3.90 (1.31)	4.18 (1.61)
Public transportation	4.39 (1.50)	4.41 (1.59)	4.40 (1.55)	4.18 (1.49)	4.38 (1.54)
Local newspapers	4.93 (1.33)	4.88 (1.57)	4.47 (1.48)	4.45 (0.92)	4.69 (1.41)
The movies being produced today	4.65 (1.51)	4.86 (1.47)	4.56 (1.46)	5.10 (1.33)	4.70 (1.47)
8 1/2" x 11" paper	4.87 (1.04)	4.90 (1.27)	4.82 (1.11)	5.00 (1.10)	4.87 (1.13)
Popular music	5.05 (1.61)	5.16 (1.54)	4.77 (1.34)	4.18 (1.59)	4.89 (1.48)
The neighbors you have	4.97 (1.50)	5.18 (1.37)	4.89 (1.47)	4.62 (1.41)	4.96 (1.45)
Modern art	4.73 (1.51)	5.09 (1.45)	5.16 (1.44)	4.46 (1.45)	4.96 (1.46)
Television programs	5.03 (1.43)	5.09 (1.49)	4.87 (1.43)	4.90 (1.35)	4.97 (1.44)
The climate where you live	5.16 (1.49)	5.04 (1.45)	4.73 (1.45)	5.32 (1.45)	4.97 (1.46)
Telephone service	4.97 (1.42)	5.22 (1.59)	5.16 (1.48)	5.08 (1.09)	5.11 (1.46)
Your telephone number	5.58 (1.12)	4.99 (1.41)	4.82 (1.54)	5.56 (1.10)	5.14 (1.35)
Local speed limits	4.83 (1.43)	5.56 (1.22)	5.29 (1.18)	4.74 (1.31)	5.17 (1.27)
Your relaxation time	5.44 (1.36)	5.24 (1.61)	5.04 (1.49)	4.72 (1.54)	5.17 (1.48)
Today's cars	5.43 (1.19)	5.24 (1.34)	5.23 (1.27)	5.33 (1.13)	5.30 (1.25)
The way you were raised	5.48 (1.45)	5.22 (1.62)	5.20 (1.54)	5.36 (1.55)	5.30 (1.53)
The city in which you live	5.34 (1.49)	5.56 (1.45)	5.18 (1.44)	5.15 (1.60)	5.31 (1.47)
The quality of food you buy	5.37 (1.31)	5.38 (1.23)	5.26 (1.37)	5.36 (1.09)	5.33 (1.30)
Restaurant food	5.52 (0.98)	5.20 (1.26)	5.32 (1.20)	5.64 (1.11)	5.38 (1.14)
The high school you attended	5.17 (1.67)	5.74 (1.40)	5.69 (1.25)	4.92 (1.86)	5.49 (1.46)
The residence where you live	5.36 (1.49)	5.77 (1.32)	5.52 (1.25)	5.10 (1.45)	5.50 (1.35)
The people you know	5.67 (1.02)	5.55 (1.39)	5.38 (1.37)	5.97 (0.96)	5.55 (1.24)
Yourself	5.57 (1.41)	5.59 (1.17)	5.62 (1.10)	5.33 (1.24)	5.57 (1.22)
Your first name	5.92 (1.21)	5.93 (1.24)	5.79 (1.21)	5.67 (1.33)	5.85 (1.23)
			Scale average <i>M (SD)</i>		5.05 (1.39)

Note. *M* = mean; *SD* = standard deviation; Average = sample weighted average across all studies.

unnecessary to introduce an ostensibly “new” construct that is redundant with an existing construct. Similarly, the Jangle Fallacy refers to the false assumption that two constructs are dissimilar because they have different names.

Neutral Objects Satisfaction Questionnaire (NOSQ)

Weitz (1952) began his work with the premise that a researcher can more accurately predict a person’s attitude toward their job by assessing the person’s average attitude toward objects endemic to everyday life. In an effort to develop this construct, Weitz argued that a person who perceives more sources of satisfaction (or dissatisfaction) than another person would have a bias to develop positive (or negative) attitudes in the future. Because assessing all possible sources of satisfaction (or dissatisfaction) is not feasible, Weitz examined a subset of sources endemic to everyday life. In other words, the objects were considered “neutral” because in the absence of enduring tendencies to generally experience objects either favorably or unfavorably, there should not be consistent between-person environmental differences in experiences of the objects. If an object is truly neutral, then any between-person variability in affective responses can be attributed to dispositional differences instead of environmental differences.

Drawing heavily on Weitz’s (1952) work, Judge and colleagues developed the NOSQ and helped reintroduce Weitz’s theorizing into personality and job attitude research (e.g., Judge, 1993; Judge & Hulin, 1993; Judge & Bretz, 1993). As a result of this work, the nomological net of the construct became clearer. NOSQ is now recognized as being distinct from other affective-oriented dispositions (e.g., trait positive and negative affectivity) and uniquely predictive of attitudes (Eschleman & Bowling, 2011).

The version of the NOSQ most commonly used by researchers is a revised version from Judge and Bretz (1993)—a shortened form of Weitz’s (1952) 44-item scale that includes more modern language and an altered response scale. The NOSQ (Judge & Bretz, 1993) instructs respondents to rate how they feel about 25 heterogeneous items such as, “advertising,” “telephone service,” “public transportation,” and “8 1/2 × 11 paper” (see the bottom half of Table 1 for a complete list of NOSQ items). In contrast to dichotomous (yes vs. no) responding in Weitz’s original measure, the NOSQ uses a 3-point satisfaction response scale (1 = *dissatisfied*; 2 = *neutral*; 3 = *satisfied*).

Similarities and Differences Between the DAM and NOSQ

The DAM and NOSQ are similar in item content and they yield similar relationships with various attitudes. Both the DAM and NOSQ ask respondents to rate their feelings toward a set of heterogeneous stimuli (Hepler & Albarracín, 2013; Judge & Bretz, 1993). In addition, both the DAM and NOSQ are both consistently associated with various attitudinal criteria. Hepler and Albarracín (2013) report that the DAM was positively associated with attitudes toward a fictitious consumer product, attitudes toward real objects (e.g., vaccine shots, recycling), and life satisfaction. The DAM also explained unique variance in attitudes toward a fictitious consumer product while controlling for other dispositions (e.g., Five Factor Model personality traits). Similar results have been observed with the NOSQ (cf. the meta-analysis by Eschleman

& Bowling, 2011). The NOSQ, for instance, was positively associated with life satisfaction and job satisfaction.

Although there are similarities in underlying theory for the dispositional basis of attitudes, content of the scales, and predictive validity, there are differences between the DAM and NOSQ that may influence the construct each scale assesses. First, the DAM instructs participants to rate their feelings toward items using a response scale anchored with *favorability*; the NOSQ instructs participants to rate their feelings toward items using a response scale anchored with *satisfaction*. Although we are unaware of any empirical research comparing the two response scale anchors, differences in scale anchors can in some instances impact results (e.g., Friedman & Amoo, 1999).

Second, the DAM items were selected based on valence. As a result, the DAM includes some objects that generally yield positive responses and it includes some objects that generally yield negative responses. Hepler and Albarracín’s reasoning for including items with negative or positive valence was to develop a measure that is equally likely to predict both negative and positive attitudes. Conversely, the NOSQ items were written and selected based on being endemic to everyday life. Although the NOSQ items have been described as neutral in valence, a majority of the items have an average rating that is favorable (Eschleman & Bowling, 2011). In sum, the DAM and NOSQ share many similarities, but there are also differences between the two measures. As a result, research is needed to examine whether or not the DAM predicts attitudes after the NOSQ has been controlled.

Current Studies

In the current set of four studies, we evaluate several hypotheses that address the unique effects of the DAM and NOSQ. Specifically, the four studies examine the relationship between the two scales and whether differences in response scales (favorability vs. satisfaction anchors) and item valence affect the validity of the DAM and NOSQ. Studies 1, 2, and 3 used a cross-sectional design to examine the unique effects of the DAM beyond the more-established measures and constructs. We extend upon Hepler and Albarracín (2013) by including the NOSQ in our evaluation of the DAM’s incremental validity. Following Hepler and Albarracín, we predict that the DAM will be positively related to various attitudes. In addition, the DAM is hypothesized to have positive relationships with narrow attitudes while controlling for other dispositions (i.e., Five Factor Model traits, locus of control, positive affectivity, negative affectivity, and need for cognition). We also pose a research question regarding whether the DAM continues to predict attitudes while controlling for the NOSQ.

Hypothesis 1: The DAM will be positively associated with narrow attitudes.

Hypothesis 2: The DAM will be positively associated with narrow attitudes while controlling for other dispositions.

Research Question 1: Is the DAM positively associated with narrow attitudes while controlling for the NOSQ?

Study 1

Study 1 tests Hypotheses 1 and 2 and addresses Research Question 1. To evaluate the predictive validity of the DAM, we

measured variables that were examined in prior research on either the DAM (Hepler & Albarracín, 2013) or NOSQ (Eschleman and Bowling, 2011, Study 1). We included attitudes toward a fictitious consumer product, life satisfaction, and job satisfaction. In previous research, the DAM was positively associated with attitude toward a fictitious consumer product ($r = .23$) and life satisfaction ($r = .15$; Hepler & Albarracín, 2013). Eschleman and Bowling's (2011) meta-analysis shows the NOSQ has positive relationships with life satisfaction ($r = .33$, $k = 5$, $N = 941$) and job satisfaction ($r = .20$, $k = 13$, $N = 2,744$). Other dispositions included positive affectivity, negative affectivity, and need for cognition.

Method

Participants and procedure. Study 1 participants were 228 adults recruited through Amazon's Mechanical Turk (MTurk). Participants were paid \$0.50 to complete a short survey on "consumer products." The average participant was 33 years old, and 51% were female, 53% were Asian, 39% were Caucasian/White, and 4% were Black/African American. A total of 54% of participants were from the United States; 40% were from India. Of those employed (73%), the average hours worked was 39 hr per week and 3.8 years job tenure. We removed 36 participants from the original recruitment pool who were identified as careless responders (e.g., Meade & Craig, 2012) because they did not respond accurately to four attention checks (e.g., "Please ensure that you are paying attention by marking "agree").

Items for the DAM and NOSQ were presented on the screen one object at a time instead of separately presenting scales in sequential blocks. This was done because we feared that presenting the two measures in sequential blocks would introduce a demand characteristic implying to participants that the two measures assess distinct constructs. The order of all DAM and NOSQ items was randomly determined for each participant.

Measures.

Dispositional attitude. Dispositional attitude was assessed with the DAM (Hepler & Albarracín, 2013) and NOSQ (Judge & Bretz, 1993). The DAM was on a 7-point scale from 1 = *extremely unfavorable* to 7 = *extremely favorable*. The DAM had an alpha reliability of .83 and a split-half reliability of .70. The NOSQ was adapted to a 7-point scale from 1 = *extremely dissatisfied* to 7 = *extremely satisfied*. The NOSQ had an alpha reliability of .89 and a split-half reliability of .79.

Other dispositions. Positive affectivity (e.g., "enthusiastic" and "interested") and negative affectivity (e.g., "jittery" and "afraid") were assessed with 10 items each (Watson, Clark, & Tellegen, 1988). Respondents rated how often they feel each emotion "on average." The items were scored on a 5-point scale ranging from 1 = *never* to 5 = *always*. Both the positive affectivity and negative affectivity scales had alpha reliabilities of .93. Need for cognition (e.g., "I like to solve complex problems") was assessed with 10 items (International Personality Item Pool, n.d.). Respondents rated their agreement with statements describing them "in general." Each item was scored on a 7-point scale ranging from 1 = *strongly disagree* to 7 = *strongly agree*. The need for cognition scale had an alpha reliability of .83.

Attitudes. Attitude toward a fictitious consumer product was assessed with the same measure used by Hepler and Albarracín (2013). Each participant read six randomized reviews for a fic-

tional product (i.e., a Monahan LPI-800 Compact 2/3-Cubic-Foot 700-W Microwave Oven). The valence of the product is neutral because the reviews were balanced with three positive and three negative reviews. Respondents were asked to rate their agreement with three statements about the product on a scale from 1 = *strongly disagree* to 7 = *strongly agree*. The three statements were, "I like this product," "This product is bad," and "This product is useful." We excluded the item that described the product as "favorable" to avoid common-method variance with the response scale of the DAM. The measure for attitude toward the neutral product had an alpha reliability of .87.

Life satisfaction (e.g., "In most ways my life is close to my ideal") was assessed with five items from the Satisfaction with Life Questionnaire (SWLQ; Diener, Emmons, Larsen, & Griffin, 1985). Each item was scored on a 7-point scale ranging from 1 = *strongly disagree* to 7 = *strongly agree*. The life satisfaction scale had an alpha reliability of .92.

Job satisfaction was assessed with three items from the Michigan Organizational Assessment Questionnaire (MOAQ; Cammann, Fichman, Jenkins, & Klesh, 1983). Respondents rated their agreement to statements describing how they feel about their job (e.g., "All in all, I am satisfied with my job"). Each item was scored on a 7-point scale ranging from 1 = *strongly disagree* to 7 = *strongly agree*. The job satisfaction scale had an alpha reliability of .93.

Results

Descriptive statistics for the DAM and NOSQ items from Study 1 are reported in the second column of Table 1. Descriptive statistics, scale reliabilities, and correlations for Study 1 variables are reported in Table 2.

Relationship between the DAM and NOSQ. The DAM and NOSQ were strongly correlated in Study 1 ($r = .66$, $p < .01$; corrected correlation = .77). In addition, we conducted confirmatory factor analyses to examine the number of factors onto which the measures loaded. Four fit statistics were used to determine model fit (see Hu & Bentler, 1999): root-mean-square residual (SRMR), comparative fit index (CFI), chi-square, and root mean square error of approximation (RMSEA). A chi-squared difference test was used to compare nested models. Similar to Hepler and Albarracín (2013), we used item parcels. The one-factor model did not fit the data well, $\chi^2(9) = 78.38$, CFI = .91, RMSEA = .18, SRMR = .06. The two-factor model, however, in which item parcels from the DAM and NOSQ loaded onto separate factors fit the data well, $\chi^2(8) = 7.75$, CFI = 1.00, RMSEA = .00, SRMR = .02, and significantly better than did the one-factor model, $\Delta\chi^2(1) = 70.63$, $p < .01$. Although two measures load onto separate latent factors, the relationship between latent factors was strong (.78) and statistically significant ($p < .01$).

Predictive validity of the DAM and NOSQ.

Main effects. We found support for Hypothesis 1, which predicted that the DAM is positively associated with attitude criteria. The DAM was positively correlated with all three Study 1 attitudes: attitude toward the neutral product, $r = .28$, $p < .01$; life satisfaction, $r = .29$, $p < .01$; and job satisfaction, $r = .24$, $p < .01$. Similarly, the NOSQ was positively correlated with all three Study 1 attitudes: attitude toward the neutral product, $r = .31$,

Table 2
Study 1 Descriptive Statistics, Reliabilities, and Correlations

Variables	Mean	SD	1	2	3	4	5	6	7	8	9
Dispositional attitude											
1. DAM	4.36	0.80	(.83)								
2. NOSQ	5.08	0.72	.66**	(.83)							
Other dispositions											
3. Positive affectivity	3.43	0.89	.47**	.57**	(.93)						
4. Negative affectivity	1.81	0.84	.11	.07	-.04	(.93)					
5. Need for cognition	5.04	0.92	.16*	.06	.29**	-.34**	(.83)				
Attitudes											
6. Neutral fictitious product	4.28	1.38	.28**	.31**	.15*	.10	-.05	(.87)			
7. Life satisfaction	4.82	1.45	.29**	.47**	.48**	-.16*	.15*	.22**	(.92)		
8. Job satisfaction	4.61	0.59	.24**	.33**	.38**	.15*	.34**	.08	.45**	(.88)	
Demographics											
9. Age	33.31	10.73	-.07	-.09	.10	-.32**	.05	-.12	.08	.12	—
10. Gender	1.48	0.50	-.08	.04	.10	-.03	.06	.00	.12	.22	-.01

Note. $N = 228$; $n = 166$ for job satisfaction correlations. Uncorrected correlations presented below the diagonal. Alpha reliabilities are presented on the diagonal in parentheses. SD = standard deviation. Female = 1, Male = 2.

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

$p < .01$; life satisfaction, $r = .47$, $p < .01$; and job satisfaction, $r = .33$, $p < .01$.

Incremental effects. Three sets of regression analyses were conducted to test the incremental effects of the DAM (see Table 3). Study 1 provided partial support for Hypothesis 2, which predicted that the DAM explains unique variance in attitude criteria while

controlling for other dispositions (i.e., positive affectivity, negative affectivity, and need for cognition). The DAM explained unique variance in two of three attitudes. Specifically, the DAM explained unique variance in attitude toward the neutral product ($\beta = .27$, $\Delta R^2 = .05$, $p < .01$) and job satisfaction ($\beta = .23$, $\Delta R^2 = .04$, $p < .05$), but did not explain unique variance in life satisfaction ($\beta = .12$, $\Delta R^2 = .01$, ns).

To address Research Question 1, we examined the predictive validity of the DAM while controlling for the NOSQ. The DAM explained unique variance in none of the attitudes. Specifically, the DAM did not explain unique variance in participants' attitudes toward the neutral product ($\beta = .14$, $\Delta R^2 = .01$, ns), life satisfaction ($\beta = -.03$, $\Delta R^2 = .00$, ns), and job satisfaction ($\beta = .14$, $\Delta R^2 = .01$, ns). Conversely, the NOSQ explained unique variance in all three attitudes. Specifically, NOSQ explained unique variance in attitudes toward the neutral product ($\beta = .22$, $\Delta R^2 = .03$, $p < .01$), life satisfaction ($\beta = .50$, $\Delta R^2 = .14$, $p < .01$), and job satisfaction ($\beta = .29$, $\Delta R^2 = .04$, $p < .01$).

We also examined the predictive validity of the DAM while simultaneously controlling for other dispositions and the NOSQ. The DAM explained unique variance in none of the attitudes. Specifically, the DAM did not explain unique variance in attitudes toward the neutral product ($\beta = .15$, $\Delta R^2 = .01$, ns), life satisfaction ($\beta = -.07$, $\Delta R^2 = .00$, ns), and job satisfaction ($\beta = .08$, $\Delta R^2 = .00$, ns). Conversely, the NOSQ explained unique variance in all three attitudes. Specifically, the NOSQ explained unique variance in attitude toward the neutral product ($\beta = .23$, $\Delta R^2 = .02$, $p < .05$), life satisfaction ($\beta = .36$, $\Delta R^2 = .06$, $p < .01$), and job satisfaction ($\beta = .27$, $\Delta R^2 = .03$, $p < .05$).

Discussion of Findings

Overall, the results of Study 1 indicate that although strongly related, the DAM and NOSQ loaded onto two latent factors. The presence of two latent factors suggest differences between the DAM and NOSQ, but these differences may be no greater than the differences often found between two measures of the same construct. That is, the relationship between the DAM and NOSQ is similar in strength as commonly found between two different measures of

Table 3
Study 1 Regression Analyses Examining Predictive Validity of the DAM

	Neutral product β	Life satisfaction β	Job satisfaction β
Controlling for other dispositions			
1. PA	.05	.43**	.18*
2. NA	.04	-.18**	.13
3. Need for cognition	-.09	-.05	.07
4. DAM	.27**	.12	.23*
Total R^2 :	.09**	.26**	.16**
ΔR^2 for DAM:	.05**	.01	.04*
Controlling for NOSQ			
1. DAM	.14	-.03	.14
2. NOSQ	.22*	.50**	.29**
Total R^2 :	.11**	.22**	.16**
ΔR^2 for DAM:	.01	.00	.01
ΔR^2 for NOSQ:	.03**	.14**	.04**
Controlling for NOSQ & other dispositions			
1. PA	-.03	.30**	.08
2. NA	.04	-.17**	.14
3. Need for cognition	-.06	.00	.11
4. DAM	.15	-.07	.08
5. NOSQ	.23*	.36**	.27*
Total R^2 :	.12**	.32**	.18**
ΔR^2 for DAM:	.01	.00	.00
ΔR^2 for NOSQ:	.02*	.06**	.03*
ΔR^2 for DAM and NOSQ:	.08**	.07**	.06**

Note. $N = 228$; $n = 166$ for job satisfaction analyses. β = standardized regression coefficients with all variables included in the model. ΔR^2 = unique variance explained. Total R^2 = total variance explained by all variables.

same construct (e.g., Gosling, Rentfrow, & Swann, 2003; Lim & Ployhart, 2006; Rammstedt & John, 2007). For example, the average self-report correlation between a shortened five-item version and a full-length 100-item version of the Five Factor Model traits was .65 (.48 to .80; Gosling et al., 2003). The predictive validity of the DAM was also examined to determine if the differences in the DAM and NOSQ are meaningful.

Consistent with Hypothesis 1, the DAM was positively associated with all attitudes. Partial support was found for Hypothesis 2, as the DAM was positively associated with several attitudes after controlling for other dispositions. The incremental effects of the DAM were absent, however, after the NOSQ was included as a control variable. This is due to the considerable overlap between the DAM and NOSQ. It is interesting to note, however, that the NOSQ had incremental effects in all attitudes even with the DAM included as a control variable. These results indicate that the DAM and NOSQ are very similar, but that there may be some substantive differences between the scales.

The differences in item valence between the DAM and NOSQ may have favored the predictive validity of the NOSQ rather than the DAM in Study 1. The DAM was developed to include both positive and negative valence items to ensure that the measure would predict both positive and negative valence attitudes. The attitudes included in Study 1 were slightly positive in valence on average, which should favor the NOSQ because the NOSQ is comprised of primarily positive valence items. Although Study 1 results indicate that the DAM does not explain unique variance in attitude criteria after controlling for other dispositions and the NOSQ, the differences between the DAM and NOSQ in item valence and scale anchors needs to be further explored. In Study 2, we examined the effects of item valence by including attitudes that have a variety of different valences. In addition, we examine the effects of response scale anchors (*favorability* vs. *satisfaction*) on participant responses to the DAM and NOSQ.

Study 2

Study 2 tests Hypotheses 1 and 2 and addresses Research Question 1. The same attitude measures from Study 1—attitude toward a neutral consumer product, life satisfaction, and job satisfaction—were included in Study 2 for replication purposes. In addition, Study 2 included measures of attitudes toward neutral objects, positive objects, and negative objects to explore whether the DAM and NOSQ have similar relationships with attitude measures of varying valences. As in Study 1, we measured other dispositions that had been previously examined in relation to either the DAM or NOSQ. These other dispositions included conscientiousness, agreeableness, neuroticism, extraversion, openness, and locus of control.

Method

Participants and procedure. Study 2 participants were 184 adults recruited via MTurk. These participants were paid \$0.50 to complete a short survey on “consumer products.” Study 2 did not include any participants who responded to Study 1. The Study 2 participants had an average age of 33 years, 48% were female, 44% were Asian, 41% were Caucasian/White, were 4% Black/African American. All participants were from the United States.

Of those employed (78%), the average hours worked was 38 hr per week and 3.7 years job tenure. We removed 16 participants from the original recruitment pool who were identified as careless responders using four attention check questions.

To examine the effects of favorability versus satisfaction anchors, the DAM and NOSQ items were randomly assigned to two subscales per measure and placed into two blocks. Each block included half the items from both the DAM and NOSQ. One block of items was placed on a 7-point scale with *satisfaction* anchors whereas the other block was placed on a 7-point scale with *favorability* anchors. The items within each block were randomized and the two blocks were counterbalanced.

Measures.

Dispositional attitude. The Cronbach’s Alpha for the DAM (Hepler & Albarracín, 2013) was .87. The correlation between the DAM satisfaction subscale and DAM favorability subscale, which is a split-half reliability, was .66. The Cronbach’s Alpha for the NOSQ (Judge & Bretz, 1993) total scale was .93. The correlation between the NOSQ satisfaction subscale and NOSQ favorability subscale was .76.

Other dispositions. Measures of conscientiousness (e.g., “I get chores done right away”), agreeableness (e.g., “I sympathize with others’ feelings”), neuroticism (e.g., “I have frequent mood swings”), extraversion (e.g., “I am the life of the party”), and openness (e.g., “I have a vivid imagination”) were assessed with four items each (Donnellan, Oswald, Baird, & Lucas, 2006). Locus of control (e.g., “I believe that my success depends on ability rather luck.”) was assessed with five items (International Personality Item Pool, n.d.) with higher scores indicating greater internal locus of control. Respondents rated their agreement to statements describing them “in general.” Each item was scored on a 7-point scale ranging from 1 = *strongly disagree* to 7 = *strongly agree*. The Cronbach’s Alphas for conscientiousness, agreeableness, neuroticism, extraversion, openness, and locus of control were .66, .77, .63, .72, .68, and .62, respectively.

Attitudes. Attitude toward a neutral consumer product (Hepler & Albarracín, 2013), life satisfaction (Diener et al., 1985), and job satisfaction (Cammann et al., 1983) were assessed using the same measures used in Study 1. The alpha reliabilities for the scales of attitude toward the neutral product, life satisfaction, and job satisfaction were .87, .91, and .86, respectively.

Attitudes toward neutral objects (i.e., “boxes” and “rope”), positive objects (i.e., “receiving birthday gifts” and “vacations”), and negative objects (i.e., “road kill” and “pollution”) were assessed with two items each. These items were interspersed among the NOSQ and DAM items. Each set of objects included an item on the satisfaction response scale and the favorability response scale. The mean scores for neutral objects ($M = 5.09$), positive objects ($M = 6.00$), and negative objects ($M = 2.54$) indicate that we were successful in selecting items with different valence. The Cronbach’s alphas for the scales of attitudes toward neutral objects, positive objects, and negative objects were .48, .51, and .79, respectively.

Results

Descriptive statistics for the DAM and NOSQ items from Study 2 are reported in the third column of Table 1. Descriptive statistics,

scale reliabilities, and correlations for Study 2 variables are reported in Table 4.

Relationship between the DAM and NOSQ. The DAM and NOSQ were strongly correlated in Study 2 ($r = .63, p < .01$; corrected correlation = .70). The subscales for the DAM and NOSQ were used to examine the effects of the satisfaction and favorability response anchors. The subscale relationships for the DAM, $r = .66, p < .01$ and NOSQ, $r = .76, p < .01$ from Study 2 were compared with the respective split-half correlations in Study 1 using Fisher r -to- Z transformation for independent samples (Cohen, Cohen, West, & Aiken, 2003). The subscale correlations did not differ from the split-half reliabilities recorded in Study 1 for the DAM ($r = .66$ vs. $r = .70$; $Z = -0.75, ns$) and NOSQ ($r = .76$ vs. $r = .79$; $Z = -0.75, ns$), indicating that the response scales (favorability vs. satisfaction) did not affect participant responses to either the DAM or NOSQ.

In a confirmatory factor analysis, a one-factor model fit the data poorly, $\chi^2(54) = 272.82, CFI = .80, RMSEA = .15, SRMR = .08$; a two-factor model with item parcels loading onto favorability and satisfaction constructs also yielded poor fit, $\chi^2(54) = 270.35, CFI = .80, RMSEA = .15, SRMR = .08$; a two-factor model with item parcels loading onto the DAM and NOSQ, however, yielded good fit, $\chi^2(53) = 121.78, CFI = .94, RMSEA = .08, SRMR = .06$, and it fit significantly better than the two-factor model based on response scale, $\Delta\chi^2(1) = 148.57, p < .01$. The relationship between latent factors was strong (.67) and significant ($p < .01$).

Predictive validity of the DAM and NOSQ.

Main effects. Study 2 provided support for Hypothesis 1, which predicted that the DAM is positively associated with attitudes. The DAM was positively correlated with all six attitudes: attitude toward the neutral consumer product, $r = .44, p < .01$; attitude toward neutral objects, $r = .63, p < .01$; attitude toward

negative objects, $r = .45, p < .01$; attitude toward positive objects, $r = .20, p < .01$; life satisfaction, $r = .49, p < .01$; and job satisfaction, $r = .19, p < .05$. Similarly, the NOSQ was positively correlated with all six attitudes: attitude toward the neutral consumer product, $r = .45, p < .01$; attitude toward neutral objects, $r = .57, p < .01$; attitude toward negative objects, $r = .22, p < .01$; attitude toward positive objects, $r = .44, p < .01$; life satisfaction, $r = .60, p < .01$; and job satisfaction, $r = .30, p < .01$.

Incremental effects. Three sets of regression analyses were conducted to test the incremental effects of the DAM (see Table 5). Study 2 provided partial support for Hypothesis 2, which predicted that the DAM explains unique variance in attitudes while controlling for other dispositions (i.e., conscientiousness, agreeableness, neuroticism, extraversion, openness, and locus of control). The DAM explained unique variance in five of six attitudes. Specifically, the DAM explained unique variance in attitude toward the neutral consumer product ($\beta = .37, \Delta R^2 = .10, p < .01$), attitude toward neutral objects ($\beta = .65, \Delta R^2 = .31, p < .01$), attitude toward negative objects ($\beta = .40, \Delta R^2 = .12, p < .01$), attitude toward positive objects ($\beta = .26, \Delta R^2 = .05, p < .01$), and life satisfaction ($\beta = .41, \Delta R^2 = .13, p < .01$), but did not explain unique variance in job satisfaction ($\beta = .17, \Delta R^2 = .02, ns$).

To address Research Question 1, we examined the predictive validity of the DAM while controlling for the NOSQ. The DAM explained unique variance in four of six attitudes. Specifically, the DAM explained unique variance in attitude toward the neutral consumer product ($\beta = .28, \Delta R^2 = .04, p < .01$), attitude toward neutral objects ($\beta = .45, \Delta R^2 = .12, p < .01$), attitude toward negative objects ($\beta = .50, \Delta R^2 = .15, p < .01$), and life satisfaction ($\beta = .18, \Delta R^2 = .02, p < .05$), but did not explain unique variance in attitude toward positive objects ($\beta = -.13, \Delta R^2 = .01$,

Table 4
Study 2 Descriptive Statistics, Reliabilities, and Correlations

Variables	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Dispositional attitude																	
1. DAM	4.34	0.96	(.87)														
2. NOSQ	5.15	0.83	.63**	(.93)													
Other dispositions																	
3. Conscientiousness	4.79	1.22	-.17*	.06	(.66)												
4. Agreeableness	5.19	1.17	-.04	.13	.18*	(.77)											
5. Neuroticism	3.79	1.19	-.23**	-.22**	-.33**	-.18*	(.63)										
6. Extraversion	3.90	1.28	.41**	.35**	.03	.19*	-.37**	(.72)									
7. Openness	4.87	1.29	-.15*	-.03	.42**	-.19*	.01	.21**	(.68)								
8. Locus of control	3.68	0.99	-.20**	-.16*	.03	.14	-.19**	.28**	.23**	(.62)							
Attitudes																	
9. Neutral fictitious product	4.51	1.36	.44**	.45**	.15*	-.08	-.03	-.19*	-.17*	-.29**	(.87)						
10. Neutral objects	5.09	0.98	.63**	.57**	.23**	-.07	-.07	-.14	-.06	-.14	.28**	(.48)					
11. Negative objects	2.54	1.69	.45**	.22**	.06	-.34**	.04	-.27**	-.49**	-.23**	.33**	.27**	(.79)				
12. Positive objects	6.00	0.94	.20**	.44**	.02	.26**	-.11	-.02	.30**	-.03	.09	.23**	-.18*	(.51)			
13. Life satisfaction	4.97	1.41	.49**	.60**	.33**	.06	-.28**	.07	-.10	-.11	.40**	.32**	.19**	.21**	(.91)		
14. Job satisfaction	5.47	1.41	.19*	.30**	.33**	.09	-.21*	.25**	.13	.21*	.13	.18*	-.06	.05	.43**	(.86)	
Demographics																	
15. Age	33.39	11.52	-.16*	-.04	-.08	.27**	-.23**	.26**	.17*	.25**	.01	-.06	-.24**	.06	-.09	.12	—
16. Gender	1.51	0.50	-.32**	-.14	-.10	.18*	.13	.04	.10	.04	-.16*	-.13	-.25**	.03	-.13	-.03	.03

Note. $N = 184$; $n = 144$ for job satisfaction correlations. Uncorrected correlations presented below the diagonal. Alpha reliabilities are presented on the diagonal in parentheses. SD = standard deviation. Female = 1, Male = 2.

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

Table 5
 Study 2 Regression Analyses Examining Predictive Validity of the DAM

	Neutral product β	Neutral objects β	Negative objects β	Positive objects β	Life satisfaction β	Job satisfaction β
Controlling for other dispositions						
1. Conscientiousness	-.08	-.01	-.10	-.05	.08	.21*
2. Agreeableness	.04	-.04	-.21**	.23**	.09	.01
3. Neuroticism	-.04	.08	-.03	-.05	-.16*	.00
4. Extraversion	-.04	.00	-.04	-.16	.06	.24**
5. Openness	-.07	.07	-.31**	.24**	-.09	.04
6. Locus of control	-.20**	-.01	-.02	-.06	-.10	.16
7. DAM	.37**	.65**	.40**	.26**	.41**	.17
Total R^2 :	.24**	.40**	.44**	.19**	.30**	.17**
ΔR^2 for DAM:	.10**	.31**	.12**	.05**	.13**	.02
Controlling for NOSQ						
1. DAM	.28**	.45**	.50**	-.13	.18*	.02
2. NOSQ	.27**	.29**	-.09	.52**	.49**	.29**
Total R^2 :	.24**	.45**	.20**	.20**	.39**	.09**
ΔR^2 for DAM:	.04**	.12**	.15**	.01	.02*	.00
ΔR^2 for NOSQ:	.05**	.05**	.01	.16**	.15**	.05**
Controlling for NOSQ & other dispositions						
1. Conscientiousness	-.13	-.07	-.11	-.13	.01	.17
2. Agreeableness	-.02	-.11	-.22**	.14	.01	-.04
3. Neuroticism	-.04	.08	-.03	-.04	-.16*	-.01
4. Extraversion	-.06	-.01	-.04	-.18*	.04	.23**
5. Openness	-.07	.08	-.31**	.25**	-.08	.04
6. Locus of control	-.16	.04	-.01	.01	-.04	.21*
7. DAM	.18	.44**	.36**	-.05	.14	-.01
8. NOSQ	.31**	.35**	.07	.52**	.46**	.30**
Total R^2 :	.29**	.46**	.44**	.33**	.42**	.23**
ΔR^2 for DAM:	.02	.07**	.06**	.00	.01	.00
ΔR^2 for NOSQ:	.05**	.09**	.00	.14**	.12**	.05**
ΔR^2 for DAM and NOSQ:	.15**	.38**	.12**	.19**	.25**	.07**

Note. $N = 184$; $n = 144$ for job satisfaction analyses. β = standardized regression coefficients with all variables included in the model. ΔR^2 = unique variance explained. Total R^2 = total variance explained by all variables.

ns) or job satisfaction ($\beta = .02$, $\Delta R^2 = .00$, ns). Conversely, the NOSQ explained unique variance in five of six attitudes. Specifically, the NOSQ explained unique variance in attitude toward the neutral consumer product ($\beta = .27$, $\Delta R^2 = .05$, $p < .01$), attitude toward neutral objects ($\beta = .29$, $\Delta R^2 = .05$, $p < .01$), attitude toward positive objects ($\beta = .52$, $\Delta R^2 = .16$, $p < .01$), life satisfaction ($\beta = .49$, $\Delta R^2 = .15$, $p < .01$), and job satisfaction ($\beta = .29$, $\Delta R^2 = .05$, $p < .01$), but did not explain unique variance in attitude toward negative objects ($\beta = -.09$, $\Delta R^2 = .01$, ns).

We also examined the predictive validity of the DAM while controlling for other dispositions and the NOSQ. The DAM explained unique variance in two of six attitudes. Specifically, the DAM explained unique variance in attitude toward neutral objects ($\beta = .44$, $\Delta R^2 = .07$, $p < .01$) and attitude toward negative objects ($\beta = .36$, $\Delta R^2 = .06$, $p < .01$), but did not explain unique variance in attitude toward the neutral consumer product ($\beta = .18$, $\Delta R^2 = .02$, ns), attitude toward positive objects ($\beta = -.05$, $\Delta R^2 = .00$, ns), life satisfaction ($\beta = .14$, $\Delta R^2 = .01$, ns), and job satisfaction ($\beta = -.01$, $\Delta R^2 = .00$, ns). Conversely, the NOSQ explained unique variance in five of six attitudes. Specifically, NOSQ explained unique variance in attitude toward the neutral consumer product ($\beta = .31$, $\Delta R^2 = .05$, $p < .01$), attitude toward neutral objects ($\beta = .35$, $\Delta R^2 = .09$, $p < .01$), attitude toward positive objects ($\beta = .52$, $\Delta R^2 = .14$, $p < .01$), life satisfaction ($\beta = .46$, $\Delta R^2 = .12$, $p < .01$), and job satisfaction ($\beta = .30$, $\Delta R^2 = .05$, $p < .01$), but did

not explain unique variance in attitude toward negative objects ($\beta = .07$, $\Delta R^2 = .00$, ns).

Discussion of Findings

In general, Study 2 replicated the results of Study 1. The DAM and NOSQ are strongly related, but loaded onto two separate latent factors. The relationship between the DAM and NOSQ was similar in strength as commonly found between two different measures of same construct (cf. Gosling et al., 2003; Lim & Ployhart, 2006; Rammstedt & John, 2007). Consistent with Hypothesis 1, the DAM was positively associated with all attitudes. Partial support was found for Hypothesis 2, as the DAM was positively associated with several attitudes after controlling for other dispositions. The incremental effects of the DAM were diminished, however, after the NOSQ was included as a control variable. As in Study 1, this is due to the considerable overlap between the DAM and NOSQ.

Study 2 builds upon Study 1 by further examining if DAM and NOSQ differences in item valence and response scales are substantive. The results indicate that item valence may influence the predictive validity of the DAM and NOSQ. Specifically, the DAM explained unique variance in attitude toward negative objects, but not attitude toward positive objects. The NOSQ explained unique variance in attitude toward positive objects, but not attitude toward negative objects. Different response scales, however, likely have

no effect on participant responses. That is, manipulating the response scales for the DAM and NOSQ did not significantly influence the subscale correlations of the measures.

Overall, Study 2 indicates that the DAM is largely redundant to the NOSQ, but may be a unique predictor of some attitudes. However, it is important to note that Study 2 is limited because it assesses attitudes toward neutral objects, positive objects, and negative objects with items interspersed among the DAM and NOSQ items. The similarity in assessment strategies for the DAM, NOSQ, and attitudes toward objects may exaggerate our observed correlations as a result of common-method variance (Spector, 2006). In Study 3, we address this limitation by examining attitudes of varying valences with measures that are more distinct from the DAM and NOSQ.

Study 3

Study 3 tests Hypotheses 1 and 2 and addresses Research Question 1. Study 3 included the same dispositions assessed in Study 1 (i.e., positive affectivity, negative affectivity, and need for cognition) and both life satisfaction and job satisfaction. The items assessing attitudes toward positive objects, neutral objects, and negative objects were excluded from Study 3 because of similarity in scale appearance to the DAM and NOSQ. These attitudes were replaced with adapted measures of Hepler and Albarracín's (2013) attitude toward a fictitious consumer product. The adapted measures are distinct from the DAM and NOSQ format and enable us to manipulate attitude valence.

Method

Participants and procedure. Study 3 participants were 320 adults recruited through MTurk. These participants were paid \$0.50 to complete a short survey on "consumer products." Study 3 did not include any participants who responded to Studies 1 and 2. The average participant was 35 years old, 48% were female, 45% were Asian/Hindu/Indian, 42% were Caucasian/White, and 3% were Black/African American. A total of 51% of participants were from the United States and 43% were from India. Of those employed (75%), the average hours worked was 40 hr per week and 3.9 years job tenure. We removed 50 participants from the original recruitment pool who were identified as careless responders using four attention check questions. In an effort to replicate the effects of favorability versus satisfaction anchors, the DAM and NOSQ were presented using the same method as Study 2.

Measures.

Dispositional attitude. The alpha reliability for the DAM (Hepler & Albarracín, 2013) total scale was .85. The correlation between the DAM satisfaction subscale and DAM favorability subscale was .70. The alpha reliability for the NOSQ (Judge & Bretz, 1993) total scale was .90. The correlation between the NOSQ satisfaction subscale and NOSQ favorability subscale was .76.

Other dispositions. Positive affectivity, negative affectivity (Watson et al., 1988), and need for cognition (International Personality Item Pool, n.d.) were assessed using the same measures used in Study 1. The alpha reliabilities for the scales of positive affectivity, negative affectivity, and need for cognition were .92, .93, and .82, respectively.

Attitudes. Life satisfaction (Diener et al., 1985) and job satisfaction (Cammann et al., 1983) were assessed using the same measures as used in Study 1. The alpha reliabilities for the scales of life satisfaction and job satisfaction were .90 and .89, respectively.

Attitudes toward the neutral consumer product, positive consumer product, and negative consumer product were assessed using measures modeled after Hepler and Albarracín's (2013) attitude toward fictitious consumer product questionnaire. Each scale included a product name and similar brief description of the product features (i.e., color, size, power, number of settings). Valences of the products were manipulated by varying a visual display of customer star ratings and the quality of three customer reviews. The neutral consumer product (i.e., blender) had a rating of 4 of 7 stars and an example customer review of, "Average quality product with basic features." The positive consumer product (i.e., coffee maker) had a rating of 6 of 7 stars and an example customer review of, "I am very happy with this product. I have bought several as gifts." The negative consumer product (i.e., toaster oven) had a rating of 2 of 7 stars and an example customer review of, "I regret buying this." Respondents rated their agreement to three statements about each product (e.g., "This is a useful product") on a scale from 1 = *strongly disagree* to 7 = *strongly agree*. The mean scores for attitudes toward the neutral consumer product ($M = 4.72$), positive consumer product ($M = 5.79$), and negative consumer product ($M = 2.93$) indicate that we successfully manipulated attitude valence. The alpha reliabilities for the measures of attitudes toward the neutral consumer product, positive consumer product, and negative consumer product were .71, .67, and .85, respectively.

Results

Descriptive statistics for DAM and NOSQ items for Study 3 are reported in the fourth column of Table 1. Descriptive statistics, scale reliabilities, and correlations for Study 3 variables are reported in Table 6.

Relationship between the DAM and NOSQ. The DAM and NOSQ were strongly correlated in Study 3 ($r = .65$, $p < .01$; corrected correlation = .74). Similar to Study 2, the subscales for the DAM and NOSQ were used to examine the effects of satisfaction and favorability response scales. The subscale relationships for the DAM, $r = .70$, $p < .01$ and NOSQ, $r = .76$, $p < .01$ from Study 3 were compared with the split-half reliabilities in Study 1. The subscale correlations did not differ from the split-half correlations recorded in Study 1 for the DAM ($r = .70$ vs. $r = .70$; $Z = 0.00$, *ns*) and NOSQ ($r = .76$ vs. $r = .79$; $Z = -0.86$, *ns*). Thus, the response scales (favorability vs. satisfaction) did not significantly change participant responses to either the DAM or NOSQ.

In a confirmatory factor analysis, a one-factor model fit the data poorly, $\chi^2(54) = 350.27$, CFI = .85, RMSEA = .13, SRMR = .07. Similarly, the two-factor model with item parcels loading onto favorability and satisfaction constructs also fit the data poorly, $\chi^2(53) = 323.89$, CFI = .86, RMSEA = .13, SRMR = .07. The two-factor model with item parcels loading onto DAM and NOSQ factors fit the data well, $\chi^2(53) = 166.81$, CFI = .94, RMSEA = .08, SRMR = .04, and significantly better than did the two-factor model based on response scale, $\Delta\chi^2(1) = 157.08$, $p < .01$. The

Table 6
 Study 3 Descriptive Statistics, Reliabilities, and Correlations

Variables	Mean	SD	1	2	3	4	5	6	7	8	9	10	11
Dispositional attitude													
1. DAM	4.30	0.85	(.85)										
2. NOSQ	4.99	0.75	.65**	(.90)									
Other dispositions													
3. Positive affectivity	3.49	0.85	.49**	.57**	(.92)								
4. Negative affectivity	1.96	0.88	.21**	-.01	-.03	(.93)							
5. Need for cognition	4.87	0.91	.03	.10	.32**	-.33**	(.82)						
Attitudes													
6. Neutral Fictitious Product	4.72	0.86	.25**	.32**	.33**	.04	.19**	(.71)					
7. Negative fictitious product	2.93	1.52	.41**	.32**	.25**	.24**	-.02	.33**	(.85)				
8. Positive fictitious product	5.79	0.84	.15**	.31**	.33**	-.15**	.22**	.42**	-.10	(.67)			
9. Life satisfaction	4.64	1.44	.42**	.56**	.52**	-.13*	.12*	.32**	.30**	.17**	(.90)		
10. Job satisfaction	5.28	1.48	.22**	.46**	.44**	-.24**	.19**	.22**	.15**	.23**	.55**	(.89)	
Demographics													
11. Age	35.08	12.67	-.22**	-.06	.00	-.33**	.20**	.04	-.12*	.08	-.07	.06	—
12. Gender	1.48	0.50	-.16**	-.09	-.11	.05	-.10	-.04	-.09	.00	-.08	-.10	.10

Note. $N = 320$; $n = 240$ for job satisfaction correlations. Uncorrected correlations presented below the diagonal. Alpha reliabilities are presented on the diagonal in parentheses. $SD =$ standard deviation. Female = 1, Male = 2.

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

relationship between latent factors was strong and statistically significant (.75, $p < .01$).

Predictive Validity of the DAM and NOSQ.

Main effects. Study 3 provided support for Hypothesis 1, which predicted that the DAM would be positively associated with attitudes. The DAM was positively correlated with all five attitudes: attitude toward the neutral consumer product, $r = .25$, $p < .01$; attitude toward the negative consumer product, $r = .41$, $p < .01$; attitude toward the positive consumer product, $r = .15$, $p < .01$; life satisfaction, $r = .42$, $p < .01$; and job satisfaction, $r = .22$, $p < .01$. Similarly, the NOSQ was positively correlated with all five attitudes: attitude toward the neutral consumer product, $r = .32$, $p < .01$; attitude toward the negative consumer product, $r = .32$, $p < .01$; attitude toward the positive consumer product, $r = .31$, $p < .01$; life satisfaction, $r = .56$, $p < .01$; and job satisfaction, $r = .46$, $p < .01$.

Incremental effects. Similar to Studies 1 and 2, we conducted three sets of regression analyses to test the incremental effects of the DAM (see Table 7). We found partial support for Hypothesis 2, which predicted that the DAM explains unique variance in attitudes while controlling for other dispositions (i.e., positive affectivity, negative affectivity, and need for cognition). The DAM explained unique variance for two of five attitudes. Specifically, the DAM explained unique variance in attitude toward the negative consumer product ($\beta = .34$, $\Delta R^2 = .20$, $p < .01$) and life satisfaction ($\beta = .26$, $\Delta R^2 = .05$, $p < .01$), but did not explain unique variance in attitude toward the neutral consumer product ($\beta = .11$, $\Delta R^2 = .01$, ns), attitude toward the positive consumer product ($\beta = .03$, $\Delta R^2 = .00$, ns), and job satisfaction ($\beta = .10$, $\Delta R^2 = .01$, ns).

To address Research Question 1, we examined the predictive validity of the DAM while controlling for the NOSQ. The DAM had a unique effect in the expected direction (i.e., positive) for one of five attitudes (attitude toward the negative product; $\beta = .35$, $\Delta R^2 = .07$, $p < .01$). The DAM, however, did not explain unique variance or had a negative relationship with attitude toward the neutral product ($\beta = .08$, $\Delta R^2 = .00$, ns), attitude toward the

positive product ($\beta = -.11$, $\Delta R^2 = .01$, ns), life satisfaction ($\beta = .10$, $\Delta R^2 = .01$, ns), and job satisfaction ($\beta = -.16$, $\Delta R^2 = .01$, $p < .05$). Conversely, the NOSQ explained unique variance in four of five attitudes. Specifically, NOSQ explained unique variance in attitude toward the neutral consumer product ($\beta = .27$, $\Delta R^2 = .04$, $p < .01$), attitude toward the positive consumer product ($\beta = .38$, $\Delta R^2 = .08$, $p < .01$), life satisfaction ($\beta = .49$, $\Delta R^2 = .14$, $p < .01$), and job satisfaction ($\beta = .56$, $\Delta R^2 = .18$, $p < .01$), but did not explain unique variance in attitude toward the negative consumer product ($\beta = .09$, $\Delta R^2 = .00$, ns).

Third, we examined the predictive validity of the DAM while controlling for other dispositions and the NOSQ. The DAM explained unique variance in one of five attitudes (attitude toward the negative consumer product; $\beta = .28$, $\Delta R^2 = .04$, $p < .01$). The DAM, however, did not explain unique variance in attitude toward the neutral consumer product ($\beta = .02$, $\Delta R^2 = .00$, ns), attitude toward the positive consumer product ($\beta = -.11$, $\Delta R^2 = .00$, ns), life satisfaction ($\beta = .09$, $\Delta R^2 = .00$, ns), and job satisfaction ($\beta = -.10$, $\Delta R^2 = .00$, ns). Conversely, the NOSQ explained unique variance for four of five attitudes. Specifically, NOSQ explained unique variance in attitude toward the neutral consumer product ($\beta = .21$, $\Delta R^2 = .02$, $p < .01$), attitude toward the positive consumer product ($\beta = .26$, $\Delta R^2 = .03$, $p < .01$), life satisfaction ($\beta = .33$, $\Delta R^2 = .05$, $p < .01$), and job satisfaction ($\beta = .37$, $\Delta R^2 = .06$, $p < .01$), but did not explain unique variance in attitude toward the negative consumer product ($\beta = .12$, $\Delta R^2 = .01$, ns).

Discussion of Findings

In general, Study 3 replicated the results of Studies 1 and 2. The DAM and the NOSQ are strongly related, the measures load onto two latent factors, and the relationship between the measures is similar in strength as commonly found between two different measures of the same construct (Gosling et al., 2003; Lim & Ployhart, 2006; Rammstedt & John, 2007). Consistent with Hy-

Table 7
 Study 3 Regression Analyses Examining Predictive Validity of the DAM

	Neutral product β	Negative product β	Positive product β	Life satisfaction β	Job satisfaction β
Controlling for other dispositions					
1. PA	.22**	.09	.29**	.41**	.38**
2. NA	.07	.17**	-.12*	-.20**	-.26**
3. Need for cognition	.14*	.01	.09	-.09	-.02
4. DAM	.11	.34**	.03	.26**	.10
Total R^2 :	.13**	.08**	.14**	.34**	.25**
ΔR^2 for DAM:	.01	.20**	.00	.05**	.01
Controlling for NOSQ					
1. DAM	.08	.35**	-.11	.10	-.16*
2. NOSQ	.27**	.09	.38**	.49**	.56**
Total R^2 :	.11**	.18**	.11**	.31**	.23**
ΔR^2 for DAM:	.00	.07**	.01	.01	.01*
ΔR^2 for NOSQ:	.04**	.00	.08**	.14**	.18**
Controlling for NOSQ & other dispositions					
1. PA	.15*	.05	.20**	.30**	.25**
2. NA	.09	.18**	-.09	-.16**	-.20**
3. Need for Cognition	.15*	.01	.10	-.07	.00
4. DAM	.02	.28**	-.11	.09	-.10
5. NOSQ	.21**	.12	.26**	.33**	.37**
Total R^2 :	.15**	.21**	.17**	.39**	.31**
ΔR^2 for DAM:	.00	.04**	.00	.00	.00
ΔR^2 for NOSQ:	.02**	.01	.03**	.05**	.06**
ΔR^2 for DAM and NOSQ:	.03**	.09**	.03**	.10**	.07**

Note. $N = 320$; $n = 240$ for job satisfaction analyses. β = standardized regression coefficients with all variables included in the model. ΔR^2 = unique variance explained. Total R^2 = total variance explained by all variables.

pothesis 1, the DAM was positively associated with all attitudes. Partial support was found for Hypothesis 2 because the DAM did not consistently explain variance in attitudes while controlling for other dispositions. As with Studies 1 and 2, the unique contribution of the DAM was limited by the inclusion of the NOSQ.

Any differences in the DAM and NOSQ are likely because of scale item valence rather than response scale. Consistent with Study 2, manipulating the response scales for the DAM and NOSQ did not significantly influence the subscale correlations of the measures. However, the DAM and NOSQ demonstrated differences in the predictive validity for attitude criteria of positive and negative valence. The DAM explained unique variance in negative product, but not positive product. The NOSQ explained unique variance in positive product, but not negative product. Similar to Study 2, the results indicate that item valence for the DAM and NOSQ may influence the predictive validity of the DAM and NOSQ. Although differences in predictive validity are consistent across Study 2 and 3, it is unclear whether or not these differences are any greater than the differences commonly found in two measures of the same disposition. In Study 4, we compare the DAM–NOSQ relationship with the relationship between two measures of an established disposition.

Study 4

Study 4 examines the relationship between the DAM and NOSQ. The results of Studies 1, 2, and 3 indicate that the DAM and NOSQ are strongly correlated and similar in strength as commonly found between two measures of the same disposition

(Gosling et al., 2003; Lim & Ployhart, 2006; Rammstedt & John, 2007). If the DAM and NOSQ are assessing distinct dispositions, then the DAM–NOSQ relationship should be weaker than relationship between two measures of an established disposition. In Study 4, we examine this question by comparing the correlation between the DAM and NOSQ with the correlation of two different measures of conscientiousness. Conscientiousness was selected because it is widely assessed within various domains of psychology (e.g., Barrick & Mount, 1991; Bogg & Roberts, 2004).

Research Question 2: Is the correlation between the DAM and NOSQ weaker than the correlation between two different measures of an established disposition?

Method

Participants and procedure. Sixty-eight participants, who were recruited by undergraduate psychology students using a snowballing strategy, provided usable data for Study 4. Study 4 used a two-wave design. Similar to Hepler and Albarracín's (2013) estimation of the test–retest reliability of the DAM, the two waves were separated by 1 month. Each participant completed the DAM and NOSQ during separate waves and the order was counterbalanced. Students received course credit to recruit friends and family members to participate in the study. One-hundred people were originally recruited, but 27 participants were removed because they did not complete Wave 2 of the survey and five participants were removed because they were identified as careless responders. Study 4 participants were an average of 25 years, 71% were female, 22% were Hispanic, 19% were Caucasian/White, and 12%

were Asian/Hindu/Indian. A majority of participants (79%) were from the United States.

Measures.

DAM and NOSQ. The DAM (Hepler & Albarracín, 2013) was presented on a favorability response scale, had an alpha reliability of .77, and an uncorrected split-half reliability of .70. The NOSQ (Judge & Bretz, 1993) was presented on a satisfaction response scale, had an alpha reliability of .80, and an uncorrected split-half reliability of .67.

Conscientiousness. Conscientiousness was assessed in Wave 1 using the NEO-PI scale from the International Personality Item Pool (n.d.) and in Wave 2 using the Saucier (1997) scale from the International Personality Item Pool (n.d.). Each IPIP scale consisted of 10 items and one identical item appeared on the two measures (i.e., “I pay attention to details”). The overlapping item was included in scale analyses. Respondents rated their agreement to statements describing them “in general.” Each item was scored on a 7-point scale ranging from 1 = *strongly disagree* to 7 = *strongly agree*. Example items from Wave 1 measure of conscientiousness were: “I am always prepared,” “I waste my time,” and “I shirk my duties.” The Wave 1 measure of conscientiousness had an alpha reliability of .81 and an uncorrected split-half reliability of .65. Example items from Wave 2 measure of conscientiousness were: “I do things by the book,” “I jump into things without thinking,” and “I do things in a half-way manner.” The Wave 2 measure of conscientiousness had an alpha reliability of .72 and an uncorrected split-half reliability of .67.

Results and Discussion

Descriptive statistics for the DAM and NOSQ items from Study 4 are reported in fifth column of Table 1. Despite being separated by 1 month, the DAM and NOSQ were strongly correlated. In regards to Research Question 2, the relationship between the DAM–NOSQ was not significantly different from the relationship between two measures of conscientiousness. Specifically, the two-wave correlation between the DAM and NOSQ was .45 (corrected for unreliability = .57). The two-wave correlation between the two measures of conscientiousness was .49 (corrected for unreliability = .64). A Fisher *r*-to-*Z* test for dependent correlated nonoverlapping coefficients was conducted to compare the uncorrected relationships (Raghuathan, Rosenthal, & Donald, 1996). The relationship between the DAM and NOSQ over time did not differ from the relationship between two different measures of conscientiousness over time ($Z = -0.29, ns$).

Study 4 indicates that the differences in the DAM and NOSQ are likely no more substantive than the differences between other dispositional measures intended to assess the same construct. The results also provide further evidence that the DAM and NOSQ assess a stable individual difference. Unlike prior studies that examine the test-retest correlation of either the DAM (Hepler & Albarracín, 2013) or NOSQ (Carter, 2004; Judge & Bretz, 1993), Study 4 directly compares the two-wave correlation coefficient with other established dispositional measures. The two-wave design enabled us to have participants complete the DAM and NOSQ separately to avoid unintended comparisons of the measures, which was a limitation in Studies 1, 2, and 3. However, the two-wave design also resulted in a small sample size. Study 4 is limited by a small sample size because we were unable to compare

the factor structure of the conscientiousness measures to the factor structure of the DAM and NOSQ.

General Discussion

We conducted four studies to replicate and expand upon the recent introduction of the DAM (Hepler & Albarracín, 2013). Recently, Hepler and Albarracín (2013) argue that the dispositional basis of attitudes could be assessed with one’s average attitude toward heterogeneous stimuli. However, both the theoretical underpinnings and method of measurement of the DAM are similar to Weitz’s (1952) seminal work examining the dispositional basis of job attitudes using the NOSQ (Judge & Bretz, 1993). The DAM and NOSQ were both developed based on the argument that one’s attitudes toward distinct stimuli are associated because of the effects of an underlying disposition. The DAM and NOSQ are similar in content: Both measures assess a person’s average attitude toward heterogeneous stimuli. To justify the use of the DAM, it is necessary to examine its utility beyond that of established measures, such as the NOSQ.

Main Effects of the DAM

Hypothesis 1 was supported across Studies 1, 2, and 3. Specifically, the DAM was positively associated with attitudes in all 14 instances. Similarly, the NOSQ was also positively associated with all 14 attitudes. We examined a variety of different attitudes, including attitudes toward fictitious consumer products, attitudes toward common objects (e.g., “vacations” and “road kill”), life satisfaction, and job satisfaction. The positive relationships across various assessments of attitudes provide additional evidence for the dispositional basis of attitudes.

Incremental Effects of the DAM

We found partial support for Hypothesis 2 across Studies 1, 2, and 3, which predicted that the DAM would explain unique variance in attitudes while controlling for other dispositions. The DAM was predictive of attitudes while controlling for other dispositions in nine of 14 analyses, which is largely consistent with utility of the DAM demonstrated by Hepler and Albarracín (2013). The utility of the DAM, however, is greatly diminished by the inclusion of the NOSQ. The DAM was predictive of attitudes while controlling for other dispositions and the NOSQ in only three of 14 analyses. In contrast, the NOSQ was predictive of attitudes while controlling for other dispositions and the DAM in 11 of 14 analyses. Overall, these results indicate the DAM does not consistently explain unique variance in attitudes after the NOSQ is taken into account.

Differences in item valence may explain why the DAM was not found to consistently yield incremental effects whereas the NOSQ was found to consistently yield incremental effects. The DAM was designed with the intent to include objects that had either positive or negative valences (Hepler & Albarracín, 2013) whereas the NOSQ was designed with the intent to include objects with neutral valences (Judge & Bretz, 1993). Although the NOSQ was intended to be neutral, a majority of objects are actually positive. Several patterns observed in the current study confirm that differences between the DAM and NOSQ in item valence are present. Studies

2 and 3 indicate that the DAM explained unique variance in both negative attitude criteria while controlling for other dispositions and the NOSQ. The incremental effects of the DAM on negative attitude criteria are important to note because the incremental effects of DAM were rare. Differences in item valence were also clearly indicated by total scale and item ratings. The total scale average score of the DAM (sample weighted $M = 4.31$) was lower than the NOSQ (sample weighted $M = 5.05$). In addition, six of 16 DAM items were below the neutral point whereas only one of 25 NOSQ items was below the neutral point. More consistent incremental effects of the DAM may have been found if a greater proportion of the attitudes were negative in valence.

We also examined whether or not differences in response scales anchors (favorability vs. satisfaction) were likely to affect participant responses. In both Studies 2 and 3, participants responded to the DAM and NOSQ items similarly regardless of using favorability or satisfaction response scales. As a result, the different response scales unlikely influence the validity of either the DAM or NOSQ.

Relationship Between the DAM and NOSQ

Although DAM and NOSQ differ in their consistency of incremental effects, the differences in scales is unlikely greater than differences between two measures of the same construct. A meta-analysis (Hunter & Schmidt, 2004) using our four samples found that the DAM and NOSQ were strongly correlated ($\rho = .73$, $k = 4$, $N = 800$). The strength of this relationship is similar to prior research comparing different scales of the same dispositions (e.g., Gosling et al., 2003; Lim & Ployhart, 2006; Rammstedt & John, 2007). Although the DAM and NOSQ load onto separate latent factors in confirmatory factor analyses, the latent factors were also strongly associated. Study 4 was conducted to further examine if the differences in scales are greater than one would expect between measures of the same construct. The relationship between two distinct measures of conscientiousness over time was not stronger than the relationship between the DAM and NOSQ over time. Overall, these results indicate that the differences between the DAM and NOSQ are no greater than one would expect from two measures of the same construct.

Limitations

The exclusive use of self-reports is a potential limitation of the current research because it may have made our results vulnerable to the effects of common-method variance. Although common-method variance can influence the strength of observed relationships, some researchers have recently suggested that common-method variance may not be as ubiquitous as is generally assumed (Spector, 2006). Indeed, self-reports may be the most accurate means of assessing personality characteristics given that they involve internal psychological processes. In addition, Studies 1, 2, and 3 included the DAM and NOSQ within the same short survey, which may make the differences between the two measures more salient to the participant. Studies 1, 2, and 3 addressed this by interspersing the DAM and NOSQ items. In addition, Study 4 participants completed both the DAM and NOSQ, but at separate time points. We believe these efforts reduced the likelihood that participants directly compared the DAM and NOSQ while formulating their responses.

Implications and Future Research

The current findings indicate that the DAM and NOSQ consistently predict attitudes, which provides additional evidence for the dispositional basis of attitudes. The DAM and NOSQ, however, largely assess the same underlying construct. The Principle of Parsimony and the Jangle Fallacy (e.g., Kelley, 1927; Marsh, 1994) both caution against using two separate labels to refer to the same phenomenon. Although redundant constructs are detrimental to the science of psychology, having multiple measures for the same construct can be beneficial. We believe that having both the DAM and NOSQ provides options to researchers seeking to examine the dispositional basis of attitudes. Based on the current research, we conclude that the NOSQ is the preferred measure for those wishing to predict positive attitudes; the DAM is the preferred measure for those wishing to predict negative attitudes.

The current research can be used to further develop the NOSQ to most accurately predict future attitudes. As noted in prior research (e.g., Eschleman & Bowling, 2011), the NOSQ includes predominately favorably rated objects. The favorable ratings may occur for several reasons: people may have positive outlook in general (Diener & Diener, 1996; Heine, Lehman, Markus, & Kitayama, 1999), the endemic nature of the objects produces a mere exposure effect (e.g., Monahan, Murphy, & Zajonc, 2000; Zajonc, 1968), or people may have a bias to rate human-relevant (Sears, 1983) and self-relevant (Gilbert, 2009, p. 175) objects (e.g., "Your first name") more favorably than inanimate and impersonal objects. Eschleman and Bowling (2011) note that the NOSQ could be revised to include more objects that are rated as neutral on average with a high degree of variability between raters. This approach is similar to Hepler and Albarracín (2013) in that items are selected based on average item scores. In the case of a revised NOSQ, however, the total scale average would ideally be close to the neutral point. However, choosing items based on the average ratings to achieve an overall average neutral score is problematic because it ignores the possibility of people generally having a positive reaction to ostensive "neutral" stimuli (a positive dispositional bent).

To further advance the assessment of the dispositional basis of attitudes, future researchers may build off of research on implicit measurement of attitudes. Ambiguous objects (e.g., inkblots; Chinese characters), for example, have been used to assess attitudes (Payne, Cheng, Govorun, & Stewart, 2005), which could be adapted to develop a dispositional scale. Similarly, researchers may consider developing items that present fictional objects. A scale composed of items similar to the fictitious product measure used by Hepler and Albarracín (2013), for example, may reduce the effects of between-person variability in object experiences, would address concerns of the mere exposure effect, and would yield normative data that represents the degree of a study populations positive (or negative) predisposition.

The current study also has important implications for researchers interested in building upon the research recommendations noted in Hepler and Albarracín (2013), which included predicting attitudes over time and building behavioral models. Both of these ideas of future research have already begun within applied psychology using Weitz (1952) as a theoretical guide. Hepler and Albarracín note that people with low scores on the DAM may be more easily persuaded to dislike a stimulus over time. Bowling,

Beehr, and Lepisto (2006) used a measure similar to the NOSQ to predict job attitudes over a 5-year period. The results indicate that people with higher scores on the dispositional measure were more likely to display positive subsequent attitudes while controlling for initial attitude standing.

Hepler and Albarracín (2013) also suggest that predictive models of behaviors can be enhanced with research on the dispositional basis of attitudes. Similarly, Weitz (1952) argues that assessing a dispositional attitude can ultimately be used to improve behavioral prediction (e.g., turnover). As result, the NOSQ has been examined in relation to measures of work-related withdrawal behaviors, such as voluntary turnover from an organization (Judge, 1993), job avoidance behaviors (Judge & Locke, 1993), and worker engagement (Steger, Littman-Ovadia, Miller, Menger, & Rothmann, 2013). In sum, future research exploring the dispositional basis of attitudes should review prior research on the NOSQ to most effectively advance the study of dispositions and attitudes.

Summary

Within a series of four datasets, we examine the predictive validity of the DAM and compare the DAM with the NOSQ. We found strong evidence for the dispositional basis of attitudes. That is, both the DAM and NOSQ were positively correlated with all attitude criteria. However, we found that the DAM did not consistently explain unique variance in attitude criteria beyond the NOSQ. These results greatly limit the utility of the DAM beyond preexisting measures and constructs. As a result of these findings, we conclude that the DAM and NOSQ assess the same underlying construct and that both are valid measures of the dispositional basis of attitudes. Researchers interested in examining the dispositional basis of attitudes should incorporate findings from prior research involving the NOSQ.

References

- Barrick, M. R., & Mount, M. K. (1991). The big five personality dimensions and job performance: A meta-analysis. *Personnel Psychology, 44*, 1–26. <http://dx.doi.org/10.1111/j.1744-6570.1991.tb00688.x>
- Bogg, T., & Roberts, B. W. (2004). Conscientiousness and health-related behaviors: A meta-analysis of the leading behavioral contributors to mortality. *Psychological Bulletin, 130*, 887–919. <http://dx.doi.org/10.1037/0033-2909.130.6.887>
- Bowling, N. A., Beehr, T. A., & Lepisto, L. R. (2006). Beyond job satisfaction: A five-year prospective analysis of the dispositional approach to work attitudes. *Journal of Vocational Behavior, 69*, 315–330. <http://dx.doi.org/10.1016/j.jvb.2006.04.004>
- Cammann, C., Fichman, M., Jenkins, G. D., & Klesh, J. R. (1983). Assessing the attitudes and perceptions of organizational members. In S. E. Seashore, E. E. Lawler, P. H. Mirvis, & C. Cammann (Eds.), *Assessing organizational change* (pp. 71–138). New York, NY: Wiley.
- Carter, S. D. (2004). Reexamining the temporal aspects of affect: Relationships between repeatedly measured affective state, subjective well-being, and NOSQ. *Personality and Individual Differences, 36*, 381–391. [http://dx.doi.org/10.1016/S0191-8869\(03\)00103-X](http://dx.doi.org/10.1016/S0191-8869(03)00103-X)
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences* (3rd ed.). Hillsdale, NJ: Erlbaum.
- Diener, E., & Diener, C. (1996). Most people are happy. *Psychological Science, 7*, 181–185. <http://dx.doi.org/10.1111/j.1467-9280.1996.tb00354.x>
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction With Life Scale. *Journal of Personality Assessment, 49*, 71–75. http://dx.doi.org/10.1207/s15327752jpa4901_13
- Donnellan, M. B., Oswald, F. L., Baird, B. M., & Lucas, R. E. (2006). The mini-IPIP scales: Tiny-yet-effective measures of the Big Five factors of personality. *Psychological Assessment, 18*, 192–203. <http://dx.doi.org/10.1037/1040-3590.18.2.192>
- Erez, A., Johnson, D. E., & Judge, T. A. (1995). Self-deception as a mediator of the relationship between dispositions and subjective well-being. *Personality and Individual Differences, 19*, 597–612. [http://dx.doi.org/10.1016/0191-8869\(95\)00088-N](http://dx.doi.org/10.1016/0191-8869(95)00088-N)
- Eschleman, K. J., & Bowling, N. A. (2011). A construct validation of the neutral objects satisfaction questionnaire (NOSQ). *Journal of Business and Psychology, 26*, 501–515. <http://dx.doi.org/10.1007/s10869-010-9206-1>
- Friedman, H. H., & Amoo, T. (1999). Rating the rating scales. *Journal of Marketing Management, 9*, 114–123.
- Gilbert, D. (2009). *Stumbling on happiness*. Westminister, MD: Random House LLC.
- Gosling, S. D., Rentfrow, P. J., & Swann, W. B., Jr. (2003). A very brief measure of the Big-Five personality domains. *Journal of Research in Personality, 37*, 504–528. [http://dx.doi.org/10.1016/S0092-6566\(03\)00046-1](http://dx.doi.org/10.1016/S0092-6566(03)00046-1)
- Heine, S. J., Lehman, D. R., Markus, H. R., & Kitayama, S. (1999). Is there a universal need for positive self-regard? *Psychological Review, 106*, 766–794. <http://dx.doi.org/10.1037/0033-295X.106.4.766>
- Hepler, J., & Albarracín, D. (2013). Attitudes without objects: Evidence for a dispositional attitude, its measurement, and its consequences. *Journal of Personality and Social Psychology, 104*, 1060–1076. <http://dx.doi.org/10.1037/a0032282>
- Hitlan, R. T., Schneider, K. T., & Walsh, B. M. (2006). Upsetting behavior: Reactions to personal and bystander sexual harassment experiences. *Sex Roles, 55*, 187–195. <http://dx.doi.org/10.1007/s11199-006-9072-5>
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling, 6*, 1–55. <http://dx.doi.org/10.1080/10705519909540118>
- Hunter, J. E., & Schmidt, F. L. (2004). *Methods of meta-analysis: Correcting error and bias in research findings*. Thousand Oaks, CA: Sage.
- International Personality Item Pool. (n.d.). *A scientific collaboratory for the development of advanced measures of personality traits and other individual differences*. Retrieved from <http://ipip.ori.org/>
- Judge, T. A. (1993). Does NOSQ moderate the relationship between job satisfaction and voluntary turnover? *Journal of Applied Psychology, 78*, 395–401.
- Judge, T. A., & Bretz, R. D. (1993). Report on an alternative measure of NOSQ. *Educational and Psychological Measurement, 53*, 1095–1104. <http://dx.doi.org/10.1177/0013164493053004022>
- Judge, T. A., & Hulin, C. L. (1993). Job satisfaction as a reflection of disposition: A multiple source causal analysis. *Organizational Behavior and Human Decision Processes, 56*, 388–421. <http://dx.doi.org/10.1006/obhd.1993.1061>
- Judge, T. A., & Locke, E. A. (1993). Effect of dysfunctional thought processes on subjective well-being and job satisfaction. *Journal of Applied Psychology, 78*, 475–490. <http://dx.doi.org/10.1037/0021-9010.78.3.475>
- Kavanagh, M. J., & Halpern, M. (1977). The impact of job level sex differences on the relationship between life and job satisfaction. *Academy of Management Journal, 20*, 66–73. <http://dx.doi.org/10.2307/255462>
- Kelley, T. L. (1927). *Interpretation of educational measurements*. Yonkers, NY: World Book.
- Lim, B. C., & Ployhart, R. E. (2006). Assessing the convergent and discriminant validity of Goldberg's international personality item

- pool—A multitrait-multimethod examination. *Organizational Research Methods*, 9, 29–54. <http://dx.doi.org/10.1177/1094428105283193>
- Marsh, H. W. (1994). Sport motivation orientations: Beware of jingle-jangle fallacies. *Journal of Sport & Exercise Psychology*, 16, 189–224.
- McConnell, A. R., & Leibold, J. M. (2001). Relations among the Implicit Association Test, discriminatory behavior, and explicit measures of racial attitudes. *Journal of Experimental Social Psychology*, 37, 435–442. <http://dx.doi.org/10.1006/jesp.2000.1470>
- Meade, A. W., & Craig, S. B. (2012). Identifying careless responses in survey data. *Psychological Methods*, 17, 437–455. <http://dx.doi.org/10.1037/a0028085>
- Monahan, J. L., Murphy, S. T., & Zajonc, R. B. (2000). Subliminal mere exposure: Specific, general, and diffuse effects. *Psychological Science*, 11, 462–466. <http://dx.doi.org/10.1111/1467-9280.00289>
- Payne, B. K., Cheng, C. M., Govorun, O., & Stewart, B. D. (2005). An inkblot for attitudes: affect misattribution as implicit measurement. *Journal of Personality and Social Psychology*, 89, 277–293. <http://dx.doi.org/10.1037/0022-3514.89.3.277>
- Piccolo, R. F., Judge, T. A., Takahashi, K., Watanabe, N., & Locke, E. A. (2005). Core self-evaluations in Japan: Relative effects on job satisfaction, life satisfaction, and happiness. *Journal of Organizational Behavior*, 26, 965–984. <http://dx.doi.org/10.1002/job.358>
- Pratto, F., Sidanius, J., Stallworth, L. M., & Malle, B. F. (1994). Social dominance orientation: A personality variable predicting social and political attitudes. *Journal of Personality and Social Psychology*, 67, 741–763. <http://dx.doi.org/10.1037/0022-3514.67.4.741>
- Quirin, M., Kazén, M., & Kuhl, J. (2009). When nonsense sounds happy or helpless: The Implicit Positive and Negative Affect Test (IPANAT). *Journal of Personality and Social Psychology*, 97, 500–516. <http://dx.doi.org/10.1037/a0016063>
- Raghunathan, T. E., Rosenthal, R., & Rubin, D. B. (1996). Comparing correlated but nonoverlapping correlations. *Psychological Methods*, 1, 178–183. <http://dx.doi.org/10.1037/1082-989X.1.2.178>
- Rammstedt, B., & John, O. P. (2007). Measuring personality in one minute or less: A 10-item short version of the Big Five Inventory in English and German. *Journal of Research in Personality*, 41, 203–212. <http://dx.doi.org/10.1016/j.jrp.2006.02.001>
- Saucier, G. (1997). Effects of variable selection on the factor structure of person descriptors. *Journal of Personality and Social Psychology*, 73, 1296–1312. <http://dx.doi.org/10.1037/0022-3514.73.6.1296>
- Schneider, K. T., Hitlan, R. T., & Radhakrishnan, P. (2000). An examination of the nature and correlates of ethnic harassment experiences in multiple contexts. *Journal of Applied Psychology*, 85, 3–12. <http://dx.doi.org/10.1037/0021-9010.85.1.3>
- Sears, D. O. (1983). The person-positivity bias. *Journal of Personality and Social Psychology*, 44, 233–250. <http://dx.doi.org/10.1037/0022-3514.44.2.233>
- Spector, P. E. (2006). Method variance in organizational research: Truth or urban legend? *Organizational Research Methods*, 9, 221–232. <http://dx.doi.org/10.1177/1094428105284955>
- Staw, B. M., Bell, N. E., & Clausen, J. A. (1986). The dispositional approach to job attitudes: A lifetime longitudinal test. *Administrative Science Quarterly*, 31, 56–77. <http://dx.doi.org/10.2307/2392766>
- Staw, B. M., & Ross, J. (1985). Stability in the midst of change: A dispositional approach to job attitudes. *Journal of Applied Psychology*, 70, 469–480. <http://dx.doi.org/10.1037/0021-9010.70.3.469>
- Steger, M. F., Littman-Ovadia, H., Miller, M., Menger, L., & Rothmann, S. (2013). Engaging in work even when it is meaningless: Positive affective disposition and meaningful work interact in relation to work engagement. *Journal of Career Assessment*, 21, 348–361. <http://dx.doi.org/10.1177/1069072712471517>
- Thoresen, C. J., Kaplan, S. A., Barsky, A. P., Warren, C. R., & de Chermont, K. (2003). The affective underpinnings of job perceptions and attitudes: A meta-analytic review and integration. *Psychological Bulletin*, 129, 914–945. <http://dx.doi.org/10.1037/0033-2909.129.6.914>
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54, 1063–1070. <http://dx.doi.org/10.1037/0022-3514.54.6.1063>
- Weitz, J. (1952). A neglected concept in the study of job satisfaction. *Personnel Psychology*, 5, 201–205. <http://dx.doi.org/10.1111/j.1744-6570.1952.tb01012.x>
- Zajonc, R. B. (1968). Attitudinal effects of mere exposure. *Journal of Personality and Social Psychology*, 9, 1–27. <http://dx.doi.org/10.1037/h0025848>
- Zickar, M. J., Gibby, R. E., & Jenny, T. (2004). Job attitudes of workers with two jobs. *Journal of Vocational Behavior*, 64, 222–235. [http://dx.doi.org/10.1016/S0001-8791\(03\)00047-2](http://dx.doi.org/10.1016/S0001-8791(03)00047-2)

Received February 7, 2014

Revision received July 16, 2014

Accepted July 17, 2014 ■