Variety-Seeking and Perceived Expertise

# Aner Sela

# University of Florida

# Liat Hadar

# The Interdisciplinary Center (IDC) Herzliya

# Siân Morgan

# University of Florida

# Michal Maimaran

# Northwestern University

Forthcoming in the Journal of Consumer Psychology (October 2019)

#### Abstract

People often infer expertise from the choice of unique, rare, or sophisticated options. But might mere variety-seeking also serve as a signal of expertise, and if so, how? Six studies show that the relationship between variety-seeking and perceived expertise is not unidirectional and depends on the perceiver's own level of expertise. Category experts perceive lower varietyseeking as indicative of discernment, which in turn increases perceived expertise in that category. Consequently, experts choose less variety to portray themselves as experts. In contrast, novices perceive high variety-seeking as indicative of category breadth knowledge, which in turn increases their perception of category expertise. Consequently, novices choose more variety to portray themselves as experts. The findings make novel theoretical contributions to research on variety-seeking, consumer expertise, and social perception, as well as practical contributions for marketers of product assortments and bundles.

Keywords: choice, variety-seeking, expertise, social perception, signaling

Attributions of expertise are central in self- and other-perception (Baumeister, 1982; Leary et al., 1994). People spontaneously infer others' domain expertise from appearance, behavior, and choice (Gershoff et al., 2001; Price & Stone, 2004; Sniezek & Van Swol, 2001). Specifically, choice of unique, sophisticated, or non-conforming options may signal expertise (Bellezza et al., 2014; Rucker et al., 2012). But regardless of specific options' qualities, might mere variety-seeking also signal expertise? And, if so, does more or less variety-seeking signal greater expertise?

People rely on variety-seeking as an input to various social perceptions. They perceive more varied selections as indicating choosers' interestingness (Ratner & Kahn, 2002), nonconformity (Ariely & Levav, 2000), expressiveness (Kim & Drolet, 2003), and non-rigidness (Drolet, 2002). We suggest that people may also see variety-seeking as an indication of domain expertise, and that they may strategically use variety as a means of displaying expertise to others through their choices. We further propose that the relationship between variety-seeking and perceived domain expertise depends on the perceiver's own level of expertise in that domain.

Experts and novices differ in the content and structure of category knowledge they possess (Alba & Hutchinson, 1987). Expertise represents a continuum, ranging from basic knowledge of what items constitute the category to a higher understanding of options, their nuanced inter-relationships, and one's own tastes and preferences (Mitchell & Dacin, 1996; West et al., 1996).

Simply knowing what options exist in a category is perhaps the most basic level of expertise development and a prerequisite for further learning. At this low level of expertise, merely being familiar with the range of options available in the category is the most salient expertise dimension (Mitchell & Dacin, 1996). Because novices have a relatively poor

understanding of the category's scope, they associate expertise with category breadth knowledge (Clarkson et al., 2013), as such knowledge represents the next stage in their own expertise development. Consequently, we argue novices view category breadth knowledge as a key indicator of expertise. Variety-seeking may signal category breadth knowledge because choosing an option suggests one is familiar with it and values it. Thus, more diverse selections indicate familiarity with more options. Consequently, we argue that novices associate variety-seeking with greater domain expertise.

As domain expertise evolves, people develop a richer and more nuanced understanding of options and attributes in the category and the rules governing the connections among them, beyond mere breadth (Alba & Hutchinson, 1987; Hutchinson et al., 2009). Compared with novices, experts value the ability to discern, judge quality, and express personal taste more than breadth knowledge per se (Alba & Hutchinson, 1987; Berger & Heath, 2007). Discernment, both in terms of objective quality and subjective preference, is thus the primary marker of expertise for experts (Mitchell & Dacin, 1996). Because choosing little variety is often attributed to discernment (Calder & Burnkrant, 1977), we argue that experts perceive less variety as indicating greater expertise.

Of note, consumers may also perceive the internal cohesiveness of a selection as indicating expertise. However, we propose that regardless of cohesiveness, *mere variety* can serve as an independent expertise signal.

In sum, we propose that the relationship between variety-seeking and perceived expertise depends on perceivers' own expertise level (Figure 1). Novices perceive greater variety-seeking as indicating expertise, due to perceived category breadth knowledge. Accordingly, novices seek

variety to signal expertise. Conversely, experts perceive lower variety-seeking as indicating expertise, due to perceived discernment. Accordingly, they seek less variety to signal expertise.

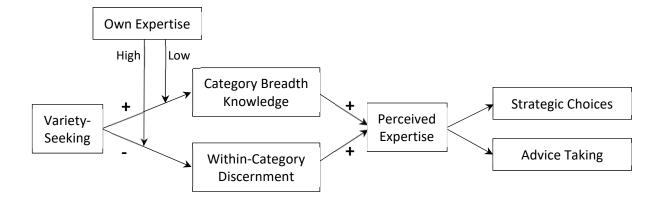


Figure 1. Conceptual summary of research propositions.

Six studies test our propositions. Study 1 examines how experts and novices perceive another person's expertise based on mere variety-seeking. Study 1 also tests the mediating roles of category breadth knowledge, for novices, and perceived discernment, for experts. Studies 2 and 3 use realistic, consequential designs to examine if people apply the same logic they use in making attributions about others to the choices they make when they wish to display expertise. A Web Appendix reports three additional studies examining generalizability (Study WA1), boundary conditions (Study WA2), and downstream consequences (Study WA3).

# **Study 1: How Choice Variety Influences Perceived Expertise**

We predicted that novices would perceive a variety-seeking individual as higher in category expertise than a person making a less varied selection. We expected novices' expertise perceptions to be mediated by perceived category breadth knowledge. In contrast, we predicted that experts would perceive a variety-seeking individual as lower in expertise than a person selecting less variety. We expected experts' perceptions to be mediated by perceived discernment.

#### Method

Participants ( $M_{age}$ =37; 52% women) were 212 US Mturkers. Sample sizes, here and in subsequent studies, were similar to (or larger than) those used in prior work on signaling through variety (Kim & Drolet, 2003; Ratner & Kahn 2002). Participants were randomly assigned to one of two between-subjects conditions (variety-seeking: high vs. low). The other independent variable, participants' expertise, was measured (see below).

First, participants completed four measures of objective expertise in gourmet chocolate, adapted from prior research (Clarkson et al., 2013, Study 1a; also Mitchell & Dacin, 1996). They rated on 1-7 scales how many varieties of gourmet chocolate truffles they had tried, how often they had had gourmet chocolate truffles, how frequently they ate gourmet chocolate truffles, and how often they bought gourmet chocolate truffles. We used these items to create an objective expertise index ( $\alpha$ =.68; scale reliability increased slightly, to  $\alpha$ =.74, when the first item was dropped, which had no effect on the remainder of the results.) We report results using all four items, for consistency and because the first item appears central for assessing objective expertise (Alba & Hutchinson, 1987; Mitchell & Dacin, 1996).

All participants then read a short description of a hypothetical person who bought a box containing 16 individually-selected gourmet chocolate truffles (Web Supplement A). In the high variety-seeking condition, we told participants that the target individual chose many different flavors. In the low variety-seeking condition, we told participants that the target individual chose only a few different flavors. We provided no additional information. Note that the total quantity bought, sixteen truffles, was the same across conditions. After reading the scenario, participants responded to the focal dependent variable and four potential mediators, presented at a random order.

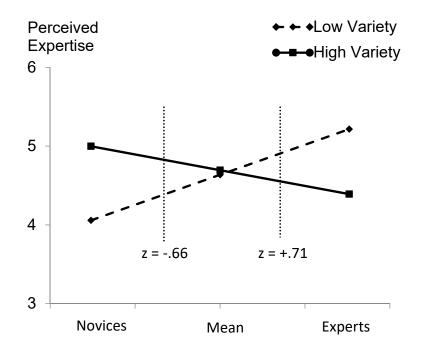
As our focal dependent variable, participants rated the extent to which they thought the target individual was a gourmet chocolate connoisseur (1=Not at all likely, 7=Very likely).

Participants responded to four potential mediators. The first two items were our hypothesized mediators for novices and experts, respectively: namely, whether the target person seemed to have "extensive knowledge about many different types of chocolate truffles" (i.e., category breadth knowledge) and whether he appeared "discerning when it comes to chocolate truffles" (i.e., discernment). The next two items test two alternative mediators. The first pertains to perceived choice coherence, or whether the target person seemed to choose options that go well together. The second item pertained to perceived preference clarity, or the extent to which the target knows what truffles he personally prefers the most. All four mediators used the same scale (1=Not at all likely, 7=Very likely).

Finally, to test the robustness of the effect, we measured participants' individual varietyseeking tendency in the category, adapted from van Trijp & Steenkamp (1992). Scale items were averaged to an index ( $\alpha$ =.84).

#### Results

We predicted that participants' own expertise level would moderate the effect of varietyseeking on the target's perceived expertise. Supporting our prediction, a variety-seeking (high vs. low) × own-expertise (continuous, mean-centered) regression analysis revealed an interaction effect on perceived target expertise (B=-.42, 95% CI[-.65,-.18], SE=.12, t(208)=-3.48, p<.001), with no main effects (both t's<.22, p's>.8). See figure 2. Gourmet chocolate novices (i.e., those one SD below the mean expertise level) perceived the target as more of an expert in the high than in the low variety-seeking condition (B=.64, 95% CI[.14,1.15], SE=.26, t(208)=2.41, p=.013). Experts (i.e., those one SD above the mean), however, perceived the target as more of an expert in the low than in the high variety-seeking condition (B=-.62, 95% CI[-1.13,-.12], SE=.26, t(208)=-2.43, p=.016).



*Figure 2*. The effect of choice variety and perceiver's expertise on perceived target expertise (Study 1). The vertical dotted lines indicate the boundaries of the Johnson-Neyman regions of significance (p < .05).

Individual variety-seeking tendencies did not influence our results. Although a main effect suggests that variety-seeking participants generally perceived the target as higher on expertise (B=.19, 95% CI[.03,.34], SE=.08, t(204)=2.39, p=.018), there was no 3-way variety × own-expertise × variety-seeking interaction (t(204)=.48, p=.64) and no 2-way interaction involving variety-seeking tendencies (both t(204)<1.59, p>.12). Thus, the effect of perceivers'

own expertise on the relationship between variety-seeking and perceived expertise was independent of perceivers' individual variety-seeking tendencies.

Next, we tested the mediators in a simultaneous moderated mediation model (Hayes 2013, model 8). Consistent with our theorizing, only perceived category breadth knowledge (for novices) and discernment (for experts) emerged as significant mediators. Detailed results are included in Supplement A (Web Appendix).

First, there were variety×own-expertise interaction effects on the target person's perceived category breadth knowledge (B=-.38, 95% CI[-.66,-.10], SE=.14, p=.008) and discernment (B=-.42, 95% CI[-.70,-.13], SE=.14, p=.004). Second, we found significant moderated mediation through category breadth knowledge (B=-.20, 95% CI[-.37,-.03]), such that knowledge mediated the effect of variety-seeking for novices (B=-.35, 95% CI[-.03,.71]) but not experts (B=-.25, 95% CI[-.58,.09]). We also found significant moderated mediation through discernment (B=-.05, 95% CI[-.11,-.03]), such that discernment mediated the effect of variety for experts (B=-.15, 95% CI[-.33,-.02]) but not novices (B=-.01, 95% CI[-.10,.08]).

The variety×own-expertise interaction effects on perceived preference clarity (B=-.15, SE=.15, p=.97) and choice cohesiveness (B=-.23, SE=.14, p=.10) did not reach significance, nor did they mediate the effect (B=-.02, 95% CI[-.06,.02], and B=-.10, 95% CI[-.25, .03], respectively).

#### Discussion

Study 1 suggests the relationship between variety-seeking and perceived expertise depends on perceivers' own category expertise. Whereas novices perceived a variety-seeking target as more of an expert, experts perceived a non-variety-seeking target as more of an expert. Further, Study 1 provides insight into the distinct processes underlying this relationship. Whereas novices perceive variety-seeking as indicating category breadth knowledge, which inturn they interpret as expertise, experts perceive less variety-seeking as indicating discernment, which they interpret as expertise.

## **Study 2: Seeking Variety to Convey Expertise**

If experts (vs. novices) associate low (vs. high) variety with greater category expertise, then this should also lead them to strategically incorporate correspondingly lower vs. higher levels of variety in their own selections when they are motivated to display expertise through choice. Study 2 tests this hypothesis in a realistic field setting.

## Method

Participants (N=209;  $M_{age}=23$ ; 41% women) were undergraduates who participated for course credit. Participants were randomly assigned to one of two between-subjects conditions (showcase-expertise vs. control). The other independent variable, participants' objective expertise, was measured at the onset using the same index as in Study 1 ( $\alpha$ =.72).

Participants read that their college had purchased chocolate truffles, to be sold at a public auction whose proceeds would be donated to a local charity (Web Supplement B). Each participant was asked to help by individually assembling a gift bag containing exactly 12 chocolate truffles.

In the showcase-expertise condition, we told participants that gift bags reflecting expertise raise more money at auctions, so they should assemble a gift bag reflecting expertise. Participants in the control condition were instead asked to assemble the most attractive gift bag possible to help raise more money for the charity. Thus, participants in both conditions were equally instructed to choose an assortment that would be favorably evaluated. The only difference was whether the explicit evaluation criterion was expertise or general appeal.

Participants received 20 large bowls, each filled with a different type of truffle. We refilled the bowls between sessions to ensure equal distribution and none was in short supply. Each participant received a small bag and filled it with 12 truffles of his/her choice.

To measure choice variety, we calculated a Herfindahl index for each participant. The Herfindahl index (Tirole, 1989) is the sum of the squares of the different options' shares, representing the degree of option diversity versus concentration in the participant's selection. A lower Herfindahl index represents greater variety-seeking, regardless of the quantity selected: it ranges from 1/n (where n is the number of options) when variety is greatest, to 1 when the selection contains no variety. The Herfindahl index is thus a sensitive measure of variety-seeking and is used frequently in variety-seeking research (Dhar et al., 2001; Morrin et al., 2012; Redden et al., 2017; Simonson & Winer, 1992).

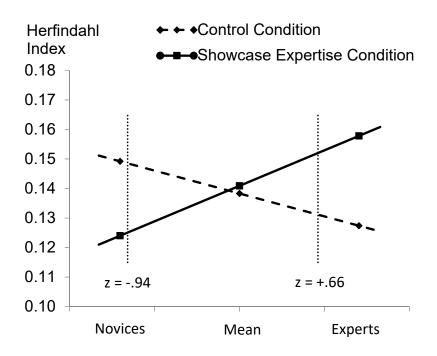
After assembling their gift bags, participants rated the extent to which they wanted to show their expertise in chocolate while assembling the gift bag, show potential buyers that they knew a lot about chocolate, show that they had experience with chocolate, and show that they were chocolate connoisseurs (1=*Not at all*, 7=*Very much*). We averaged these items into an index ( $\alpha$ =.91) and used it as a manipulation check. Finally, to test for robustness, we measured participants' individual variety-seeking tendency using the same scale from Study 1 ( $\alpha$ =.78). All gift bags were subsequently donated to a local charity.

#### Results

*Manipulation check.* A (showcase-expertise vs. control)  $\times$  (own-expertise, meancentered) regression analysis on the - desire to showcase expertise revealed the predicted main effect of condition (*B*=1.42, *SE*=.22, *t*(205)=6.53, *p*<.0001, 95% CI[.99,1.85]), with no interaction (*t*(205)=-.28, *p*=.78).

*Variety-seeking.* A similar regression analysis on the Herfindahl index revealed the predicted interaction (B=.02, SE=.006, t(205)=3.14, p=.002, 95% CI[.007,.032]), with no main effects (both t's<.7, p's>.5). See figure 3.

Supporting our predictions, chocolate novices (i.e., one SD below the mean) made *more* varied selections in the showcase-expertise than in the control condition (B=-.03, SE=.01, t(205)=-2.05, p=.041, 95% CI[-.05,-.001]). Conversely, chocolate experts (i.e., one SD above the mean) made *less* varied selections in the showcase-expertise condition (B=.03, SE=.01, t(205)=2.42, p=.017, 95% CI[.006,.055]).



*Figure 3.* The effect of expertise showcasing instructions and own-expertise on variety-seeking (Study 2). Note: lower values on the Herfindahl index represent greater variety. The vertical dotted lines indicate the boundaries of the Johnson-Neyman regions of significance (p < .05).

Individual variety-seeking tendencies did not influence our results. An alternative (showcase-expertise vs. control) × (own-expertise) × (variety-seeking) regression analysis on the Herfindahl index revealed only the condition × own-expertise interaction (B=.02, SE=.006, t(201)=3.16, p=.002, 95% CI[.008,.033]). No other main or interaction effects were significant (all t's(201)<1.47, p's>.14). The effect of participants' own expertise on variety-seeking, when asked to showcase expertise, was independent of their individual variety-seeking tendencies.

Ancillary analysis. Our main premise is that novices and experts perceive *mere variety* as more vs. less indicative of expertise, respectively. One may wonder, however, whether novices' and experts' choices also differed in terms of assortment cohesiveness. Given the inherent subjectivity of such judgments for chocolate truffles, we asked two independent judges, blind to the hypothesis and experimental condition, to rate the extent to which participants' gift bags appeared cohesive and logical (r=.75, combined to an index). Inter-judge agreement was low (r=.13, p=.06), possibly owing to the subjectivity of such judgments, so we analyzed each judge separately.

To examine whether cohesiveness perceptions differed for experts and novices, we used the same (condition) × (own-expertise) regression analysis, controlling for variety itself (i.e., the number of different flavors chosen; results were identical when using Herfindahl index and when not controlling for variety at all). The analysis revealed no significant main or interaction effects of condition or expertise on perceived cohesiveness, for either judge (all t's(204)<1.28, p's>.2). Furthermore, controlling for cohesiveness ratings had no effect on the focal (condition) × (ownexpertise) interaction effect on variety-seeking, for either judge (both t's(204)>2.63, p's<.009).

## Discussion

Using a consequential design with real products, Study 2 suggests that motivating participants to display expertise, holding constant anticipated evaluation, increased variety-seeking for novices but decreased it for experts.

Interestingly, experts appear to be more variety-seeking than novices at the baseline, evidenced by the slope in the control condition. This may reflect their increased familiarity with more options within the category. Compared with this baseline, however, motivating participants to display expertise leads experts to choose *less* variety while leading novices to choose *more* variety.

Our findings cast doubt on the possibility that novices chose more variety because they were less certain of their preferences. Such an alternative account would predict a main effect of own-expertise on variety-seeking, which we did not observe (here or in other studies). Thus, novices' behavior is unlikely due to lower preference certainty.

The findings also cast further doubt on the possibility that choice cohesiveness was driving the effects. Although cohesiveness may certainly vary in some contexts, this does not appear to play a role in our results. Consistent with Study 1, *mere variety* (or lack thereof) appears to be an independent expertise signal.

#### **Replication and Generalization: Choosing for a Maven (Study WA1)**

We conceptually replicated Study 2 using a scenario where participants chose chocolate truffles for a friend whose opinion they valued (Study WA1, Web Appendix). We manipulated participants' motivation to display expertise by framing the recipient as either a fine chocolate connoisseur or a non-connoisseur. Consistent with Study 2, we found that choosing for a

connoisseur (compared with a non-connoisseur) increased variety-seeking for novices but decreased variety-seeking for experts. People often choose assortments for recipients with different levels of connoisseurship in the focal category, so replicating our findings using this manipulation illustrates the findings' ecological validity.

#### Study 3: Mere Variety-Seeking in the Absence of Product Knowledge

One may wonder whether Study 2 reflects familiarity differences with the choice options. If experts believe they know which options other experts would consider to be best, then motivating them to display expertise could lead them to choose only those specific options, resulting in decreased variety-seeking. Study 3 tests this possibility using an incentivecompatible design: we asked people to choose an assortment of craft beers and manipulated their expertise showcasing motivation, but we used fictitious brands for which participants had no prior knowledge.

#### Method

Participants ( $M_{age}$ =33; 54% female) were 134 US Mturkers, randomly assigned to one of two between-subjects conditions (Evaluation-Criterion: expertise vs. average). As in previous studies, we measured participants' domain expertise.

We told participants that they would be helping a company to design a gift basket composed of craft beer (Web Supplement C). Participants created the gift basket by choosing any number of items from ten available brands. To rule out the possibility that any effects were due to knowledge differences, we used fictitious beer names (validated in a pretest, Supplement C). We directly manipulated participants' motivation to display expertise through choice. In the expertise criterion condition, we asked participants to assemble a basket that would be especially appealing to beer connoisseurs, and told them that a panel of beer experts would evaluate all the baskets submitted by participants on apparent expertise. To make this task incentive-compatible, we also told participants that they would receive a \$25 bonus if their basket received the highest expertise rating. Thus, participants were directly incentivized to choose in a manner that would lead others to perceive their choice as reflecting expertise.

In the average criterion (i.e., control) condition, we asked participants to assemble a gift basket that would be appealing to average people. We told them that they would receive a \$25 bonus if a panel of consumers evaluated their basket as the most appealing. Thus, participants in both conditions were incentivized to choose an assortment that would be favorably evaluated by others. The only difference was whether the evaluation criterion was expertise or general appeal.

We then showed participants the list of pretested fictitious beer brands (Supplement C). We asked participants to indicate the number of bottles of each brand they would put in the gift basket. We told participants they could pick more than one bottle from the same brewery, if they wished, and that they could select any total number of bottles. Participants selected 12.9 units on average, which was unaffected by own-expertise or condition (all p's>.60). To measure variety-seeking, we calculated a Herfindahl index for each participant.

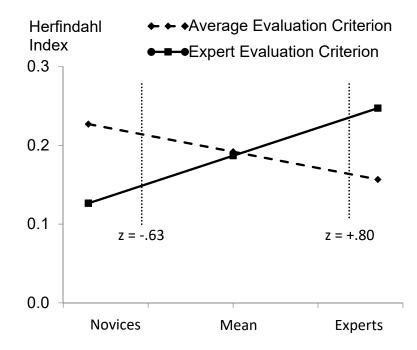
Subsequently, participants rated on a seven-point scale how important it was for them to display expertise, which served as a manipulation check, and how difficult it was to choose. Finally, participants rated their own beer expertise and the extent to which they considered themselves a beer connoisseur<sup>1</sup> (r=.85; averaged to an index). These ratings were unaffected by condition (F(1,132)=1.01, p=.32).

## Results

*Manipulation check.* An (evaluation-criterion) × (own-expertise, mean-centered) regression analysis on participants' ratings of their motivation to appear as experts revealed the predicted main effect of evaluation-criterion (B=.75, SE=.29, t(130)=2.61, p=.01), with no interaction (t(130)=.52, p>.6).

*Variety-seeking.* A similar regression analysis on the Herfindahl index revealed the predicted interaction (B=.056, 95% CI[.02,.09], SE=.0166, t(130)=3.39, p<.001), with no main effects (both p's>.40). Results were identical when controlling for the number of units selected (B=.05, SE=.0165, p=.003). See figure 4.

<sup>&</sup>lt;sup>1</sup> Whereas the previous studies used established measures of objective expertise (Clarkson et al., 2013), the current study uses subjective measures of expertise, also adapted from Clarkson et al., 2013. Although our theory focuses on actual domain expertise, prior research indicates that these objective and subjective measures of domain expertise tend to be strongly positively correlated (e.g., Clarkson et al. 2013; Mitchell & Dacin 1996). The results of Study 3 replicate our previous findings, suggesting that self-rated expertise measures can, at least in some cases, be a valid proxy for objective expertise. On average, people who rate themselves as experts are likely to have higher objective expertise than people who rate themselves as novices.



*Figure 4*. The effect of own-expertise and evaluation standard on variety-seeking (Study 3). Note: lower values on the Herfindahl index represent greater variety. The vertical dotted lines indicate the boundaries of the Johnson-Neyman regions of significance at the p < .05 level.

Supporting our predictions, expecting to be evaluated based on expertise increased variety-seeking among novices (i.e., one SD below the mean), compared with control (B=-.10, 95% CI[-.18,-.02], SE=.040, t(130)=2.54, p=.012). Among beer experts (i.e., one SD above the mean), however, expecting to be evaluated based on expertise decreased variety-seeking, compared with control (B=.09, 95% CI[.01,.17], SE=.040, t(130)=2.27, p=.025).

There were no effects of own-expertise or experimental condition on choice difficulty (all t's(130)<.50, p's>.61).

#### Discussion

Study 3 incentivized participants to display expertise through choice, and found that this increased variety-seeking for novices but decreased variety-seeking for experts. Using fictitious brands provides strong evidence that participants used *mere variety* – regardless of choice

cohesiveness – to signal expertise. It also rules out alternative explanations based on familiarity differences between experts and novices.

## **General Discussion**

People often choose distinctive, rare, or sophisticated options to signal expertise. The current research suggests that mere variety-seeking may also serve to signal expertise. Furthermore, the relationship between variety and perceived expertise is not unidirectional but moderated by perceivers' own expertise.

In addition to its contributions to literatures on social-perception and expertise signaling, our research also extends variety-seeking research by discovering a novel driver of variety-seeking. Unlike most prior findings in this stream, we show that self-presentation concerns may lead consumers to seek more *or* less variety, depending on their category expertise.

## **Boundary Conditions**

Novices may not perceive variety-seeking as indicative of expertise in the extreme scenario where a decision-maker indiscriminately selects all of the options in the category. Although, technically, such a strategy maximizes variety, it is likely to be perceived as more heuristic and less indicative of expertise, compared with more deliberative variety-seeking. Study WA2 (Web Appendix) supports this boundary condition.

Our findings may not apply to strictly utilitarian domains, in which objective quality and price are the primary evaluation criteria and variety-seeking plays a lesser role (Ratner et al., 1999), or to specific domains where diversification is considered objectively superior (e.g., investment) or a social norm (Steffel & LeBoeuf, 2014).

Lastly, experts may not necessarily perceive consistency as indicating expertise when choice is repeated over time. Our effects may also change when items are sub-categorized within a superordinate product category (Mogilner et al., 2008).

#### **Implications for Future Research**

One important consequence of perceived expertise is advice-seeking. Study WA3 (Web Appendix) examines how variety-seeking and own-expertise influence advice-taking.

Our findings suggest that varied assortments may be more popular in entry-level products, lower-priced tiers, and options targeted at novices. Less varied assortments may be more popular in high-end tiers positioned for "pros". Similarly, experts may perceive brands or stores offering limited arrays of products or services as higher in expertise or knowhow, whereas the opposite may be true for novices. Future research may examine whether and when variety influences store perceptions (Berger et al., 2007) and perceptions of abundance within a category (Etkin & Sela, 2016).

Extending beyond variety, future research may examine whether our findings generalize to a "less is more" (experts) vs. "more is better" (novices) heuristic. An expert craftsman, for example, may prefer a more specialized collection of power tools, whereas an amateur homeimprover may prefer a versatile tool. Similarly, experts may prefer to buy products at a more specialized store, or seek advice from others with narrower but deeper expertise, whereas novices may favor less specialized outlets and advice from others with broader, but potentially shallower, expertise.

Such tentative hypotheses imply that, in addition to variety-seeking across options, experts and novices may have divergent perceptions of, and preferences for, the variety of attributes *within* options. Future research may examine whether, and under what conditions, such perceptions diverge and, potentially, drive preferences for different products, outlets, and sources of advice.

#### References

- Alba, J. W. & Hutchinson, J. W. (1987). Dimensions of Consumer Expertise. Journal of Consumer Research, 13(4), 411-454.
- Ariely, D. & Levav, J. (2000). Sequential choice in group settings: taking the road less traveled and less enjoyed. *Journal of Consumer Research*, 27 (December), 279-290.
- Baumeister, R. F. (1982). A self-presentational view of social phenomena. *Psychological Bulletin*, 91(1), 3-26.
- Bellezza, S., Gino, F., & Keinan, A. (2014). The red sneakers effect: Inferring status and competence from signals of nonconformity. *Journal of Consumer Research*, 41(1), 35-54.
- Berger, J., Draganska, M., & Simonson, I. (2007). The influence of product variety on brand perception and choice. *Marketing Science*, *26(4)*, 460-472.
- Calder, B. J. & Burnkrant, R. E. (1977) interpersonal influence on consumer behavior: An attribution theory approach. *Journal of Consumer Research*, *4*(1), 29-38.
- Clarkson, J. J., Janiszewski, C., & Cinelli, M. D. (2013). The desire for consumption knowledge. Journal of Consumer Research, 39 (April), 1313-1329.
- Dhar, S. K., Hoch, S. J., & Kumar, N. (2001). Effective category management depends on the role of the category. *Journal of Retailing*, 77(2), 165-184.
- Drolet, A. (2002). Inherent rule variability in consumer choice: Changing rules for change's sake. *Journal of Consumer Research*, 29 (December), 293-305.
- Etkin, J. & Sela, A. (2016). How Experience Variety Shapes Postpurchase Product Evaluation. Journal of Marketing Research, 53(1), 77-90.

- Gershoff, A. D., Broniarczyk, S. M., & West, P. M. (2001). Recommendation or evaluation? Task sensitivity in information source selection, *The Journal of Consumer Research*, 28(3), 418-438.
- Huberman, G.& Jiangm, W. (2006). Offering vs. choice in 401(k) plans: Equity exposure and number of funds. *Journal of Finance*, *61*(2), 763-801.
- Hutchinson, J. W., Eisenstein, E. M., & Alba, W. (2009). *Consumer learning and expertise*, Springer Publishing Company, Inc.
- Kim, H. S. & Drolet, A. (2003). Choice and self-expression: A cultural analysis of varietyseeking. *Journal of Personality and Social Psychology*, 85(2), 373-382.
- Leary, M. R., Nezlek, J. B., Downs, D., Radford-Davenport, J., Martin, J., & McMullen, A. (1994). Self-presentation in everyday interactions: Effects of target familiarity and gender composition. *Journal of Personality and Social Psychology*, 67(4), 664-673.
- Mitchell, A. A. & Dacin, P. A. (1996). The assessment of alternative measures of consumer expertise. *Journal of Consumer Research*, *23(3)*, 219–239.
- Mogilner, C., Rudnick, T., & Iyengar, S. S. (2008). The mere categorization effect: How the presence of categories increases choosers' perceptions of assortment variety and outcome satisfaction. *Journal of Consumer Research*, *35*(2), 202-215.
- Park, C. W., Mothersbaugh, D. L., & Feick, L. (1994). Consumer knowledge assessment. Journal of Consumer Research, 21 (June), 71–82.
- Price, P. C. & Stone, E. R. (2004). Intuitive evaluation of likelihood judgment producers:
  Evidence for a confidence heuristic. *Journal of Behavioral Decision Making*, *17(1)*, 39-57.

- Ratner, R. K. & Kahn, B. E. (2002). The impact of private versus public consumption on varietyseeking behavior. *Journal of Consumer Research*, 29(2), 246-257.
- Ratner, R. K., Kahn, B. E., & Kahneman, D. (1999). Choosing Less-Preferred Experiences for the Sake of Variety. *Journal of Consumer Research*, 26(1), 1-15.
- Redden, J. P., Haws, K., & Chen, J. (2017). The ability to choose can increase satiation. *Journal* of Personality and Social Psychology, 112(2), 186-200.
- Rucker, D. D., Galinsky, A. D., & Dubois, D. (2012). Power and consumer behavior: How power shapes who and what consumers value. *Journal of Consumer Psychology*, 22 (3), 352-368.
- Simonson, I.& Winer, R. S. (1992). the influence of purchase quantity and display format on consumer preference for variety. *The Journal of Consumer Research*, *19*(1), 133-138.
- Sniezek, J. A. & Van Swol, L. M. (2001). Trust, confidence, and expertise in a judge-advisor system. *Organizational Behavior and Human Decision Processes*, *84*(2), 288-307.
- Steffel, M., & Le Boeuf, R. A. (2014). Overindividuation in gift giving: Shopping for multiple recipients leads givers to choose unique but less preferred gifts. *Journal of Consumer Research*, 40(6), 1167-1180.
- Tirole, J. (1989). The theory of industrial organization, Cambridge, MA: MIT Press.
- West, P.M., Brown, C.L., & Hoch, S.J. (1996). Consumption vocabulary and preference formation. *Journal of consumer research*, 23(2), 120-135.

# Web Appendix for "Variety-Seeking and Perceived Expertise": Additional Studies and Supplemental Materials

## Study WA1: Choosing for a Maven – A Conceptual Replication of Study 2

This study conceptually replicates Study 2, using a different manipulation of the motivation to showcase one's expertise. Different from Study 2, we manipulated participants' motivation to showcase their expertise by framing the recipient as either a fine chocolate connoisseur or a non-connoisseur. We predicted that, compared with the baseline, choosing for a connoisseur (and thus being motivated to showcase their expertise) would lead experts to choose a less varied assortment while leading novices to choose a more varied assortment. People often choose assortments for recipients with different levels of connoisseurship in the focal product category, so replicating our findings using this manipulation demonstrates the ecological validity of our findings.

#### Method

Participants (N = 177; mean age = 22; 52% women) were university students who completed an experiment titled "choosing fine chocolate" for extra course credit. They were randomly assigned to one of two between-subjects conditions (Recipient Framing: connoisseur vs. non-connoisseur). The other independent variable, participants' expertise in the category, was measured (see below).

Participants chose an assortment of fine chocolate truffles presumably as a gift to a friend (Supplement D). We manipulated participants' motivation to showcase their expertise through choice by framing the recipient as either a fine chocolate connoisseur or a non-connoisseur.

All the participants were asked to take a few moments to think about a friend whose opinion was important to them. In the connoisseur condition, we told participants to assume that their friend was a "fine chocolate connoisseur". In the non-connoisseur condition we did not provide these additional instructions. To increase participants' engagement in the task, we asked them to list what they thought were three characteristic traits of their friend.

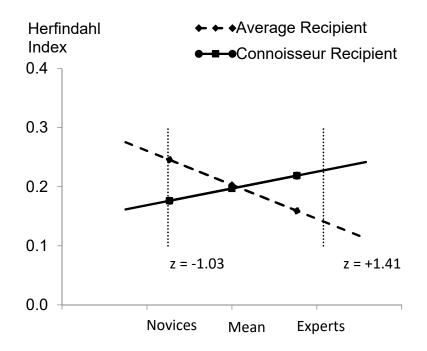
A separate pretest confirmed that our manipulation increased participants' motivation to showcase their expertise in the fine chocolate category and that this effect did not differ between experts and novices. Pretest participants (N = 123) reported feeling more motivated to show their expertise in chocolate (3.52 vs. 5.28), show the recipient that they knew a lot about gourmet chocolate (3.74 vs. 5.48), show the recipient that they have experience with gourmet chocolate (3.90 vs. 5.15), and demonstrate that they are chocolate connoisseurs (3.39 vs. 4.90) when the recipient was described as a connoisseur versus a non-connoisseur (all F's(1, 119) > 19.01, all p's < .001). This was true of both novice (B = 1.94, SE = .33, p < .0001) and expert participants (B = 1.08, SE = .33, p = .001).

Next, we asked participants in the main experiment to imagine going to a Teuscher store (a prestigious brand of premium Swiss chocolate) to buy a box of gourmet chocolate truffles as a gift for their friend. We presented participants with a list of twenty-two different truffle options (e.g., Champagne, Milk Buttercrunch, Irish Whiskey) and asked them to indicate the number of units they wanted to buy of each option. The total number of units participants could choose was not limited. Participants chose 21.7 units on average, and there was no effect of expertise or recipient × own-expertise interaction effect on the number of units selected (all p's > .61). To measure assortment variety, we calculated a Herfindahl index for each participant.

After making their selection, participants responded to measures of expertise similar to those used in Study 1 (these ratings were unaffected by the experimental manipulation of recipient expertise, F(1, 175) = .43, p = .51). We predicted that participants' own level of expertise would moderate the effect of recipient expertise on assortment variety.

## Results

A (recipient framing) × (own expertise, mean-centered) regression analysis on the Herfindahl index revealed the predicted interaction effect (B = .043, SE = .016, p = .01), with no main effects (both p's > .42). See figure WA1. This interaction was identical when controlling for the number of units selected by participants (B = .042, SE = .017, p = .01).



*Figure WA1*. The effect of own-expertise and the motivation to showcase one's expertise on variety-seeking (conceptual replication). Note: lower values on the Herfindahl index represent greater variety. The vertical dotted lines indicate the boundaries of the Johnson-Neyman regions of significance (p < .05).

Consistent with our prediction, fine chocolate novices (i.e., those one standard deviation below the mean level of expertise) selected a *more* varied assortment when selecting for a fine chocolate connoisseur, and therefore motivated to showcase their expertise, than when selecting for a person who was not a connoisseur (B = -.069, SE = .035, p = .051). Experts (i.e., those one standard deviation above the mean level of expertise), on the other hand, selected a *less* varied assortment when selecting for a fine chocolate connoisseur than when selecting for a more average person (B = .06, SE = .035, p = .09). Johnson-Neyman analysis indicates that these simple effects for novices and experts become significant ( $\alpha = .05$ ) 1.03 *SD* below and 1.41 *SD* above the mean level of own-expertise, respectively.

## Discussion

Extending Study 2, Study WA1 shows that experts and novices may strategically choose different levels of variety when motivated to portray themselves as experts. Compared to when they merely chose for a friend whose opinion they valued, when choosing for a friend who was a connoisseur in the product category, variety-seeking increased for novices but decreased for experts.

## Study WA2: Testing an "All Options" Boundary Condition

We find that novices perceive varied selections as indicative of greater category expertise, compared with less varied selections, but do they still perceive the decision-maker as an expert when he or she indiscriminately selects all of the options in the category? Although, technically, such a choice strategy maximizes variety, we believe that novices are likely to perceive indiscriminate choice of all the options in the category as a heuristic that is less indicative of expertise, compared with a more discriminate choice of extensive variety. We test this boundary condition in the following study.

## Method

Participants (N = 307; mean age = 37; 45% women) completed this experiment on Mturk in the US. Participants were randomly assigned to one of three between-subjects conditions (variety: high vs. low vs. all-options).

To test this boundary condition for novices, we used a product category for which most of our participants were likely to have low expertise (i.e., occasional users at most). To that end, we used sake (a Japanese alcoholic beverages made of fermented rice), which is a product category in which the vast majority of participants were likely to have low expertise.

We measured participants' objective expertise using measures similar to Study 1 (Supplement E). Validating that our sample of participants was generally low in sake expertise, the average level of expertise was 2.37 on a 1-7 scale (SE = .07), significantly lower than the midpoint, 4 (t(306) = 21.61, p < .0001), as well as from 3 (t(306) = 8.27, p < .001). A 95% CI analysis indicates that the true sample mean expertise was no higher than 2.53 on a 1-7 scale.

The procedure was similar to that of Study 1. After completing the measure of individual expertise, all of the participants read a short description of a hypothetical person, Mike, who had been invited to a dinner party and was asked by the host to bring a selection of sake for 16 people. We emphasized the number of anticipated drinkers to keep the perceived amount bought constant.

In the high variety condition, we told participants that Mike "selected an assortment containing a large variety, with many different types of sake. He bought a sufficient quantity for 16 people." In the low variety condition, we told participants Mike "selected an assortment containing little variety, with only a few different types of sake. He bought a sufficient quantity for 16 people." In the all-options condition, we told participants Mike "selected an assortment containing every single type of sake available in the store. He bought a sufficient quantity for 16 people."

After reading the scenario, participants rated whether Mike was a sake connoisseur (1 = *not at all*, 7 = definitely). This was our focal dependent measure.

#### **Results and Discussion**

Given that this was an all-novice sample, we analyzed perceived target expertise using a 1-way ANOVA with the three variety conditions (high vs. low vs. all-options). The analysis revealed a significant effect of condition (F(2, 304) = 4.24, p = .015). Replicating our main findings for novices, planned contrasts reveal that participants rated Mike as more of an expert in the high variety condition (4.17) than in the low variety condition (3.70; t = 2.08, p = .038). Further, participants in the high variety condition also rated the target, Mike, as more of an expert compared with the all-options condition (3.53; t = 2.80, p = .005). The low variety and all-options conditions two did not differ from each other (p = .43). These results support an "all options" boundary condition: novices appear to perceive indiscriminate choice of all the options available in the category as less indicative of expertise, compared with a more discriminate choice of extensive variety.

#### Study WA3: Downstream Consequences on Advice-Taking

Study WA3 uses an incentive-compatible design to examine a downstream consequence of the expertise attributions people make from others' variety-seeking. Consistent with Study 1, we expected coffee experts (vs. novices) to perceive a hypothetical consumer selecting a less (vs. more) varied assortment of coffee as more of a coffee expert, and to consequently seek that person's advice in the coffee category.

If variety signals general category expertise, as we argue, then such expertise should be transferrable even when participants' idiosyncratic preferences do not necessarily match those of the hypothetical consumer. Consequently, we predicted that participants would be more likely to seek the advice of a consumer they perceive as more of a category expert.

## Method

Participants were recruited through Prolific Academic online panel in the UK (N = 202; mean age = 38; 77% female). They were asked to imagine selecting a coffee blend at the store (Supplement F). As a part of the scenario, we asked participants to imagine seeing two other customers at the store who were also selecting coffee blends at the same time – one selecting a relatively varied assortment (five packs of five different blends) and another selecting a less varied assortment (four packs of one blend and one pack of another blend). A pretest with participants from the same pool (N = 70) validated that the coffee brands allegedly chosen by the high- and the low-variety choosers were similar in terms of familiarity, perceived quality and sophistication, and likelihood of buying, and that these perceptions did not differ between coffee novices and experts (all F's < 1.56, p's > .18).

We then told participants that they were considering buying one of two coffee blends, neither of which was included in the assortments selected by the other two customers. We also told them that one of the customers they saw in the store recommended the first of these two choice options, while the other customer recommended the other choice option. We counterbalanced the coffee options recommended by the high vs. low variety customers, to ensure that participants did not simply heed the advice of the customer whose coffee choices (in the high vs. low variety assortments) they had incidentally preferred.

The key dependent variable was whether participants heeded the advice of the high vs. low variety customer in choosing their preferred coffee blend. We used an incentive-compatible design by telling participants that, as an additional compensation, two randomly selected participants would receive a 200-gram pack of their chosen coffee blend (this promise was honored after data collection was completed). We asked participants to choose carefully because they would not be able to change their choice later. In all, 52% of participants chose the coffee blend recommended by the high-variety customer and 48% chose the coffee blend recommended by the low-variety customer.

After choosing their preferred option, participants rated which of the two customers was more likely to be a coffee expert in their opinion (1 = Customer A, 4 = Customer A and *Customer B equally*, 7 = Customer B). Finally, participants rated their own level of expertise in coffee using two items: *Please indicate your level of knowledge of coffee* (1 = Not*knowledgeable at all*, 7 = Very *knowledgeable*) and *Please indicate your level of expertise in coffee* (1 = Not much expertise at all, 7 = A lot of expertise). These were combined to form a participant expertise index (r = .92; mean = 3.03, SD = 1.57).

#### Results

*Variety, expertise, and advice-seeking.* A logistic regression, with choice option as the dependent variable (1 = the option recommended by the high-variety customer; 0 = the option recommended by the low-variety customer) and participants' own expertise index as an independent variable, revealed the predicted effect (B = -.2, SE = 0.09,  $\chi^2(1) = 4.63$ , p = .031; odds ratio = 0.82, 95% CI [.68, .98]). The higher participants' own expertise index was, the more likely they were to heed the advice of the customer choosing low variety.

We next examined participants' expertise attributions about the other customers. We recoded participants' ratings of the other customers' expertise such that higher values reflected a higher expertise rating for the customer choosing a high level of variety. The average expertise rating was 4.14 (SD = 1.47). Consistent with Study 1, a regression analysis, with other customers' expertise as dependent variable and participants' own expertise as independent variable, revealed the predicted effect (B = -.17, 95% CI [-.3, -.04], SE = .07, t(200) = -2.56, p = .011). The higher participants' expertise index was, the lower were their perceptions of the high variety chooser's expertise.

*Mediation*. A bootstrapping mediation analysis with 5000 samples (PROCESS model 4; Hayes, 2013) examined whether participants' ratings of the other customers' expertise mediated the effect of their own level of experitse on the likelihood of heeding the high (vs. low) variety chooser's advice. The analysis supported our mediation hypothesis (B = -.18, SE = 0.09, 95% CI [-.38, -.04]). The higher participants rated their own expertise, the lower they rated the expertise of the high variety chooser (B = -.17, SE = .07, 95% CI [-.3, -.04]), which in turn decreased their likelihood of heeding that person's advice when buying unrelated options in the same category (B = -1.08, SE = .18, 95% CI [-1.44, -.73]). The residual effect of participants' own expertise was not significant when their perceptions of the other customers' expertise were included in the model (B = -.1, SE = .11, 95% CI [-.31, .11]).

#### Discussion

Study WA3 extends our findings by examining a downstream consequence, using an incentive-compatible design in a different product category. Higher (vs. lower) expertise participants perceived another person choosing less (vs. more) variety as more of an expert and, consequently, were more likely to heed that person's advice about other options in the category.

# Supplement A: Stimuli and additional analysis in Study 1

Objective expertise scale items (adapted from Clarkson, Janiszewski, & Cinelli, 2013):

- 1. How many varieties of gourmet chocolate have you tried before? (1 = *a small number*, 7 = *a large number*)
- 2. How often do you have gourmet chocolate? (1 = not often at all, 7 = very often)
- 3. How frequently do you eat gourmet chocolate? (1 = not often at all, 7 = very often)
- 4. How often do you buy gourmet chocolate? (1 = rarely, 7 = frequently)

*High Variety condition:* 

# <u>JOSHUA</u>

Joshua buys gourmet chocolate for himself. He buys a box containing 16 truffles, which he selects individually. He chooses <u>a lot of variety – many different truffle flavors</u>.

Low Variety condition:

# JOSHUA

Joshua buys gourmet chocolate for himself. He buys a box containing 16 truffles, which he selects individually. He chooses <u>little variety – only a few different truffle flavors</u>.

Main dependent measure used in both conditions:

Based on your impression, to what extent is Joshua a gourmet chocolate connoisseur? (1 = not at all likely, 7 = very likely)

Mediators used in both conditions:

In your perception, based on Joshua's choice of gourmet chocolate truffles, how likely is each of these statements to be true? (1 = not at all likely, 7 = very likely)

- 1. Joshua has extensive knowledge about many different types of truffles
- 2. Joshua is discerning when it comes to chocolate truffles
- 3. Joshua chooses truffles that go together well
- 4. Joshua knows what truffles he personally prefers the most

Note: Mediators were randomized with the main DV, as well as among themselves.

## RUNNING HEAD: VARIETY AND EXPERTISE

|                               | Category Breadth<br>Knowledge | Discernment | Preference Clarity | Preference<br>Cohesiveness |
|-------------------------------|-------------------------------|-------------|--------------------|----------------------------|
| Category Breadth<br>Knowledge |                               | .497        | .510               | .681                       |
| Discernment                   | .497                          |             | .555               | .504                       |
| Preference Clarity            | .510                          | .555        |                    | .616                       |
| Preference<br>Cohesiveness    | .681                          | .504        | .616               |                            |

# Correlations among Mediators 1—4 in Study 1:

Note: all correlations are significant at the p < .001 level.

Complete Simultaneous Moderated Mediation Model in Study 1:

# 1. Category Breadth Knowledge Model

|                       | В      | SE    | t-test  | p-value | LL 95% CI | UL 95% CI |
|-----------------------|--------|-------|---------|---------|-----------|-----------|
| Constant              | 4.6121 | .1073 | 42.9678 | .0000   | 4.4005    | 4.8237    |
| Variety               | .1022  | .2147 | .4761   | .6345   | 3210      | .5254     |
| Own-Expertise         | .0413  | .0711 | .5813   | .5617   | 0988      | .1814     |
| Variety*Own-Expertise | 3824   | .1421 | -2.6907 | .0077   | 6626      | 1022      |

Conditional effects of variety-seeking at different levels of own-expertise:

|                | В     | SE    | t-test  | p-value | LL 95% CI | UL 95% CI |
|----------------|-------|-------|---------|---------|-----------|-----------|
| Novice (-1 SD) | .6836 | .3044 | 2.2456  | .0258   | .0835     | 1.2838    |
| Average        | .1022 | .2147 | .4761   | .6345   | 3210      | .5254     |
| Expert (+1 SD) | 4792  | .3048 | -1.5723 | .1174   | -1.0800   | .1216     |

## 2. Within-Category Discernment Model

|                       | В      | SE    | t-test  | p-value | LL 95% CI | UL 95% CI |
|-----------------------|--------|-------|---------|---------|-----------|-----------|
| Constant              | 4.4379 | .1079 | 41.1107 | .0000   | 4.2251    | 4.6507    |
| Variety               | 7352   | .2159 | -3.4051 | .0008   | -1.1608   | 3095      |
| Own-Expertise         | 0180   | .0715 | 2525    | .8009   | 1589      | .1229     |
| Variety*Own-Expertise | 4161   | .1429 | -2.9113 | .0040   | 6979      | 1343      |

Conditional effects of variety-seeking at different levels of own-expertise:

B SE t-test p-value LL 95% CI UL 95% CI

## RUNNING HEAD: VARIETY AND EXPERTISE

| Novice (-1 SD)                               | 1025    | .3062 | 3349    | .7381 | 7061    | .5010 |
|--|---------|-------|---------|-------|---------|-------|
| Average                                      | 7352    | .2159 | -3.4051 | .0008 | -1.1608 | 3095  |
| Expert (+1 SD)                               | -1.3678 | .3065 | -4.4627 | .0000 | -1.9721 | 7636  |
| 3. Perceived Target Person's Expertise Model |         |       |         |       |         |       |

|                       | В      | SE    | t-test  | p-value | LL 95% CI | UL 95% CI |
|-----------------------|--------|-------|---------|---------|-----------|-----------|
| Constant              | 1.6105 | .2297 | 7.0128  | .0000   | 1.1577    | 2.0633    |
| Variety               | .0389  | .1363 | .2855   | .7756   | 2298      | .3077     |
| Category Knowledge    | .5190  | .0488 | 10.6281 | .0000   | .4227     | .6152     |
| Discernment           | .1116  | .0486 | 2.2981  | .0226   | .0159     | .2073     |
| Own-Expertise         | 0325   | .0434 | 7496    | .4544   | 1180      | .0530     |
| Variety*Own-Expertise | 1707   | .0887 | -1.9237 | .0558   | 3457      | .0042     |

Residual effects of variety-seeking at different levels of own-expertise, controlling for both mediators:

|                | В     | SE    | t-test  | p-value | LL 95% CI | UL 95% CI |
|----------------|-------|-------|---------|---------|-----------|-----------|
| Novice (-1 SD) | .2985 | .1889 | 1.5796  | .1157   | 0741      | .6710     |
| Average        | .0389 | .1363 | .2855   | .7756   | 2298      | .3077     |
| Expert (+1 SD) | 2206  | .1946 | -1.1338 | .2582   | 6043      | .1630     |

Indirect effects of variety-seeking through category breadth knowledge (bootstrapped):

|                | В     | SE    | LL 95% CI | UL 95% CI |
|----------------|-------|-------|-----------|-----------|
| Novice (-1 SD) | .3548 | .1747 | .0327     | .7085     |
| Average        | .0530 | .1107 | 1620      | .2778     |
| Expert (+1 SD) | 2487  | .1713 | 5813      | .0927     |

Index of moderated mediation through category breadth knowledge (bootstrapped):

| В    | SE    | LL 95% CI | UL 95% CI |
|------|-------|-----------|-----------|
| 1985 | .0875 | 3743      | 0322      |

Indirect effects of variety-seeking through discernment (bootstrapped):

|                | В    | SE    | LL 95% CI | UL 95% CI |
|----------------|------|-------|-----------|-----------|
| Novice (-1 SD) | 0114 | .0415 | 0977      | .0778     |
| Average        | 0820 | .0466 | 1919      | 0097      |
| Expert (+1 SD) | 1526 | .0811 | 3306      | 0204      |

Index of moderated mediation through discernment (bootstrapped):

B SE LL 95% CI UL 95% CI

-.0464 .0293 -.1146 -.0034

Note: estimated using PROCESS macro, model 8 (Hayes 2013). Significant estimates (p < .05) appear in bold font.

# Supplement B: Stimuli used in Study 2

# General instructions:

As part of the effort to contribute to the community, [college name] has purchased chocolates for the preparation of personal chocolate gift bags that will be sold to the public at an auction to the highest bidder. The money collected will be donated to a local charity on behalf of [college name]. This local charity provides holistic solutions through the arts and biomedical practices to adolescents and adults on the autistic spectrum.

Would you please help us assemble one chocolate gift bag? Each gift bag should contain exactly 12 chocolates.

## Showcase expertise condition additional instructions:

<u>Please note:</u> As you are preparing the chocolate gift bag, keep in mind that it is important to prepare chocolate bags that will seem as if they were prepared by chocolate experts. In our experience, gift bags that showcase expertise raise more money at auctions.

Please assemble the gift bag now.

## Control condition additional instructions:

<u>Please note:</u> As you are preparing the chocolate gift bag, keep in mind that it is important to prepare chocolate bags that will seem attractive. In our experience, attractive gift bags raise more money at auctions.

Please assemble the gift bag now.

Showcase expertise manipulation check items:

- 1. To what extent did you feel motivated to show your expertise in chocolate while assembling the gift bag? (1 = not at all, 7 = very much)
- 2. To what extent did you want to show potential buyers that you know a lot about chocolate? (1 = not at all, 7 = very much)
- 3. To what extent did you want to show potential buyers that you have experience with chocolate? (1 = *not at all*, 7 = *very much*)
- 4. To what extent did you want to show potential buyers that you are a chocolate connoisseur? (1 = not at all, 7 = very much)

# Supplement C: Stimuli used in Study 3

# Pretest (N = 70)

A pretest from the same participant pool validated that the fictitious brand names used (see below) were equal in terms of perceived quality and sophistication, and that these perceptions did not differ between craft beer novices and experts (all F's < 1.48, p's > .2). The pretest also validated that novices and experts did not differ in their perceptions of quality and sophistication regarding lager and pilsner beer types (all F's < 1.14, p's > .29), so we framed the fictitious brands as pilsners and lagers.

# Main Study – Expertise criterion condition instructions:

We are helping WorldGiftBaskets, a company that creates and ships handmade, high quality gift baskets, to design a gift basket composed of beer. We need your help creating a beer gift basket that would be appealing to connoisseurs. A panel of beer experts will evaluate all of the gift baskets submitted by participants, and you would receive a \$25 bonus <u>if your basket received the highest expertise rating</u>.

# Main Study – Average criterion condition instructions:

We are helping WorldGiftBaskets, a company that creates and ships handmade, high quality gift baskets, to design a gift basket composed of beer. We need your help creating a beer gift basket that would be appealing to the average customer. A panel of beer customers will evaluate all of the gift baskets submitted by participants, and you would receive a \$25 bonus <u>if your basket received the highest rating</u>.

# Note: One random participant in each condition received the bonus.

# Choice options:

Please enter the number of beer bottles you would choose from each brewery. You can pick more than one bottle from the same brand, if you wish, and you can select any total number of bottles.

# RUNNING HEAD: VARIETY AND EXPERTISE

| 0 | Keepers Brewery 0     | Hopscotch Brewing Co. | 0 Merridale Brewery  |
|---|-----------------------|-----------------------|----------------------|
| 0 | Black Oak Brewing     | 0 Pemberton Meadery   | 0 Long Table Brewery |
| 0 | Roundhouse Brewery    | 0 Gardiner Brewing Co | mpany                |
| 0 | Steam Whistle Brewing | 0 Wellington Brewery  |                      |

# Supplement D: Stimuli used in Study WA1

Connoisseur condition:

Imagine you have a friend whose opinion of you is very important to you. Your friend is also known as a serious fine chocolate expert.

Please take a few moments to carefully imagine this friend. Then, list what you think are the three <u>most characteristic traits</u> of your friend.

| First trait:  |  |
|---------------|--|
| Second trait: |  |
| Third trait:  |  |

Non-connoisseur condition:

Imagine you have a friend whose opinion of you is very important to you.

Please take a few moments to carefully imagine this friend. Then, list what you think are the three <u>most characteristic traits</u> of your friend.

| First trait:  |  |
|---------------|--|
| Second trait: |  |
| Third trait:  |  |

Choice:

Imagine that you are planning to buy your friend a box of gourmet chocolate truffles as a birthday gift, so you went to a **Tuescher** store, a prestigious brand of premium Swiss chocolate.

Please select any number of Teuscher truffles from among the following options. Feel free to select the same options multiple times or to select many different options to include in your gift box.

# RUNNING HEAD: VARIETY AND EXPERTISE

| 0 Champagne 0 Milk 0 Dark 0 Walnut 0 Almond                                       |
|---|
| 0 Cocoa 0 Bailey's 0 Lemon 0 Milk Buttercrunch                                    |
| 0     Dark Buttercrunch     0     Orange     0     Jasmine Tea     0     Cinnamon |
| 0 Extra Butter 0 Grand Marnier 0 Caramel 0 Mocca                                  |
| 0 Raspberry 0 Mint 0 Kirsch cherry liquor 0 Irish Whiskey                         |
| 0 Amaretto almond liquor  |

# Supplement E: Stimuli used in Study WA2

*Objective expertise scale items (adapted from Clarkson et al., 2013):* 

Sake is a Japanese alcoholic beverage made of fermented rice. It is pronounced sa-ke.

- 1. How many different types of sake have you tried? (1 = a small number, 7 = a large number)
- 2. How often do you have sake? (1 = not often at all, 7 = very often)
- 3. How frequently do you drink sake? (1 = not often at all, 7 = very often)
- 4. How often do you buy sake? (1 = rarely, 7 = frequently)

*High Variety condition:* 

# <u>MIKE</u>

Mike was invited to a dinner party. He was asked by the host to bring a selection of sake for 16 people.

At the store, Mike selected an assortment containing <u>a large variety with many different</u> types of sake. He bought a sufficient quantity for 16 people.

Low Variety condition:

# <u>MIKE</u>

Mike was invited to a dinner party. He was asked by the host to bring a selection of sake for 16 people.

At the store, Mike selected an assortment containing <u>little variety with only a few</u> <u>different types of sake</u>. He bought a sufficient quantity for 16 people.

All-Options condition:

# <u>MIKE</u>

Mike was invited to a dinner party. He was asked by the host to bring a selection of sake for 16 people.

At the store, Mike selected an assortment containing <u>every single type of sake available</u> in the store. He bought a sufficient quantity for 16 people.

Main dependent measure used in all conditions:

Based on your impression, to what extent is Mike a sake connoisseur? (1 = not at all, 7 = definitely)

## Supplement F: Stimuli used in Study WA3

Imagine going to a coffee store to buy a coffee blend.

When you arrive to the store, you find out that the store offers each customer a choice of five coffee samples from the following list of coffee blends, as a gift:

| Coffee Type         | Flavor |
|---------------------|--------|
| Café Estima Blend   | Smoky  |
| Cascada             | Smoky  |
| Garuda Blend        | Nutty  |
| Java Dutch Estate   | Tangy  |
| Komodo Dragon Blend | Earthy |
| Rancho Mathilde     | Earthy |
| Rift Valley Blend   | Spicy  |
| Sierra Dorada Blend | Spicy  |
| Sulawesi-Kalosi     | Nutty  |
| Yukon Blend         | Tangy  |

You notice the choices of 5 coffee samples made by two other customers:

| Customer A's choices: | Customer B's choices: |
|-----------------------|-----------------------|
| 1 Cascada             | 4 Garuda Blend        |
| 1 Garuda Blend        | 1 Sierra Dorada Blend |
| 1 Rancho Mathilde     |                       |
| 1 Sierra Dorada Blend |                       |
| 1 Yukon Blend         |                       |

Recall that you arrived to the store to buy coffee blend. You are considering two coffee blends: La Azulita and Senseo Douwe.

**Customer A** recommends the La Azulita Blend. **Customer B** recommends the Senseo Douwe Blend.

Which Coffee Blend will you buy?

As additional compensation for participating in this study, two participants, selected at random, will receive a 200g pack of their chosen coffee blend. Please choose carefully because you will not be able to change your preference later on.

- The La Azulita Blend, recommended by Customer A.
- The Senseo Douwe Blend, recommended by Customer B.

|          |   |   | Customer  |   |   |          |
|----------|---|---|-----------|---|---|----------|
|          |   |   | A and     |   |   |          |
| Customer |   |   | Customer  |   |   | Customer |
| А        |   |   | B equally |   |   | В        |
| 1        | 2 | 3 | 4         | 5 | 6 | 7        |

In your opinion, which of these two customers is more likely to be a coffee expert?

Please indicate your level of knowledge of coffee:

| Not           |   |   |   |   |   | 17            |
|---------------|---|---|---|---|---|---------------|
| knowledgeable |   |   |   |   |   | Very          |
| at all        |   |   |   |   |   | knowledgeable |
| 1             | 2 | 3 | 4 | 5 | 6 | 7             |

Please indicate your level of expertise of coffee:

| Not much  |   |   |   |   |   |           |
|-----------|---|---|---|---|---|-----------|
| expertise |   |   |   |   |   | A lot of  |
| at all    |   |   |   |   |   | expertise |
| 1         | 2 | 3 | 4 | 5 | 6 | 7         |