Subjective Expertise and Consumption Enjoyment

by

Troy Hiduke Campbell

Department of Business Administration
Duke University

Date:_______________________

Approved:

___________________________
Dan Ariely, Supervisor

___________________________
Joel C. Huber

___________________________
Peter A. Ubel

___________________________
Brian Wansink

Dissertation submitted in partial fulfillment of
the requirements for the degree of Doctor of Philosophy in the Department of
Business Administration in the Graduate School of Duke University

2015
ABSTRACT

Subjective Expertise and Consumption Enjoyment

by

Troy Hiduke Campbell

Department of Business Administration
Duke University

Date:_______________________
Approved:

___________________________
Dan Ariely, Supervisor

___________________________
Joel C. Huber

___________________________
Peter A. Ubel

___________________________
Brian Wansink

Dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in the Department of Business Administration in the Graduate School of Duke University

2015
Abstract

Consumers’ beliefs can influence enjoyment via beliefs about a product (e.g., whether a wine is believed to be high quality) and explored beliefs about themselves (e.g., where the consumers believes they have the expertise to appreciate any high qualities in a wine). Across nine experiments in five domains (e.g. film, tea, wine) we seek to better understand this latter and far less understood component by experimentally altering people’s subjective expertise (beliefs about ability in a consumption domain) independent of their real expertise and independent of real or framed differences in products’ qualities. We find subjective expertise alone generally increases two sources of enjoyments, item enjoyment (the enjoyment of an item’s qualities such as liking an item’s flavor) and process enjoyment (the enjoyment of consumer processes such as critically evaluating an item’s flavor). Importantly though, when consumption items are perceived to be lower quality, the subjective expertise effect on item enjoyment is eliminated but remains positive for process enjoyment. Additionally, subjective expertise leads consumers to engage in more actions and effort to improve their consumption (e.g. stirring a drink, learning more about a consumption item). This project improves general understanding of consumer expertise and consumer beliefs, finds subjective expertise has unique and often diverging effects on two sources of enjoyment important to everyday consumption, and demonstrates how
and when subjective expertise can be altered to effectively enhance consumer enjoyment.
Contents

Abstract ......................................................................................................................................... iv

List of Figures ................................................................................................................................ x

Acknowledgements ..................................................................................................................... xi

1. Subjective Expertise and Consumption Enjoyment............................................................. 1

   1.1 Introduction....................................................................................................................... 1

   1.2 The Importance of Subjective Expertise ........................................................................ 2

   1.3 Theoretical Development ................................................................................................ 4

       1.3.1 Item Enjoyment ............................................................................................................ 5

       1.3.2 Improvement Actions ................................................................................................. 7

       1.3.3 Process Enjoyment ...................................................................................................... 7

       1.3.4 Distinguishing Item Enjoyment and Process Enjoyment ...................................... 8

   1.4 Experiment 1a: Item Enjoyment and Wine ................................................................. 11

       1.4.1 Method ........................................................................................................................ 13

           1.4.1.1 Participants ......................................................................................................... 13

           1.4.1.2 Procedure and Materials ................................................................................... 13

       1.4.2 Results ......................................................................................................................... 14

   1.5 Experiment 1b: Item Enjoyment and Film .................................................................. 14

       1.5.1 Method ........................................................................................................................ 15

           1.5.1.1 Participants ......................................................................................................... 15

           1.5.1.2 Procedure and Materials ................................................................................... 15
1.5.2 Results ......................................................................................................................... 16

1.6 Experiment 1c: Item Enjoyment and Advertisements ..................................................... 16

1.6.1 Method .......................................................................................................................... 16

1.6.1.1 Participants ........................................................................................................... 16

1.6.1.2 Procedure and Materials ................................................................................... 17

1.6.2 Results ......................................................................................................................... 17

1.7 Experiment 1d: Item Enjoyment and Literature .............................................................. 18

1.7.1 Method .......................................................................................................................... 18

1.7.1.1 Participants ........................................................................................................... 18

1.7.1.2 Procedure and Materials ................................................................................... 18

1.7.2 Results ......................................................................................................................... 19

1.8 Experiment 2: Item Enjoyment and Quality ................................................................. 20

1.8.1 Method .......................................................................................................................... 20

1.8.1.1 Participants ........................................................................................................... 20

1.8.1.2 Procedure and Materials ................................................................................... 21

1.8.2 Results and Discussion ............................................................................................. 22

1.9 Experiment 3a: Improvement Action – Stirring Tea ..................................................... 24

1.9.1 Method .......................................................................................................................... 24

1.9.1.1 Participants ........................................................................................................... 24

1.9.1.2 Procedure and Materials ................................................................................... 25

1.9.2 Results and Discussion ............................................................................................. 26

1.10 Experiment 3b: Improvement Action – Learning Exercise ........................................ 28
1.10.1 Method ...................................................................................................................... 28
  1.10.1.1 Participants ....................................................................................................... 28
  1.10.1.2 Procedure and Materials ................................................................................. 29
1.10.2 Results and Discussion ........................................................................................... 31

1.11 Experiment 4a: Item Versus Process Enjoyment – The Influence of Quality ...... 31
  1.11.1 Method ...................................................................................................................... 33
    1.11.1.1 Participants ................................................................................................... 33
    1.11.1.2 Procedure and Materials ................................................................................. 33
  1.11.2 Results and Discussion ........................................................................................... 36
    1.11.2.1 Item Enjoyment ............................................................................................ 36
    1.11.2.2 Process Enjoyment ......................................................................................... 38
    1.11.2.3 Comparison .................................................................................................... 39
    1.11.2.4 Mediation ....................................................................................................... 39
    1.11.2.5 Summary ......................................................................................................... 40

1.12.1 Experiment 4b: Item Versus Process Enjoyment – The Influence of “Placebo” Quality.................................................................................................................................... 40
  1.12.1 Method ...................................................................................................................... 42
    1.12.1.1 Participants ................................................................................................... 42
    1.12.1.2 Procedure and Materials ................................................................................. 42
  1.12.2 Results and Discussion ........................................................................................... 43
    1.12.2.1 Item Enjoyment ............................................................................................ 43
    1.12.2.2 Process Enjoyment ......................................................................................... 45
1.12.2.3 Comparison ....................................................................................................... 45
1.12.2.5 Summary ........................................................................................................... 46
1.13 General Discussion ..................................................................................................... 46
1.13.1 Importance of Process Enjoyment ......................................................................... 47
1.13.2 Identity and Expertise ............................................................................................. 49
1.13.3 Expectations ............................................................................................................. 50
1.13.4 Conclusion ................................................................................................................ 52
Appendix C: Word Game Activity Measure ........................................................................... 88
Biography ..................................................................................................................................... 94
List of Figures

Figure 1: Effect of Subjective Expertise on Item and Process Enjoyment ................................. 9

Figure 2: Effect of Subjective Expertise on Item Enjoyment in Four Domains .............. 12

Figure 3: Effect of Subjective Expertise on Item Enjoyment by High Versus Low Quality 23

Figure 4: Effect of Subjective Expertise on Likelihood to Engage in Improvement Actions ........................................................................................................................................ 27

Figure 5: Effect of Subjective Expertise on Item Enjoyment and Process Enjoyment by Quality ........................................................................................................................................ 37
Acknowledgements

Academics do a lot of things alone. But whenever they do something great, it is rarely done alone. I don’t know if what you are reading is great, but I do know I did not do it alone. And if there are glimmers of greatness in these pages or any others I’ve written at Duke, that greatness stems in large part from these people.

First massive thanks to the four professors who ushered me through my Duke years Peter Ubel, Gavan Fitzsimons, Aaron Kay, and especially my advisor Dan Ariely. They inspired me, helped me develop, and showed me how academia could be my home. From the silly to the serious, from the slips to the spectacular, I am grateful for all the moments I had with them. Thanks to Joel Huber who provided me with the right thoughts always at just the right time and to Jim Bettman for being there every time, for any conversation, on any topic. And thanks to the Duke University faculty and beyond who helped me pursue projects with a positive calculated ambition, particularly Tanya Chartrand, Gráinne Fitzsimons, Brian Wansink, Rick Larrick, Mary Frances Luce, Mark Leary, Julie Britton, and all the Fuqua Marketing stars who always had the most concise useful comments for me.

Endless thanks to Christy Zhou and Steven Shepherd for being the best of friends, greatest of colleagues, and making me part of your families. Gratitude to Ed O’Brien for being my academic buddy and peer mentor. Gratefulness to Avni Shah for being a cohort of one but delivering like a cohort of many. Praise to Peggy Liu for being
my productive counterweight and neighbor. Love to Hillary Weiner, Scott Wallace, Asa Palley, Jae Kim, Adriana Camilleri, Bobby Zhou, Vivian Quin, Danielle Brick, Hana Choi, Katherine Crain, Sarah Memmi, Jacqueline Rifkin, Karen Scherr, Christina Radar, Stephen Spiller, Kate Minn, Jared Wolfe, Keisha Cutright, Adriana Samper, and my extended Fuqua student family for being a sounding board and helping me hone my weirdness. Indebtedness to those who kept me organized: Bobbie Clinkscale, Chulpan Khismatova, Lorna Hicks, Amber Holden, and Lillie Williamson. Inspiration to Elina Halonen and Caroline Roux for being my creative outlet. Thankfulness to my Durham friends especially Graeme O’Connell, Kess Ballentine, Chris George, and Hannah Aird who kept me motivated when I was oh so down, edited my work, and provided so many left-field thoughts. Adoration to my family, Gail Hiduke, Kent Campbell, and Casey Campbell for their inspiration, proofs, academic impetus, and supportive Skype sessions. And finally, a thunderous shout out to my beloved Center for Advanced Hindsight crew. May we be forever weird in our colorful jackets! Special shout outs for this project to Vladamir Chituc, Aline Grüeneisen, Aaron Nichols, and Megan Hogerty, and my fierce and fun army of RAs: Minn Htet Kline, Thomas Vosburgh, Tyler Fredricks, Rachel Anderson, Colette Kolenda, Katie Becker, Paris Morgan, Shannon Lin, Michael Bleggi, Woojin Kim, and Luke Duchemin.

To all of you I say: Thanks for your support and thoughts, and helping me keep my spirits up and my signature motto alive. Enthusiastically, Troy.
1. Subjective Expertise and Consumption Enjoyment

1.1 Introduction

Beliefs and expectations are some of the most powerful forces in a marketer’s toolbox. Marketing research on “placebos” finds alterations of consumers’ beliefs and expectations about an item’s quality (e.g., the quality of a wine) can increase consumers’ enjoyment and experiences with the item (Allison and Uhl 1964; Braun, 1999; Kopalle and Lehmann, 2006). For example, marketing material that frames a wine as expensive improves consumers’ enjoyment of the wine (Plasmann et al., 2008). Similarly, meats and sweets taste better to consumers when marketed with delicious sounding labels (Levin and Gaeth, 1988; Wansink, Van Ittersum, and Painter 2005) and Coke lovers enjoy drinking a glass of Pepsi more when they are lead to believe it is Coke (McClure et al. 2004). In sum, previous work has shown that a consumption experience results not simply from actual tangible product attributes (e.g., the ingredients of a drink or the words of a poem), but instead from an interaction between product attributes and the consumers’ beliefs, such that what is believed rather than simply what is, strongly affects enjoyment.

Interestingly an aspect of beliefs that has been neglected in past enjoyment work are the consumers themselves. In other words most work has focused on how consumers’ views of the outside world influence their consumption experiences. But
what about how the consumers’ view themselves? How might consumers’ beliefs about their skills and abilities change their consumption experiences?

This paper directly examines this question by looking at how subjective expertise influences consumption enjoyment. That is, it focuses less on a consumer’s external beliefs (e.g. a wine’s fine qualities), and more on a consumer’s internal beliefs (e.g. their ability to detect fine qualities in wine).

Across nine experiments, three subject pools (two online, one laboratory), and five different consumption domains (wine, tea, literary, film, brands), this paper explores the influence of such internal beliefs on enjoyment and how such internal beliefs interact with aspects of the product, aspects of consumption, and opportunities to improve a product. Generally, but not without exception, feeling more expert in a consumption domain increases different sources of enjoyment in that consumption domain. The results extend and integrate various theoretical realms including expertise, expectations, and enjoyment, and we suggest some future paths to explore this highly important and complex relationship.

1.2 The Importance of Subjective Expertise

There are at least three reasons why it is important to study subjective expertise, defined as consumers’ beliefs about their ability and knowledge in a consumption domain (Alba and Hutchinson 2000; Hadar, Sood, and Fox, 2013).

First, expertise is one of the most historically-studied constructs in marketing
(Alba and Hutchinson 1987; Chase and Simon, 1973; West, Brown, and Hoch 1996), and the study of subjective expertise advances the general theory of expertise in new ways. This is because as consumers develop expertise, they not only develop objective expertise (e.g., the ability to accurately distinguish subtle flavors in wine) but also subjective expertise, as well (e.g., beliefs about how well one can distinguish wine flavors), such that the objective component of expertise is intertwined with the subjective component (though not necessarily always linearly related, see Alba and Hutchinson, 2000). Accordingly, subjective expertise deserves its own attention, as it is part of both the effect of objective expertise on consumption and it is its own individual piece in the larger expertise construct.

Second, objective expertise can be difficult to alter, but past research shows that marketers can feasibly and powerfully influence consumers’ subjective expertise (Clarkson, Janiszewski, and Cinelli 2013; Hadar and Sood, 2014). Marketers could greatly benefit from a more fine-tuned understanding of this consumer construct, because of their ability to greatly leverage. For instance, some of our experiments use a leveragable short quiz plus feedback design that resembles the consumer expertise quizzes that are currently popular online (Mohan, 2015).

Finally, the current project is part of a larger recent movement in marketing to explore subjective expertise. For instance, Hadar, Sood, and Fox (2013) recently examined the counterintuitive notion education that improves objective financial
experts can lead people to shy away from certain financial decisions, because the complicated educational material reduces consumers’ subjective financial expertise.

Other work (Hadar and Sood, 2014) has examined how subjective expertise independent of objective expertise can affect choice set satisfaction. Building on a number of findings from marketing (Alba and Hutchinson, 2000; Dahl and Moreau 2007; Mochon et al. 2012; Moorman et al. 2004), psychology (Bandura, 1997; Bandura and Schunk, 1981; White, 1959), and management (Stone, Deci, and Ryan 2005), this paper focuses on how subjective expertise affects consumption enjoyment and presents a structured and novel inquiry around the nuanced influences that subjective expertise can have across consumption items and sources of enjoyment.

1.3 Theoretical Development

Portions of the literatures of marketing, management, and psychology support the notion that subjective expertise can have wide-ranging effects related to enjoyment. For example, people who report feeling expertise and efficacy in their jobs and goals tend to report enjoy those jobs and goals more (Stone, Deci, and Ryan 2005; White, 1959). Other research shows that feeling expertise in commercial product assembly leads to increased enjoyment of the assembly process (Mochon et al. 2012; Dahl and Moreau, 2007).

Building on this past research, we explore how subjective expertise affects enjoyment of basic consumption (e.g. drinking a tea, reading a book). In this exploration,
we draw an important distinction between two different sources of enjoyment. The first is *item enjoyment*, defined as the enjoyment of an item’s objective qualities, such as a wine’s flavor or a record’s sound. The second is *process enjoyment*, what we define as the enjoyment of consumer processes, such as the pleasure drawn from thoughtfully evaluating a wine’s flavor or an LP’s musical style.

This distinction is related to past work such as procedural versus non-procedural elements (McFarlin and Sweeny, 1992), engagement versus satisfaction (Calder, Malthouse, and Schaedel 2008; van Doorn et al. 2010), and more recently on enjoyment of consumer products and processes such as assembly (Dahl and Moreau 2007; Mochon et al. 2012, Prahalad and Ramaswamy, 2004). In the domain of subjective expertise, this distinction is particularly interesting because it brings up the possibility that enjoyment from the process can compensate for a low quality item experience.

### 1.3.1 Item Enjoyment

We predicted that subjective expertise would generally increase the enjoyment of the item’s qualities. This prediction draws from two general literatures: the expectation literature and the identity-ownership literature.

First, those with higher subjective expertise may expect to enjoy the item because they believe they have the ability to appreciate item’s qualities more (Ballester, Patris, Symoneaux, and Valentin 2008; Jacobsen 2010; Peskin, 1998). Drawing on the previously discussed work on how external expectations about the quality of an item influence
consumption (e.g., how well a wine is made), it seems plausible that external expectations about one’s ability to appreciate the qualities of an item (e.g., ability to notice how well the wine is made) will also influence item enjoyment. In short, consumers who think they are experts may enjoy a consumption experience like their perception of an expert would, resulting in a Descartes-like logic, “I think I am expert, therefore I enjoy like I am an expert.”

Secondly, research literatures on psychological ownership and identity support a positive subjective expertise and enjoyment relationship. Pierce, Kostova and Dirks (2003) proposed a direct link between subjective expertise and identity processes, citing a previous theoretical paper that argued, “That over which I exercise ... control becomes a part of my sense of self” (Furby, 1978, 322-323). When the items or processes of a consumption domain are categorized as part of the self (Weiss and Johar 2013), they may lead to more positive attitudes and enjoyment via self-associations and goal-associations (Chatterjee, Irmak, and Rose 2013; Dommer and Swaminathan, 2013; Fishbach, Shah, and Kruglanski 2004; Furby 1978; Nuttin 1987; Kahneman, Knetsch, and Thaler 1991). Initial evidence of this comes from theorizing on self-assembled products (e.g., Norton, Mochon, Ariely, 2012), which posits that masterfully creating items increases both positive thoughts about the attributes of the created item and emotional attachment to the item.
H1: Item Enjoyment Hypothesis — Higher subjective expertise of a consumer domain will lead to more enjoyment of domain consumption items.

1.3.2 Improvement Actions

Given that subjective expertise may lead to stronger expectations of appreciation and feelings of connection to the item, subjective experts more than others may take steps to improve the consumption item. For instance, subjective experts may be more likely to carefully stir a tea before consuming, if doing so is known to unlock subtle flavors in the tea. They may do so because they expect higher expertise enhances detection and appreciation of the subtleties unlocked by the improvement action. If this hypothesis is correct, we would gain an insight into one of the reasons subjective experts may often enjoy an item more, because they put more effort into improving and appreciating the consumption item, a behavior that should often be efficacious.

H2: Improvement Actions Hypothesis — Higher subjective expertise in a consumer domain will lead to a greater likelihood to engage in actions to improve appreciation of consumption items in the domain.

1.3.3 Process Enjoyment

Consumption enjoyment is not limited to the enjoyment of the item itself (e.g., an item’s taste or qualities). Consumers may also enjoy what we classify as consumption processes (e.g., the physical gestures of smoking, judging and evaluating a consumption
object). In this project, we predict that subjective expertise generally increases enjoyment of certain consumption processes.

This prediction builds on work concerning human’s general motivation to feel competence, efficacy, and expertise and that such feelings are psychologically rewarding (Deci and Ryan 2000; White 1959). For instance, consumers derive feelings of competence from autonomously and successfully creating products (Dahl and Moreau 2007; Mochon et al. 2012). Simpler processes that span nearly all consumption domains, such as evaluation and critiquing (e.g., having an evaluative conversation about art while looking at art in a museum), may also provide enjoyment, especially when one feels a sense of subjective expertise. Additionally, because subjective expertise may engender identification with the larger domain (e.g., art), the identity literature would also predict that participation in consumption processes would lead to enjoyment via identity consistent goals (Swann 1983).

H3: Process Enjoyment Hypothesis: Higher subjective expertise of a consumer domain will lead to more enjoyment of consumer processes in the domain.

1.3.4 Distinguishing Item Enjoyment and Process Enjoyment

Given that our predictions regarding item enjoyment build on past identity and expectation literatures, it follows that when subjective experts have less reason to expect their level of expertise to improve consumption and have less reason to identify with the items, the effect of subjective expertise on item enjoyment should be attenuated. For
instance, when an item is of low quality, the effects of subjective expertise should be muted. However, even in such cases some enjoyment of the consumption processes may be retained. This is because we predict subjective expertise enhances process enjoyment through feelings of competence, involvement, self-worth, and identity, and these constructs can be accessed independent of the item quality (Deci and Ryan, 2000; White 1959). Accordingly, subjective expertise may enhance enjoyment of the process of properly smoking a cigar or the process of critiquing a movie as one consumes it, even if the cigar or movie is of low quality.

Figure 1: Effect of Subjective Expertise on Item and Process Enjoyment
Subjective expertise generally has a positive effect on item enjoyment and process enjoyment. However, with lower (higher) quality item, the positive effect of subjective expertise on item enjoyment is (not) inhibited. Accordingly, subjective expertise and quality have both additive and interactive effects on item enjoyment but have just additive effects on certain process enjoyments.

In order to examine the boundaries of the positive effect of subjective expertise
on enjoyment and to understand when the effect of subjective expertise may diverge between item and process enjoyment, we looked at how subjective expertise affects enjoyment across items of different qualities (particularly higher versus lower quality). See Figure 1 for an illustration. Building from the logic presented above, for item enjoyment, we predicted the effect of subjective expertise would strongly vary across items of different quality. In contrast, we predicted that the positive effect on process enjoyment would be similar and generally maintained across items of different qualities.

In the experiments, we manipulated quality in two ways. First, we varied quality based on generally indisputable differences in quality (e.g., famous authors’ work versus stilted amateur poetry). Second, in a placebo design (Litt and Shiv 2012; Shiv et al. 2005; Waber et al. 2008), we varied quality based only on perceived differences in qualities such that we framed a single item as higher or lower quality between subjects. This allowed us to simultaneously test the influence of two marketing manipulations: a manipulation of the external beliefs regarding the quality of an item (the placebo effect observed consistently in past research) and our focal manipulation in this paper about the internal beliefs of one’s ability to expertly experience the quality of an item (the subjective expertise effect). This allows us to test how these two different beliefs might have distinct and interactive effects. In sum, we find that when quality was manipulated by real or only perceived differences, the effect of quality had the same interactive patterns with the individual patterns of subjective expertise on item and process
enjoyment. Formally we predicted and find evidence of the following.

H4: Quality Hypothesis—A reduction in the quality of the focal consumption item
will have a stronger dampening on the positive effect of subjective expertise
on domain item enjoyment than on domain process enjoyment.

1.4 Experiment 1a: Item Enjoyment and Wine

In possibly no other consumption domain is expertise’s relation to enjoyment as
often talked about and empirically researched as in wine (Ballester et al. 2008; Hughson
and Boakes, 2009; Plassmann et al., 2008; Solomon, 1997). Accordingly, we begin with a
simple experiment on wine in Experiment 1a.

Experiment 1a as well as Experiments 1b-1d sought to broadly test the
hypothesis that subjective expertise increases item enjoyment (H1). We examined this
hypothesis in domains relevant to the public discussion and research on expertise (i.e.,
wine, film, and literature) as well as the consumption domain of marketing material (i.e.,
advertisements). Additionally, Experiments 1a-1d utilize slight differences in
methodology. These differences sought to offer breadth, test alternative explanations,
and provide converging evidence for the importance of subjective expertise on item
enjoyment. More specifically, Experiment 1a examines the influence of domain
subjective expertise on feelings about the general enjoyment of a domain (i.e., wine) and
Experiment 1b on predicted enjoyment of a novel item in a domain (i.e., a new film).
These experiments capture the construct of predicted consumption enjoyment, a construct important to marketers who try to increase consumers’ likelihood to consume. Lastly, Experiments 1c and 1d examine the focal measure of this paper, how subjective expertise can offer consumers’ actual enjoyment from consumption, and 1d addresses certain alternative explanations. Together this set of experiments provides a broad test of the basic item enjoyment hypothesis (H1) and lays a foundation for the theoretical extensions of Experiments 2 – 4b. Results for Experiments 1a-1d are summarized in Figure 2.

![Figure 2: Effect of Subjective Expertise on Item Enjoyment in Four Domains](image)

Data shown for the item enjoyment of the content in the domain of the subjective expertise manipulation for Experiment 1a-1d. All adjacent high versus low expertise mastery bars in each individual experiment are significantly different ($p < .05$).
1.4.1 Method

1.4.1.1 Participants

Participants were recruited using Amazon Mechanical Turk (for all but Experiments 3a-b), and care was taken to prevent repeat participants across experiments. Additionally, to maintain quality, only participants who passed an attention check were admitted. Furthermore, for this wine experiment, the survey was preprogrammed such that only participants who indicated that they were 21 years or old and they drank wine at least “several times a year” on a wine consumption frequency scale were accepted into the wine experiment, yielding a sample of eighty-seven participants (Male = 54, Female = 33, \( M_{age} = 32.92 \), \( SD = 11.02 \)). Non-qualifying participants were sent to an unrelated experiment.

1.4.1.2 Procedure and Materials

All experimental manipulations of subjective expertise and the consumption stimuli, for this study and all others, are presented in the supplementary materials.

There were two conditions in this experiment, and participants were randomly assigned to one of them. In the high subjective expertise condition, participants took an easy multiple-choice quiz about wine (sample question: “Wine is generally made from what fruit?”) and were provided feedback that indicated that they had some wine expert abilities. In the low subjective expertise condition, participants took a multiple-choice quiz about wine intended to be difficult (sample question: “What does austere mean?”) and
were provided no feedback on their performance. Note, this study’s experiments closely resemble this design, in which participants were randomly assigned to either a high subjective expertise condition with an easy test that was paired feedback indicating some expertise regardless of performance versus a low expertise condition with a difficult test that (usually but not in Experiment 1a) was paired with feedback indicating no expertise regardless of performance.

Next, participants rated how much they enjoyed wine on a 7-point scale from “Not At All” to “Extremely.” Comparative analyses in the subsequent experiments (particularly Experiments 4a and 4b) reveal that this measure, which directly refers to enjoyment of the item itself, assesses item enjoyment.

1.4.2 Results

As predicted, participants induced to feel greater subjective expertise reported more enjoyment of wine consumption than those in the low subjective expertise condition ($M_{\text{high}} = 5.28$, $SD = 1.40$, $M_{\text{low}} = 4.61$, $SD = 1.28$, $t(85) = 2.31$, $p = .023$, see Figure 2).

1.5 Experiment 1b: Item Enjoyment and Film

Experiment 1b turned to a different domain, film, and included a manipulation check used to conduct a mediation analysis.
1.5.1 Method

1.5.1.1 Participants

Eighty-nine participants (Male = 46, Female = 43, $M_{age} = 33.65$, $SD = 11.39$) were recruited on Amazon Mechanical Turk and completed the experiment.

1.5.1.2 Procedure and Materials

In this experiment, participants read that they would be taking a quiz on film and were then randomly assigned to either the high subjective expertise or low subjective expertise condition. In the high subjective expertise condition, participants were given an easy multiple-choice quiz about film (sample question: “What is a crane shot?”). Participants were then provided with feedback that indicated they had some film expertise abilities. In the low subjective expertise condition, they were given a very difficult quiz that included real and fake film questions (sample questions: “What is Mise en scène?” “What is falling rhythm?”). Participants were then provided feedback that indicated they had low abilities in film.

Participants next reported their level agreement on a 6-point scale from “Strongly Disagree” to “Strongly Agree” with the statement, “Compared with others, my knowledge of filmmaking is above average.” Lastly, we told participants about a cinematographer who had taken high quality nature shots for an indie film. Participants saw an example picture of a lake, and they were told the shots had been assembled into
a montage scene. Participants rated how much they would enjoyed watching the scene on a 7-point scale from “Not At all” to “Very Much”.

1.5.2 Results

As predicted, those in high versus low subjective expertise felt more personal film expertise ($M_{high} = 3.52, SD = 1.31, M_{low} = 1.98, SD = 1.32, t(87) = 5.54, p < .001$) and predicted more enjoyment of the film scene ($M_{high} = 5.24, SD = 1.21, M_{low} = 4.49, SD = 1.32, t(87) = 2.78, p = .006$; see Figure 2). This latter effect of subjective expertise on predicted enjoyment of the film scene was found to be mediated by the feelings of personal film expertise in a simple 5,000 bootstrap mediation model (95% CI [.0851, .7895]).

1.6 Experiment 1c: Item Enjoyment and Advertisements

Past work finds marketing content itself can be enjoyable (Moore and Harris, 1996). Experiment 1c tested whether subjective expertise can play a role in this enjoyment. In contrast to the previous experiments, Experiment 1c and all subsequent experiments investigated the effect of subjective expertise manipulation on actual rather than predicted consumption.

1.6.1 Method

1.6.1.1 Participants

One hundred thirty-eight (Male = 96, Female = 41, Other = 1, $M_{age} = 30.88, SD = 9.21$) were recruited on Amazon Mechanical Turk and completed the experiment.
1.6.1.2 Procedure and Materials.

Participants read that they would take a quiz on brands. They were then randomly assigned to either the high subjective expertise or low subjective expertise condition. On both quizzes, participants were given the logo of a brand and asked to match the brand to one demographic that most fit the brand from given a list (e.g., jock, hipster, prep). In the high subjective expertise condition, participants saw popular brands (e.g., the Nike swoosh logo or the Mac apple logo) and received feedback that indicated they had some brand expertise. In the low subjective expertise condition, participants were presented with obscure or fake brands for the quiz and received feedback indicating low brand expertise.

After the subjective expertise manipulation, participants clicked through a series of stylish advertisements (including ads from Ray-Ban, Glassex, and Anagram Bookshop). Participants then indicated how much they enjoyed looking through the ads on a 7-point scale from “Not At all” to “Very Much”.

1.6.2 Results

As predicted, participants induced to feel relatively higher versus lower brand expertise enjoyed the advertisements more ($M_{high} = 5.25$, $SD = 1.24$, $M_{low} = 4.62$, $SD = 1.57$, $t(136) = 2.66$, $p = .009$), see Figure 2.
1.7 Experiment 1d: Item Enjoyment and Literature

Experiments 1d tested two alternative explanations for the previous experiments: generalized positive mood and generalized expertise. These alternative explanations would both predict that a domain subjective expertise manipulation should also increase enjoyment of any content outside of the domain due to a general feeling of positive mood or expertise. If a manipulation of subjective expertise in one domain (e.g., literature) only increases (or more greatly increases) enjoyment in the manipulated domain and not another domain (e.g., in literature not sports), this would provide further support that subjective expertise is having an independent effect. This was tested using a 2 (literary subjective expertise: high vs. low) X 2 (domain of quotes: literary vs. sport) between-subjects design.

1.7.1 Method

1.7.1.1 Participants

Three hundred and forty-four (214 Males, 130 Females; $M_{age} = 31.0$, $SD = 10.88$) participants were recruited on Amazon Mechanical Turk and completed the experiment.

1.7.1.2 Procedure and Materials

Participants read that they would take a quiz on literary writing and were randomly assigned to either the high subjective expertise or the low subjective expertise condition. In the high subjective expertise condition, participants took a basic multiple-choice quiz about literary writing (e.g., “What is a metaphor?”) and read feedback
indicating that they had some expert literary abilities. In the low subjective expertise condition, participants took a multiple-choice quiz about literary writing intended to be difficult (e.g., a question asked about “deconstructive fictionalism,” which is not a real concept) and provided with feedback that indicated they did not have expert literary abilities.

At this point, participants were randomly assigned to read a set of five short passages from either famous literary authors or athletes. All quotes were authentic quotes attributed to the respected writer or athlete (e.g., Ernest Hemingway or Michael Jordan), and they were respectively described as coming from either the domain of literary writing or the domain of sports. In the athletes condition, it was also noted to participants that they would now be moving on to a different topic from literary.

Participants rated “How much did you enjoy the authors’ quotes?” on a 7-point scale anchored at “Not At All” and “A Lot.”

### 1.7.2 Results

To test the prediction that subjective expertise increases enjoyment in the domain of expertise but not in other domains, we conducted a 2 (literary subjective expertise: high vs. low) X 2 (domain of quotes: literary vs. sport) between-subjects ANOVA on item enjoyment. The interaction was significant, $F(1, 340) = 6.29, p = .013; F(1, 340) = 3.99, p = .046$. For literary quotes, participants in the high versus low literary subjective expertise condition enjoy the quotes more ($M_{\text{high}} = 5.26, SD = 1.43; M_{\text{low}} = 4.75, SD = 1.55$,}
$F(1, 340) = 5.96, p = .015$, see Figure 2). In contrast, for content in the sports domain, a
domain unrelated to the subjective expertise manipulation, the same pattern was not
observed. Participants in the high versus low subjective literary expertise condition did
not enjoy the sports quotes more ($M_{\text{high}} = 5.29, SD = 1.38, M_{\text{low}} = 5.53, SD = 1.183, \ F(1, 340)
= 1.25, p = .265$). These findings provide evidence for the effect of subjective expertise on
item enjoyment (H1) while controlling for alternative accounts of generalized mood and
generalized expertise effects.

### 1.8 Experiment 2: Item Enjoyment and Quality

Experiments 1a-1d showed that feeling more like an expert in a certain domain, such as wine or literature, increases enjoyment of items in that domain. It is possible, however (H4), that this effect does not extended to lower quality items in that domain. To test this possibility, in this experiment, we varied content in terms of quality (high “good” vs. low “bad”). We hypothesized (H4) that subjective expertise would not have the same strong positive effect on item enjoyment for the low-quality items. If so, this would demonstrate an important boundary condition and a nuance of the subjective expertise effect on item enjoyment.

#### 1.8.1 Method

**1.8.1.1 Participants.**

One hundred and twenty-two (Male = 66, Female = 56, $M_{\text{age}} = 30.97, SD = 10.3$) participants who identified as Democrats were recruited on Amazon Mechanical Turk
and completed the experiment. Recruiting Democrats made it likely that these participants would judge certain items (i.e. George W. Bush speech quotes) to be low quality. To ensure this effect isn’t specific to political domains, Experiments 4a and 4b replicated the same interactive patterns with non-political content and without political affiliation as a recruitment criterion.

1.8.1.2 Procedure and Materials

Participants read that they would be taking a quiz on literary writing. This test was the same across all participants, and featured easy, difficult, and fake questions. After taking the test, participants randomly read positive or negative feedback based on random assignment to the high subjective and low subjective expertise conditions. Assignment to the same quiz with randomized feedback eliminates a potential confound in Experiments 1a-1d and some of the later experiments that being exposed to different questions and content in different version of the quiz might affect enjoyment between conditions rather than the direct manipulation of the subjective expertise construct.

After the quiz, participants read that the next portion of the study involved a person who uses literary techniques in their works, such as a president, journalist, or famous author. Participants were then randomly assigned to either the Thomas Jefferson (high “good” quality) or George W. Bush (low “bad” quality) condition. Participants were shown a picture of the respective president, were told the years that the president served as present, and that the president used literary writing techniques in his speeches.
Participants then read three real quotes from the assigned US President in their condition. After reading the quotes, the participants answered the same measure of item enjoyment from Experiment 1d.

### 1.8.2 Results and Discussion

We conducted a 2 (subjective expertise: high vs. low) X 2 (quality: high, “good” vs. low, “bad”) between-subjects ANOVA on the measure of item enjoyment (see Figure 3). The interaction was significant, $F(1, 118) = 4.21, p = .043$. For the good quality quotes, participants in the higher subjective expertise condition enjoyed the quotes more than those in the low condition ($M_{\text{high}} = 5.25, SD = 1.14$, $M_{\text{low}} = 4.56, SD = 1.61$, $F(1, 118) = 4.15, p = .044$). For the bad quality quotes, participants in the higher subjective expertise condition did not enjoy the quotes more than those in the low condition ($M_{\text{high}} = 3.96, SD = 1.33$, $M_{\text{low}} = 4.28, SD = 1.28$, $F(1, 118) = .80, p = .372$).
Figure 3: Effect of Subjective Expertise on Item Enjoyment by High Versus Low Quality

The adjacent high versus low expertise mastery bars are significantly different ($p < .05$) for only the high quality items.

Together, these findings support H1 and part of H4: that subjective expertise increases item enjoyment more (or possibly only) for items of higher quality. In the final two experiments and general discussion, we return to the question of high versus low quality, however, in the next experiments, we examine improvement actions in consumption.
1.9 Experiment 3a: Improvement Action – Stirring Tea

If subjective expertise increases enjoyment of certain consumption items, then subject experts might also go to greater lengths to enhance those consumption items. In Experiments 3a and 3b, we tested this prediction (H2). Specifically, in Experiment 3a we tested whether subjective expertise increases how often consumers engage in actions that might improve later consumption experiences (e.g., carefully preparing a drink) in a 2 (subjective expertise: high vs. low) x 2 (stirring: improves taste vs. does not improve taste) between-subjects design. This experiment uses the consumption item hot tea. This added a test of the general item enjoyment hypothesis with an item that is physically consumed.

1.9.1 Method

1.9.1.1 Participants

Ninety-three students were recruited for a general study that did not mention tea in recruitment materials. When participants arrived three participants were excluded because they could not consume tea (allergies or religious reasons) and six participants were excluded for failing a basic tea question (described in the procedure). This yielded a final sample of eighty-four participants (Male = 25, Female = 59; $M_{age} = 21.49$, $SD = 2.65$).
1.9.1.2 Procedure and Materials

Participants were brought from the lab waiting room into the lab area hallway one at a time. Participants were pre-assigned by a randomized list to be in either the *high subjective expertise* or *low subjective expertise* condition. All participants were asked, “Are you familiar with teas like green tea, black tea, and Earl Grey tea?” Participants who said “no” or indicated they had dietary restrictions (i.e., allergies or religious reasons) were then excluded from the experiment.

In the high subjective expertise condition, the research assistant (RA) gave participants who answered “yes” a piece of paper from an adjacent table and said, “Alright, that means you have some higher tea knowledge. Please read this and it will explain how your high tea knowledge relates to the study today.” In the low subjective expertise condition, the RA asked participants who answered “yes” about their familiarity with two fake teas, “Are you familiar with teas like PSG teas or DSM teas?” All participants replied “no.” The RA gave participant a piece of paper from an adjacent table and said, “Alright, that means you have lower tea knowledge. Please read this and it will explain how your lower tea knowledge relates to the study today.”

After participants read the feedback, the RA led them into Room One. In Room One, the RA explained that participants would be sampling an organic English breakfast tea. Approximately three ounces of hot, fresh-brewed tea were provided to participants, and they had the option to stir their tea at a stirring station a few feet away. The station
had a decorative picture of tea, as well as a plate with metal spoons. There were no additives (e.g., sugar, milk) on the table, so all participants drank the tea completely “plain.”

Participants randomly received different information about the stirring. In the stirring improves condition, participants were told that experts often like to stir their tea because it improves the taste. In the stirring no improvement condition, participants were told that some experts like to stir their tea for the symbolic ritual, but with this type of freshly brewed tea it would not improve the taste. Participants then chose whether or not to stir the tea on the way out of Room One toward Room Two. In Room Two, participants sat down at an available computer and entered their participant ID number, which was attached to their cup.

After participants entered their participant ID number into the computer, they were asked to sample the tea and rate how much they agreed with statement, “I liked the taste of the tea” on a 7-point scale anchored at “Not At All” and “A Lot.”

1.9.2 Results and Discussion

Replicating previous experiments on the effect of subjective expertise on item enjoyment, participants in the high versus low subjective expertise condition liked the taste of the tea more ($M_{high} = 5.18$, $SD = 1.41$, $M_{low} = 4.37$, $SD = 1.76$; $t(82) = 2.31$, $p = .023$).

Next, we assessed whether or not the expertise condition impacted likelihood to stir. When stirring was said to improve taste (an improvement action), those in the high
subjective expertise condition chose to stir significantly more often than those in the low subjective expertise condition (39% versus 8%, $\chi^2(1, N = 46) = 6.08, p = .014$, see Figure 4).

When the stirring was said to not improve the taste, those participants in the high versus low subjective expertise condition did not choose to stir the tea significantly more often (5% versus 0%, $\chi^2(1, N = 38) = .362, p = .362$). We did not observe a main effect of tea stirring condition on item enjoyment ($F(1, 80) < .01, p = .93$) nor an interaction of subjective expertise and tea stirring condition on item enjoyment ($F(1, 80) = .59, p = .446$).

![Figure 4: Effect of Subjective Expertise on Likelihood to Engage in Improvement Actions](image)

Data shown from both Experiments 3a and 3b for when the action (respectively stirring tea or learning about a passage) was said to improve enjoyment. Adjacent high versus low expertise mastery bars are significantly different ($ps < .05$).
Together, these findings provide the support for the hypothesis that subjective expertise increases engagement in actions that foreseeably improve appreciation of consumption items (H2). It also further broadly supports this study by testing in with physical consumption.

1.10 Experiment 3b: Improvement Action – Learning Exercise

In Experiment 3a, we found that subjective expertise leads people to be more likely to engage in behaviors that are said to improve the quality of their consumption experience. Experiment 3b provided an additional test of this finding, by measuring voluntary engagement in a pre-consumption learning exercise.

Additionally, this experiment included a control condition in which no negative feedback was provided. This allowed us to practically test if a very short quiz-feedback design, similar to those currently popular online (Mohan, 2015), could be used to increase item enjoyment.

1.10.1 Method

1.10.1.1 Participants

Two hundred ninety-seven (Male = 131, Female = 161, Decline to State/Other = 5; \( M_{age} = 41.28, SD = 13.97, \) Unreported = 8) were recruited from a large online class in psychology and economics as part of the weekly class survey. Unlike the other online surveys in the class, it did not include a reading check.
1.10.1.2 Procedure and Materials

Participants were informed that they would be taking a quiz on literary writing. Participants were randomly assigned to either the high subjective expertise or the control condition. In the high subjective expertise condition, participants were given an easy multiple-choice quiz about literary writing (e.g., “What is a metaphor?”) and were provided feedback indicating that they had some expert literary abilities. In the control condition, the participants did not take any quiz and moved on to the content without receiving feedback.

Participants were told that they would read a high quality poem that was known for its literary qualities from the web collection Poetry Soup. Unlike previous literary content, this poem was neither written by a famous poet nor by a writer from the actual Poetry Soup, but instead by the first author, who has some basic training in literary writing. This ensured that no participant could have been familiar with the author or text.

After reading the three-page poem, we assessed participants’ item enjoyment on two measures this time. In this experiment, first participants indicated how much they enjoyed the poem (quote-enjoyment) and second on an additional new measure of item enjoyment, how much they enjoyed the quality (quality-enjoyment) of the poem on a 7-point scale. The quality-enjoyment measure was added as a check that the measure of item enjoyment used in the previous was indeed measuring item enjoyment, defined as
enjoyment of the item’s quality. Across the last experiments we used multiple assessments to measure item and process enjoyment for robustness and nuance checks (Note process enjoyment was not measured till Experiment 4a). There were no hypotheses that these assessments measuring the same construct would differ. Results showed they did not meaningfully differ and as predicted “moved together” in the same patterns with the independent variables.

Next in this experiment, participants were then informed that there was one more quote from a new author who is known for having literary talent, and asked whether or not they would “like to go through an analysis exercise first to explain the literary techniques and meaning behind the quote in depth?” and answered “yes” or “no.”

This was the end of the main measures in this experiment to assess H1 and H2. However, to maintain consistency with the directions of the experiment, participants who chose “yes” did a short analysis exercise on the second passage. Then, all participants read an excerpt from Ernest Hemmingway’s *A Farewell to Arms*, and responded to the same two measures of item enjoyment as they did with the first literary piece. The effect of the subjective expertise manipulation on enjoyment of this second passage was the same as the first.
1.10.2 Results and Discussion

As predicted, those in the high subjective expertise condition versus the control condition had more item enjoyment (quote-enjoyment: $M_{\text{high}} = 3.70$, $SD = 1.60$, $M_{\text{control}} = 3.12$, $SD = 1.49$, $t(295) = 3.23$, $p = .001$; quality-enjoyment $M_{\text{high}} = 3.48$, $SD = 1.64$, $M_{\text{control}} = 3.07$, $SD = 1.49$, $t(295) = 2.24$, $p = .026$). Additionally, as shown in Figure 4, those in the high subjective expertise condition were more likely to engage in the improvement action than those in the control condition (72% vs. 56%, $\chi^2(1, N = 297) = 8.59$, $p = .003$, see Figure 4). Lastly, collapsing across the choice to engage or not engage in the improvement action, participants in the high subjective expertise condition versus control condition had more item enjoyment of the Hemmingway passage (quote-enjoyment: $M_{\text{high}} = 4.74$, $SD = 1.55$, $M_{\text{control}} = 4.25$, $SD = 1.54$, $t(295) = 2.73$, $p = .007$; quality-enjoyment: $M_{\text{high}} = 4.89$, $SD = 1.58$, $M_{\text{control}} = 4.39$, $SD = 1.55$, $t(295) = 2.76$, $p = .006$).

Together, these findings support the item enjoyment hypothesis (H1) and the improvement action hypothesis (H2). Further, this experiment provides evidence that a short quiz with feedback can increase item enjoyment and increase engagement in actions believed to improve consumption item appreciation.

1.11 Experiment 4a: Item Versus Process Enjoyment – The Influence of Quality

In Experiments 3a and 3b we observed that subjective experts were more likely to engage in processes said to improve an item’s qualities or the understanding of an item’s qualities. In the last two experiments, we examined subjective expertise’s effect on
how much consumers enjoy engaging in consumption processes. Here, we assess process enjoyment, an often-neglected source of enjoyment in consumption.

We explicitly compared and contrasted the effect of subjective expertise on process enjoyment (e.g., enjoyment of critiquing the taste) with item enjoyment (e.g., enjoyment of taste). Participants were placed into 2 between (subjective expertise: high vs. low) X 2 within (quality: high, “good” vs. low, “bad”) X within (enjoyment source: item vs. process) mixed design. In short, subjective expertise was manipulated between subjects (high vs. low), then all participants consumed sets of both high and low quality items and their item and process enjoyment of each the two quality sets were assessed.

For high quality items, we predicted that subjective expertise would lead to a strong increase in both item enjoyment (H1) and process enjoyment (H3). For low quality items, building on the findings of Experiment 2 and H4, we predicted that subjective expertise would not lead to an increase in item enjoyment, but would in contrast lead to an increase in process enjoyment.

Across nearly all consumption domains, consumers evaluate and critique. We turned to these processes as the basis for measuring process enjoyment. To asses this in Experiment 4a, first participants read literary items without any instructions on how to evaluate or critique the items. After consumption we asked participants how much they enjoyed any engagement in evaluation and critiquing (undirected-process-enjoyment). After reading quotes, the same participants were also directed to engage in a structured
evaluation process, after which we measured enjoyment of this evaluation and
critiquing process (directed-process-enjoyment). Experiment 3b, where the subjective
experts elected to engage in a learning process more often, suggests that subjective
experts may freely make more of an effort to consider, evaluate, and be critically
involved with an item. This second measure allowed us to assess whether subjective
experts would get greater enjoyment from a directed critical evaluation process that
would be independent of any greater likelihood for subjective experts to freely engage in
a process. We predicted subjective experts would get more enjoyment in both
undirected and directed process engagement.

Finally, we measured people’s experienced subjective expertise. This allowed us
to provide additional evidence for the effect of subjective expertise on both item and
process enjoyment via mediation analyses.

1.11.1 Method

1.11.1.1 Participants

One hundred and fifty-nine participants (Male = 107, Female = 52, $M_{age} = 30.03$, $SD = 10.58$) were recruited on Amazon Mechanical Turk and completed the experiment.

1.11.1.2 Procedure and Materials

Participants were told that they would be taking a quiz on literary writing and
were randomly assigned to either the high subjective expertise or low subjective expertise
condition. In the high subjective expertise condition, participants were given an easy
multiple-choice quiz about literary writing (e.g., “What is a metaphor?”) and were provided feedback indicating that they had some expert literary abilities. Participants in the low subjective expertise condition took a fake multiple-choice quiz about literary writing intended to feel difficult (e.g., “What is deconstructive fictionalism?”) and received feedback indicating they had no expert literary abilities.

Next, all participants read high “good” quality and low “bad” quality content. First, participants read three quotes by famous authors (Hemingway, Yeats, and Aeschylus), with the authors’ names cited. We told participants that these quotes were known for strong and skilled demonstrations of literary language.

Participants were then asked one question each about their quote, quality, and undirected-process enjoyment on a 7-point anchored at “Not At All” and “A Lot.” The first two questions were used in experiment 3b to measure item enjoyment (quote-enjoyment and quality-enjoyment). These two questions read: “How much did you enjoy reading the quotes?” and “How much did you like the quality of the quotes?” The last question measured process enjoyment and read: “How much did you enjoy the process of evaluating and critiquing the quality of these quotes?” This measure is referred to as undirected-process-enjoyment.

Participants were also asked to read three quotes that were explained as known as bad examples of literary language, and that these quotes can offer insight on what authors should not do. Two quotes were from the “Bad Poems Examples” on the
website Poetry Soup, and one more quote was completely fabricated by us to be low quality. These quotes were cited with fake indemnities. Participants were then asked to consider this second batch of quotes and answered the same three questions as for the first batch.

Next, we had participants directly engage in a consumer process and measured their enjoyment of the process. Specifically, we asked participants to assume the role of a critic and play “The Word Game” (see supplementary materials for full game details). In this process participants were told that, “Many people enjoy reviewing written items and thinking about what’s good and what might be improved.”

Participants then saw the poetry quote by Yeats for a second time, and indicated from a list which words they thought did or did not describe the quote (e.g., “beautiful,” “meaningful,” “meaningless,” “pretentious”) and were asked to give the quote a letter grade. Afterwards, participants were asked to report how much they enjoyed the process of reviewing the quote in the word game process on a 7-point scale anchored at “Not At All” and “A Lot” (process-directed-enjoyment). Participants were also presented with a quote from the bad quotes section (same quote for all participants) and were asked to do the same activity. Once again, participants reported enjoyment of this second process.

Additionally, we used the participants’ grades of the poem (grade-enjoyment) as a secondary measure of item enjoyment (specifically the grade ostensibly represents
their attitude toward and perception of its quality), analyzing it as a continuous variable on a 13-point scale from “F” to “A+”. This measure also provided a manipulation check of quality.

Lastly, we measured subjective expertise by having participants indicate how much they agreed with two statements on a 6-point scale, anchored at “Strongly Disagree” and “Strongly Agree.” The two statements read: “I have some expertise of literary language” and “My knowledge of reading and writing is above average.” Participants’ responses were averaged into a single index of subjective expertise ($r = .71, p < .001$).

1.11.2 Results and Discussion

To explore the effect of the subjective expertise manipulation, we conducted a 2 (subjective expertise: high vs. low) X 2 (quality: high, “good” vs. low, “bad”) mixed ANOVA on each of the enjoyment measures. See Figure 5 for representative results. We begin with the findings for item enjoyment, then process enjoyment, and finally their comparison in a larger analysis.

1.11.2.1 Item Enjoyment

As predicted by H4, and replicating Experiment 2, we observed a significant interaction of subjective expertise and item quality on all three item enjoyment measures: quote-enjoyment, $F(1, 157) = 9.14, p = .003$; quality-enjoyment, $F(1, 157) = 2.95$,
Figure 5: Effect of Subjective Expertise on Item Enjoyment and Process Enjoyment by Quality

All adjacent high versus low expertise bars are significantly different ($p < .05$) except for item-enjoyment of low quality items. For display, the graph uses the specific quote-enjoyment for item enjoyment and natural-process-enjoyment measure for process enjoyment.

For the high quality items, there was positive effect of subjective on item enjoyment, such that participants in the high expertise condition had more item enjoyment of the quote than those in the low subjective expertise condition (quote-enjoyment: $M_{\text{high}} = 5.35$, $SD = 1.29$, $M_{\text{low}} = 4.64$, $SD = 1.48$, $F(1, 157) = 7.24$, $p = .008$; quality-enjoyment: $M_{\text{high}} = 5.72$, $SD = 1.09$, $M_{\text{low}} = 5.24$, $SD = 1.08$, $F(1, 157) = 4.99$, $p = .027$; grade-enjoyment: $M_{\text{high}} = 10.98$, $SD = 1.99$, $M_{\text{low}} = 10.28$, $SD = 2.43$, $F_{\text{grade-enjoyment}}(1, 157) = 5.55$, $p = .02$). In contrast, and replicating the findings from Experiment 2, when consuming the
bad items there was not a positive effect of subjective expertise on item enjoyment. Specifically, participants in the high subjective expertise condition did not have significantly more or less enjoyment of the quote itself than those in low subjective expertise condition (quote-enjoyment: $M_{\text{high}} = 3.16, SD = 1.57, M_{\text{low}} = 3.31, SD = 1.52, F(1, 157) = .32, p = .575$; quality-enjoyment: $M_{\text{high}} = 2.48, SD = 1.49, M_{\text{low}} = 2.47, SD = 1.37; F(1, 157) < .01 , p = .973$; grade-enjoyment: $M_{\text{high}} = 5.54, SD = 2.35, M_{\text{low}} = 5.82, SD = 2.36, F(1, 157) = 4.18, p = .347$).

1.11.2.2 Process Enjoyment

For the process enjoyment measures, we did not observe a significant interaction of subjective expertise and item quality (undirected-process-enjoyment), $F(1, 157) = 1.761, p = .186$; directed-process-enjoyment, $F(1, 157) = .07, p = .793$). Instead, we observed an unqualified main effect such that, across good and bad content, participants in the high subjective expertise condition reported higher enjoyment on both process measures compared to those in the low subjective expertise condition (undirected-process-enjoyment: $M_{\text{high}} = 4.55, SD = 1.13, M_{\text{low}} = 3.76, SD = 1.26, F (1, 157) = 17.26, p < .001$; directed-process-enjoyment: $M_{\text{high}} = 4.80, SD = 1.33, M_{\text{low}} = 4.26, SD = 1.39, F(1, 157) = 6.42, p = .012$). Further analyses showed that the effect of the subjective expertise manipulation on process enjoyment was also significant and positive for individual tests on each of the measures for both good and bad quality, $ps < .05$. 

38
1.11.2.3 Comparison

Next, we formed two indices of item enjoyment and process enjoyment by respectively averaging across the two main measurements of item enjoyment (quote-enjoyment and quality-enjoyment) and the two measures of process enjoyment. A 2 (subjective expertise: high vs. low) X 2 (quality: high, “good” vs. low, “bad”) X 2 (enjoyment source: item vs. process) mixed ANOVA was conducted. This analysis revealed the predicted three-way interaction, providing further evidence of the distinct and complex effects that subjective expertise has on the different sources of enjoyment, \( F(1, 157) = 4.71, p = .03 \).

1.11.2.4 Mediation

As predicted, participants in the high compared to the low subjective expertise condition felt higher expertise, \( (M_{\text{high}} = 4.20, SD = 1.04, M_{\text{low}} = 3.33, SD = 1.18; t(157) = 4.93, p < .001) \). Next we conducted seven individual simple mediation analyses (with 5,000 bootstraps) on the effect of the subjective expertise manipulation on each enjoyment item that showed a significant effect of the subjective expertise manipulation via the indirect path of self-reported subjective expertise. These results provided meditational evidence in support of the subjective expertise mechanism.

Regarding enjoyment with the good items, the subjective expertise had a positive effect on all five enjoyment measures (quote-enjoyment, quality-enjoyment, grade-enjoyment, process-undirected-enjoyment, and process-directed-enjoyment). With these
good items, we observed a significant indirect effect of condition through subjective expertise for all five of those enjoyment measures (95% confidence in respective order: [.15, .57], [.02, .36], [.08, .73], [.10, .58], [.11, .57]). Regarding enjoyment with the bad items, as mentioned previously, the subjective expertise had a positive effect on only two of the process enjoyment measures (process-undirected-enjoyment and process-directed-enjoyment). With these two process measures on the bad items, we observed a significant indirect effect of condition through subjective expertise for these two enjoyment measures (95% confidence in respective order: [.13, .56], [.02, .43]).

1.11.2.5 Summary.

These findings provide support for the hypotheses that subjective expertise has a positive effect on process enjoyment (H3) and that subjective expertise can have independent effects on item enjoyment and process enjoyment (H4). Particularly, subjective expertise has a smaller (or even a null or different) effect on item enjoyment of low quality items compared with high quality items (H4), but has a similar positive effect on process enjoyment across high and low quality items. Further, the mediation analyses provide additional support of the effect of subjective expertise on both item and process enjoyment.

1.12.1 Experiment 4b: Item Versus Process Enjoyment – The Influence of “Placebo” Quality

In this last experiment, we expanded our investigation by examining how subjective expertise affects and interacts with previously researched quality placebos
effects (Plassmann et al. 2008; Shiv, Carmon, and Ariely 2005). This experiment allows us to simultaneously test and differentiate two “belief effects”: the beliefs about the product quality captured by a quality framing placebo manipulation and the beliefs about one’s expertise in the domain captured by the subjective expertise manipulation.

The findings of this last experiment suggest that subjective expertise may play an important role in quality placebo effects on enjoyment and potentially consumers’ ability to determine item’s objective quality. Given that those with higher objective experts usually have more subjective expertise (Alba and Hutchinson 2000), our findings suggest that objective experts may at times be more susceptible to certain quality framing effects compared to what one might otherwise predict.

Lastly, using a between-subjects manipulation of quality and holding objective quality constant between “quality” conditions, this experiment provides a more controlled test of the three-way interaction (H4) of subjective expertise, quality, and source of enjoyment found in Experiment 4a. The design for Experiment 4b was a 2 between (subjective expertise: high vs. low) X 2 between (quality: high, “good” vs. low, “bad”) X 2 within (enjoyment source: item vs. process) design.
1.12.1 Method

1.12.1.1 Participants

Three hundred seventy-one participants (Male = 235, Female = 133, Other/Decline to State = 3; \( M_{\text{age}} = 28.88, SD = 8.47 \)) were recruited on Mechanical Turk and completed the experiment.

1.12.1.2 Procedure and Materials

Participants were randomly assigned to either the high subjective expertise or low subjective expertise condition using the identical quiz/feedback manipulation in the previous Experiment 4a.

Next, participants were randomly assigned to the high quality or low quality condition. In the high quality condition, we told participants that they would read a passage written by a successful literary author that exemplified literary techniques and used ambiguity well. In the low quality condition, participants were told they would read a passage written by a “trashy romance” author that was very poor at using literary techniques and had some problems with ambiguity. All participants then read a short and dramatic prose written for this experiment.

Next, participants reported their item enjoyment of the passage by answering how much they enjoyed the passage on a 7-point scale anchored at “Not At All” and “A Lot.”
We assessed process enjoyment, in this experiment only by asking participants to assume the role of a critic and play “The Word Game.” Because the undirected-process enjoyment measure in Experiment 4a may have possibly biased the directed-process-enjoyment measure, we excluded it in Experiment 4b. Participants answered how much they enjoyed the process of the game on a 7-point scale anchored at “Not At All” and “A Lot.” We also assessed the grade participants’ gave the piece as a secondary measure of item enjoyment. As in Experiment 4a, we did not use it in the three-way interaction because it was not measured on the same scale nor was it a direct measure of item enjoyment.

1.12.2 Results and Discussion

To explore the effect of the subjective expertise manipulation on enjoyment we conducted a 2 (subjective expertise: high vs. low) X 2 (quality: high, “good” vs. low, “bad”) between-subjects ANOVA separately on both the item enjoyment and process enjoyment measures.

1.12.2.1 Item Enjoyment

For item enjoyment, this analysis revealed the predicted interactive pattern, $F(1, 367) = 6.84, p = .009$. When the prose piece was said to be of good quality, participants in the high expertise condition enjoyed the prose piece significantly more than in the low subjective expertise condition ($M_{\text{high}} = 4.67, SD = 1.38, M_{\text{low}} = 4.15, SD = 1.44, F(1, 367) = 6.67, p = .01$). In contrast, when the prose piece was said to be of bad quality, participants
in the high subjective expertise condition did not have more enjoyment of the quote itself compared to those in low subjective expertise condition ($M_{\text{high}} = 2.36$, $SD = 1.23$, $M_{\text{low}} = 2.58$, $SD = 1.40$, $F(1, 367) = 1.26$, $p = .262$).

How did the two belief effects relate to one another? There were both independent and interactive effects of the manipulated beliefs about expertise and beliefs about quality on item enjoyment. That is, though there was a strong main effect of placebo quality on enjoyment across those in high and low subjective expertise conditions ($F(1, 367) = 186.20$, $p < .001$), the positive versus negative quality framing had a greater effect on those induced to feel high subjective expertise (mean difference = 2.31) versus those induced to feel low subjective expertise (mean difference = 1.57).

Overall the same patterns for the secondary measure of item enjoyment, grade-enjoyment were observed. There was a subjective expertise by framed quality interaction, $F(1, 367) = 6.92$, $p = .009$. In particular, when the prose piece was described as good quality, participants in the high subjective expertise condition gave the item a higher grade than in the low subjective expertise condition ($M_{\text{high}} = 9.95$, $SD = 2.16$, $M_{\text{low}} = 8.98$, $SD = 2.75$), $F(1, 367) = 6.50$, $p = .011$). In contrast, when the prose piece was described as bad quality, there was no significant difference in grading between participants in the high subjective expertise condition and those in the low subjective expertise condition ($M_{\text{high}} = 5.37$, $SD = 2.84$, $M_{\text{low}} = 5.82$, $SD = 2.71$, $F(1, 367) = 1.387$, $p = .24$).
1.12.2.2 Process Enjoyment

For process enjoyment there was no interaction between subjective expertise and quality frame, $F(1, 367) = .59, p = .442$. Instead, as predicted there was an unqualified main effect of subjective expertise on process enjoyment, such that participants in the high versus low subjective expertise condition enjoyed the process of the word game more in general ($M_{\text{high}} = 5.01$, $SD = 1.40$, $M_{\text{low}} = 4.33$, $SD = 1.58$, $F(1, 367) = 17.69$, $p < .001$) and this pattern was significant for both the high and low quality framings, $p$s < .05.

There was also a main effect of quality, such that across conditions, people enjoyed the process more with the good versus bad quality items, $F(1, 367) = 9.64$, $p = .002$.

These findings, replicating those in Experiment 4a, show that sometimes process enjoyment may vary by the quality of the item. However, regardless of the quality of the item, there will be a similar additive positive effect of subjective expertise on the enjoyment of certain consumption processes.

1.12.2.3 Comparison

A three way (subjective expertise: high vs. low) X 2 (quality: high, “good” vs. low, “bad”) X 2 (enjoyment source: item vs. process) mixed ANOVA revealed the predicted three-way interaction, $F(1, 367) = 6.34$, $p = .012$. This provides further statistical evidence that of subjective expertise has a different effect across combinations of quality and enjoyment source.
1.12.2.5 Summary

Together, these findings demonstrate that the results of the previous within-subjects manipulation of quality experiment hold in a between-subjects design. Further, even when quality differences were manipulated by a placebo frame (fake perceived differences rather than objective differences), we observed the same predicted three-way interaction (H4) of subjective expertise by quality interaction by source of enjoyment.

1.13 General Discussion

Extent research has well established that consumers’ beliefs about a product affect their experience with that product. In this paper we extend that research to examine the consumers’ beliefs about themselves, particularly in terms of their subjective expertise. Across nine experiments in various consumption domains (brands, film, poetry, tea, wine) and consumption methods (drinking, reading, viewing) we provide an empirically testable structure to predict for what products and what aspects of a consumption experience subjective expertise lead to more enjoyment of. In conclusion, we offer the following general advice to marketers, product designers, and creators of consumption experiences: don’t just make great products; make consumers feel great at using the products.

This inquiry drew an important distinction between item enjoyment and process enjoyment and tested the effect of subjective expertise on these two sources of enjoyment across items of different quality. For items of high quality, subjective
expertise positively influenced item enjoyment and process enjoyment. For items of lower quality, subjective expertise positively influence process enjoyment but not item enjoyment. Additionally, we found that subjective expertise led people to more often engage in actions that improved a consumption experience (e.g., stirring a tea to improve the flavor or engaging in a pre-consumption learning exercise).

The current study pieces together existing findings on expertise (Dahl and Moreau 2007; Deci and Ryan 2000; Norton et al. 2012; White 1959) and consumption enjoyment (Loewenstein 1999; Vohs et al. 2013) to distinguish subjective expertise as an important, distinct, and nuanced influence on consumption enjoyment. These findings can help marketers make better predictions about how subjective expertise will affect different sources of enjoyment, under what conditions these patterns will vary, and what behaviors subjective expertise might increase. However, a full understanding of the breadth and potential of subjective expertise is still unclear and a more nuanced understanding can help us harness this power for the worthy cause of increased consumer enjoyment. We turn now to discuss marketing implications and future directions with regard to three topics: consumption processes, identity, and expectations.

1.13.1 Importance of Process Enjoyment

Attention to subjective expertise and its effect on process enjoyment may be especially relevant for marketers and researchers for two reasons: First, it is typical in
modern consumption to reflect on, critique, and share information about a consumption experience, often during the experience itself. Consumers may choose content (e.g., trashy TV or a new local art show) because of the enjoyment they get from this real time process engagement with the content, rather than the content itself. For example, some consumers may watch the MTV Music Video Awards, not because of any appreciation for the videos or songs, but to draw pleasure from criticizing the performances and discussing the celebrities live on Twitter. Future research should seek to better understand “the joy of judging” gained from reflection and discussions about consumed products, and how subjective expertise plays a role. In line with our findings (Experiments 4a and 4b), we posit that judging can be fun, especially when one feels talented at judging.

Second, beyond “judging” and discussion, other consumer engagement processes involving expertise pervade modern culture, including co-creation (Coimbatore and Ramaswamy 2004), personal customization (Buechel and Janiszewski 2014), maker hobbies (Dahl and Moreau 2007), consumer societies (Belk and Costa 1998), and online consumption (Belk 2013). Thus, it may be profitable for businesses to offer consumers the opportunity to engage in processes related to their products and to help consumers to feel subjective expertise within the processes.
1.13.2 Identity and Expertise

Very few constructs have been as central to marketing research as expertise and identity, but the link between these two constructs, which we hypothesize may be quite strong, has yet to be widely explored (for some exceptions and potential insights see Dahl and Moreau, 2007; Pierce et al., 2003). Future work that unites these two powerful constructs could be quite valuable.

For instance, people largely self-categorize into identities based on whether they feel they “fit” an identity’s qualifications (Schwarz and Bless 1992; Turner and Reynolds 2011). Though there are many potential qualifications across domains (e.g., membership, similarity, emotional attachment, public displays of commitment, nationality), we argue that expertise is often an important—if not the most important—qualification in many situations. In fact, many of the most common identity-qualifications, such as ownership or group membership, may have an implicit expertise component. For instance, to have a “Mac-user identity” may imply some expertise of Mac’s applications. An American identity may imply expertise of genuinely American skills or knowledge. Therefore, if someone sees the aforementioned expertise as identity qualifications, they may not identify as a “Mac-person” or an American, even if they own a Mac or are from the USA. This lack of identity may lead to less enjoyment of their iPhone or a July 4th fireworks display. Understanding when and for which situations expertise and identity may lead
to one another and subsequently impact enjoyment is an important avenue for future research.

1.13.3 Expectations

Past work finds that expectations and beliefs about external items, such as product’s quality, affect consumption enjoyment (Plassmann et al. 2008). In this paper, we focused on internal abilities to appreciate and detect qualities in external products, rather than beliefs about those products themselves. We found that consumers’ beliefs about their consumption abilities generally affected their enjoyment. This may have occurred because certain people felt as if they were better or more fully experiencing the product’s qualities during the consumption experience.

A follow up experiment supports this notion. Using the same manipulation of subjective expertise and similar high quality literature quotes as in Experiment 4a, we found that participants induced to feel high versus low subjective expertise reported that they were better able to differentiate the individual literary quotes’ unique qualities \( (p < .05) \), and that this perceived understanding mediated (95% CI: [.0765, .8456], 5,000 bootstraps) their significantly higher ratings of enjoyment \( (p < .001) \) of the quotes.

Future work may examine why expertise expectations lead to higher feelings of understanding and enjoyment. Experiment 3a and 3b offers some hints. Participants in these two experiments who ostensibly believed they had more expertise to enjoy a product engaged in more actions to improve appreciation of the product, stirring the tea
in Experiment 3a and learning more about a literary piece in Experiment 3b (see self-efficacy research for similar findings, Bandura 1997). Preparation or engagement behaviors in certain situations have been shown to increase enjoyment (Hoffman and Novak 2009; Vohs et al. 2013). Research, however, may also find that independent of any differences in effort, expectations and other mechanisms such as identity or psychological ownership may affect enjoyment more directly. Understanding how subjective expertise affects enjoyment may relate to still lingering research questions about how expectations and identity specifically affect enjoyment.

Future work may also examine the important question of when subjective expertise plays a stronger role in consumption enjoyment. For high quality in which both experts and non-experts are expected to comprehend the items (albeit at different levels, e.g., for an artistic but mainstream movie), we may see a subjective expertise effect that is relatively weaker compared to situations in which non-experts are expected to not comprehend the items at all (e.g., a complicated artistic movie). At other times, the reverse may occur.

Some research finds that certain types of objective expertise can lead to less enjoyment via too much understanding, overfamiliarity, or higher standards (Moore 2012; Wilson and Gilbert 2008). If consumers hold the belief that experts (e.g., very high-level wine connoisseurs) will not like certain items (e.g., very low quality wine) because these items have qualities that experts specifically dislike, are bored of, or maybe even
are “offended” by, then subjective experts may come to like the items less. There is often a stereotype that experts look down on low quality items with disdain. Future work could test whether this stereotype is in reality a true common manifestation. We recommend that manipulating the expectation that experts will not enjoy something and assessing how often consumers organically hold such similar expectations could be fruitful for future research.

1.13.4 Conclusion

In famous museums, mainstream theme parks, niche boutiques, or even generic big box stores, it is clear that millions have been spent to make sure the available products are great. However, it is also clear that relatively meager efforts have been taken to make sure consumers feel great at consuming those products. This asymmetry of focus is also reflected in marketing journals. Though efforts to manage real consumers’ subjective expertise do occasionally show up in practitioners’ actions and journals (e.g., positive video game feedback or research on master in product assembly) the importance and the understanding of subjective expertise’s effect on enjoyment remains shrouded. We hope this work can help bring this important concept into the light and to improve current and future understanding of its rich and important complexities.
Appendix A: Expertise Manipulations

Experiment 1a – Wine

Directions
Now let us see how much you know about wine. On the next page you will be given questions about wine. This will assess your knowledge of wine and your ability to appreciate different wines.

Over the next few pages, please select the correct answer for each question. Note. There are no trick questions. This means for some people the questions may seem very basic. If the answer seems too obvious to you, that’s most likely because it is an easy and obvious question for someone with your level of wine knowledge.

High Subjective Expertise Condition

Test

1) What fruit are wines most commonly made out of?
   - Apple
   - Grape
   - Kiwi
   - Orange

2) True or False? The best and most common way to store red wine is in a freezer.

3) True or False? Generally, red wine pairs well with rich foods.

4) True or False? The barrel that a wine is aged in affects the taste.

Feedback

The results of this survey indicate you have some wine mastery.

People with wine mastery have some mastery over the wine tasting experience. They have the ability to detect subtle flavors and nuanced ingredients.
They may not always be able to tell the exact ingredients but they have the ability to detect and take notice of the flavors and the wine experience. Because of this skill they are better at distinguishing different wines.

Don’t expect these people to be able to tell you everything about wine but give them two wines and expect that they can understand some of the differences. They have a great ability to appreciate wine.

**Low Subjective Expertise Condition**

*Test*

1) **ANGULAR means**
Lacking the perception of sweetness
- Firm
- Green
- Hollow
- With acidity

2) **UNCTUOUS means**
- Leathery
- Jammy
- Finesse
- Connected
- Oily

3) **OXIDATIVE means**
- Dry
- Fresh
- Over-aged
- Fruit
- Fallen over

4) **AUSTERE means**
- Opulent
- Complex
- Aroma
- Dry
• Heavy

5) CHEWEY TANNINS means
• Dry in interior
• Diffused
• Transparent
• Powerful
• Raisiny

Feedback

*There was no feedback given.*
**Experiment 1b – Film**

**High Subjective Expertise Condition**

*Test*

1) What is a “crane shot”?
   - A shot from a crane above the principle action
   - A shot that curls like a crane’s neck
   - A shot that moves in and out like a crane eating

2) Who is in charge on a film set?
   - Cinematographer
   - Director
   - Assistant director
   - Second unit

3) The “tone” of a film is best described as...
   - The Mood of a film
   - The Meaning of the film
   - The Goal of the film
   - The Emotion of the film
   - The style of the film

4) C.G.I. is used to create visual special effects. For instance big blockbuster movies have a lot of C.G.I. these days.
   - What does C.G.I. stand for?
   - Computer-generated imagery
   - Coherence good indigo
   - Cable Graph Ire
   - Common Gateway Interface

5) Which one of the following people is a famous film director?
   - Jordan
   - Spielberg
   - Clarkson
You scored high on the “Film Quiz.”

You may not be a professional film critic, but you have some mastery of the high quality techniques and film making ideas in film.

People with mastery of film techniques tend to have the ability to appreciate and see things in films that others do not.

**Low Subjective Expertise Condition**

**Test**

1) A Dutch angle is used to demonstrate the ____ of character
   - Confusion
   - Excitement
   - Anger
   - Distance

2) Beats refer to
   - The tempo of a scene.
   - The lighting of a scene.
   - The characters of a scene.
   - The closeness of shots in a scene.

3) ”Mise en Scene” refers to
   - The composition of the frame.
   - The pacing of a scene.
   - The continuity of a set.
   - The lighting of the characters.
   - The end cut of a scene.

4) Falling rhythm is...
   - An off timing scene rhythm.
   - A pace that returns and then leaves.
• A sixteen-line monologue.
• A device for silent films’ scores.
• A "half lighting” technique.

Feedback

You scored low on the "Film Quiz."

Don’t quit your day job, you don’t have much mastery of the techniques in this area.

This is not an area you have much skill and knowledge in. Remember though, it’s a skill that not everyone has and you’re likely talented in some other areas.
Experiment 1c – Branded Advertisements

All participants read.

On the next page try and match the brand with the group most associated with the brand’s "image." Sometimes there may be more than one right answer but just pick one answer.

If you don't recognize the brand take your best guess.

General Question

What consumer best matches this brand?

- Preppy Person
- Barista
- Businesses Person
- College Student
- Fraternity Member
- High Fashion New Yorker
- Hipster
- International Student
- Popular Teen
- Prom Queen
- Rock Climber
- Skater
- Soccer Player
- Southern Gentleman

High Subjective Expertise Condition

Test
Feedback

The results of the quiz indicate that ...

You have **HIGH** brand mastery.
The results of the survey indicate you have **high** brand mastery. You **know** how to understand and interpret brands and their associations -- for instance, you understand what many magazine ads are "going for."

**Low Subjective Expertise Condition**

*Test*

![Diagram](image-url)
Feedback

The results of the quiz indicate that ...

You have LOW brand mastery.

The results of the survey indicate you have lower brand mastery. You probably do not know how to understand and interpret brands and their associations well -- for instance you may have trouble understanding what many magazine ads are "going for."
Experiment 1d - Literary

High Subjective Expertise Condition

Test

1) “The woman was a butterfly in the wind” is an example of a ...
   • Time Twist
   • Metaphor
   • Cursivo

2) What is the proper word that should go in the blank? “No man is ___ island.”
   • A
   • An

3) Here’s an example of a Japanese poem...
   "An old silent pond,
   A frog jumps into the pond,
   splash, silence again."
   What is the name of this type of short 17-syllable Japanese poem?
   • Haiku
   • Pablo Neruda
   • Head Jam

Feedback

RESULTS
Congratulations, you scored very high on the “Literary Test.”
You may not be a world famous author, but you have a mastery of reading and writing.
This is an area you have much skill and knowledge in.

Low Subjective Expertise

Test

1) Deconstructive Fictionalism is … ?
   • A 1980s movement by newspapers to improve entertainment in features.
- A secondary move of post-modernism to include fiction.
- Sternwater Publishing’s 1970s turn toward post-modernism.

2) A turn twist is …
- The name of a middle paragraph that presents a thesis.
- The type of article that ends “three times.”
- A newspaper article that “fakes out” readers with a promise it leaves open.

3) Jared Shu was the inventor of what type of newspaper article.
- The weekly respective
- The Celtic measure
- The triple interview

*Feedback*

RESULTS
You scored low on the “Literary Test.”
Don’t quit your day job, you don’t have much mastery of reading or writing. This not an area you have much skill and knowledge in. Don’t feel bad, it’s a skill that not everyone has and you’re certainly talented in some other areas.
Experiment 2 - Literary

Test
(all participants took same test)

1) “The woman was a butterfly in the wind” is an example of a ...
   Time twist
   - Cursivo
   - Metaphor

2) Deconstructive Fictionalization is …
   - A 1920s movement used by writers to change contexts in their work.
   - A secondary move of post-modernism to include fiction.
   - A style by authors at Sternwater Publishing that resembled post-modernism.

3) "Onomatopoeia"
   - is a word that phonetically imitates or suggests the source of the sound that it describes.
   - is a stanza that was popularized by the poet Poe
   - is an off beat rhythm

4) "I will jump. I will fall. I will continue."
   - is an example of mirrored repetition
   - is an example of a constant form
   - is an example of quad beat

5) Jared Shu was the inventor of what type of writing?
   - The respective
   - The Celtic measure
   - The triple interview

6) "Little Lucky Ladies" is an example of ...
   - Alliteration
   - Sternography
   - Upstone Tune
7) Falling rhythm is

- An off beat rhythm
- A rhythm that returns and then leaves
- A sixteen line poem with two rhythm

**High Subjective Expertise Condition**

*Feedback*

You scored very high on the “Literary Test.”

You may not be a professional literary author, but you have some mastery of the techniques in "Literary Writing." This is an area you have skill and knowledge in.

**Low Subjective Expertise Condition**

*Feedback*

You scored low on the “Literary Test.”

Don’t quit your day job, you don’t have much mastery of the techniques in "Literary Writing." This is not an area you have much skill and knowledge in. Remember though, it’s a skill that not everyone has and you’re certainly talented in some other areas.
Experiment 3a – Tea

High Subjective Expertise Condition

Feedback

For Participants with High Tea Knowledge

Introduction to Tea Tasting Study

So you’ve heard of most of the following teas before: Black Tea, Green Tea, Early Grey, and Chamomile.

This is because you probably tend to have an above average knowledge and competence with tea, especially compared to the general American population.

You know that some of the most popular teas are blacks and greens.

You know that iced-tea is a very different experience than hot tea.

You may even be familiar with a few more obscure tea flavors like Jasmine Tea, White Tea, and Herbal Teas.

This knowledge of tea allows you to distinguish the difference between flavors and types, e.g. between iced and hot, sweet and not, light and dark. This allows you to better appreciate the unique tastes of tea.

It’s people like you who have some tea knowledge and even maybe skill with tea that allows them to appreciate the tea that we are interested in and your opinions today.

Today the study is about Tea.

You will be sampling a tea and telling us honestly what you think of it and answering a few questions.

Low Subjective Expertise Condition

Feedback

For Participants with Low Tea Knowledge
Introduction to Tea Tasting Study

Most likely you are not a tea expert. Tea is not an area where you have much knowledge in. You don’t have a taste palate that is accustomed to noticing the subtle flavors in tea and it may be hard for you to appreciate differences amongst some teas.

Make sure to let us know how much you do actually know about tea, even if is very little in the open comments section in the survey.

We are interested in the opinions of people like you who aren’t very knowledgeable or highly skilled with tea.

Today the study is about Tea.

You will be sampling a tea and telling us honestly what you think of it and answering a few questions.
Experiment 3b – Literary

High Subjective Expertise Condition

Test

1) “The woman was a butterfly in the wind” is an example of a ...
   - Time Twist
   - Metaphor
   - Cursivo

2) Have you read books or seen movies that have good literary language?
   Book examples might include *The Great Gatsby*, *The Lord of the Rings*, J.K. Rowling’s later books like *Harry Potter* & *The Deathly Hallows*, Shakespeare’s plays, and *To Kill a Mockingbird*. Movie examples include *The Departed* and other Oscar winning films.
   - Yes
   - No

3) "Four Score and Seven Years Ago..." begins a speech by what literary language master?
   - Abraham Lincoln
   - Dan Brown
   - Robert Frost

Feedback

The results of this online quiz indicate that you have literary knowledge. You probably tend to have an above average knowledge and competence with literary language—especially compared to the general American population.

For instance, you know some important literary techniques, such as how to identify metaphors.

You probably could also spot at least a few famous literary quotes when they are referenced, such as Shakespeare’s “To be or not to be” or “Star-crossed lovers.”
You may even be able to identify symbolism in readings.

This knowledge of literary language probably allows you to distinguish and appreciate certain methods of writing. In turn, you may be able to better “feel their meaning” and understand works of literature.

Among many different types of people, we are interested in the opinions of people like you, who have some literary knowledge and maybe even skill with literary language.

**Control Condition**

There was no test or feedback in this condition.
Experiment 4a and 4b – Literary

High Subjective Expertise Condition

Test

1) “The woman was a butterfly in the wind” is an example of a ...
   - Time Twist
   - Metaphor
   - Cursivo

2) Have you read books or seen movies that have good literary language?

   Book examples might include The Great Gatsby, The Lord of the Rings, J.K Rolwing’s later books like Harry Potter & The Deathly Hallows, Shakespeare’s plays, and To Kill a Mockingbird. Movie examples include The Departed and other Oscar winning films.
   - Yes
   - No

3) "Four Score and Seven Years Ago" is a quote from a speech by what literary language master?
   - Abraham Lincoln
   - Dan Brown
   - Robert Frost

Feedback

The results of this online quiz indicate that you have medium to high literary knowledge

You probably tend to have an above average knowledge and competence with literary language—especially compared to the general American population.

For instance, you know some important literary techniques, such as how to identify metaphors.
You probably could also spot at least a few famous literary quotes when they are referenced, such as Shakespeare’s “To be or not to be” or Shakespeare’s “Star-crossed lovers.”

You may even be able to identify symbolism in readings and apply those ideas to your own life.

This knowledge of literary language probably allows you to distinguish and appreciate certain methods of writing. In turn, you may be able to better “feel their meaning” and understand works of literature.

Among many different types of people, we are interested in the opinions of people like you, who have some literary knowledge and even maybe skill with literary language that allows them to appreciate some of the written works that we are interested in.

**Low Subjective Expertise Condition**

*Test*

1) Deconstructive Fictionalization is …

- A 1920s movement used by writers to change contexts in their work.
- A secondary move of post-modernism to include fiction.
- A style by authors at Sternwater Publishing that resembled post-modernism.
- I don’t know.

2) Jared Shu was the inventor of what type of writing?

- The respective
- The Celtic measure
- The triple beat
- I don’t know.

3) "The sweet star in distance fading -- will I reach it before it loses its glow" is a quote from what literary master?
The results of this online quiz indicate that you have lower literary knowledge. This probably means you tend to have lower competence with literary language.

For instance, you may not know some important literary techniques, such as how to identify clerihews from other types of stanzas in poetry.

You also may have a hard time identifying symbolism in readings and applying those ideas to your own life.

You don’t have the experience in literary language that allows you to distinguish and appreciate certain methods of writing. In turn, you may not fully “feel their meaning” or completely understand works of literature.

Make sure to let us know how much you do actually know about literary language, even if it is very little in the open comments section in the survey.

Among many different types of people, we are interested in the opinions of people like you who aren’t very knowledgeable or highly experienced with literary knowledge.
Appendix B: Consumption Content

Experiment 1b – Film

For a recent film, an indie filmmaker needed a beautiful day for nature shots to appear in a montage. So, on a sunny day his cinematographer went out to film the shots. Most would agree the filmmaker got his beautiful day shots, shown by the example below.
Experiment 1c – Branded Advertisements

Instructions
Sometimes, some people like looking at ads. Next you will click through a number of advertisements. Tell us how much you like looking at them.

W Hotels
FedEx

McDonalds
Experiment 1d - Literary

Literary Quotes

"To him she seemed so beautiful, so seductive, so different from ordinary people, that he could not understand why no one was as disturbed as he by the clicking of her heels on the paving stones, why no one else's heart was wild with the breeze stirred by the sighs of her veils, why everyone did not go mad with the movements of her braid, the flight of her hands, the gold of her laughter."
- Marquez

"How little we know of what there is to know. I wish that I were going to live a long time instead of going to die today because I have learned much about life in these four days; more, I think than in all other time. I'd like to be an old man to really know. I wonder if you keep on learning or if there is only a certain amount each man can understand. I thought I knew so many things that I know nothing of. I wish there was more time."
-Hemingway

"Turning and turning in the widening gyre
The falcon cannot hear the falconer;
Things fall apart; the centre cannot hold;
Mere anarchy is loosed upon the world."
-Yeats

"A noiseless, patient spider,
I mark'd, where, on a little promontory, it stood, isolated;
Mark'd how, to explore the vacant, vast surrounding,
It launch'd forth filament, filament, filament, out of itself;
Ever unreeling them--ever tirelessly speeding them."
-Whitman

"He who learns must suffer. And even in our sleep pain that cannot forget falls drop by drop upon the heart, and in our own despair, against our will, comes wisdom to us."
-Aeschylus

Sports Quotes
"Running. It's about the sweat in your hair and the blisters on your feet. It's the frozen spit on your chin and the nausea in your gut. It's about throbbing calves and cramps at midnight that are strong enough to wake the dead. It's about getting out the door and running when the rest of the world is only dreaming about having the passion that you need to live each and every day with. It's about being on a lonely road and running like a champion even when there's not a single soul in sight to cheer you on."
-Maurer

“Ever bike? Now that's something that makes life worth living!...Oh, to just grip your handlebars and lay down to it, and go ripping and tearing through streets and road, over railroad tracks and bridges, threading crowds, avoiding collisions, at twenty miles or more an hour, and wondering all the time when you're going to smash up. Then go home again after three hours of it and then to think that tomorrow I can do it all over again!"
-London

“They say that nobody a perfect athlete. Then they tell you practice makes perfect. I wish they'd make up their minds.”
-Chamberlain

"I've missed more than 9000 shots in my career. I've lost almost 300 games. 26 times, I've been trusted to take the game winning shot and missed. I've failed over and over and over again in my life. And that is why I succeed."
-Jordan

"I enjoyed the position I was in as a tennis player. I was to blame when I lost. I was to blame when I won. And I really like that, because I played soccer a lot too, and I couldn't stand it when I had to blame it on the goalkeeper."
-Federer
**Experiment 2 - Literary**

*Thomas Jefferson Quotes*

The care of human life and happiness, and not their destruction, is the first and only object of good government. He who knows best knows how little he knows. All, too, will bear in mind this sacred principle, that though the will of the majority is in all cases to prevail, that will to be rightful must be reasonable; that the minority possess their equal rights, which equal law must protect, and to violate would be oppression.

*George W. Bush Quotes*

We will not waver; we will not tire; we will not falter, and we will not fail. Peace and Freedom will prevail. Leadership to me means duty, honor, country. It means character, and it means listening from time to time. I believe the most solemn duty of the American president is to protect the American people. If America shows uncertainty and weakness in this decade, the world will drift toward tragedy. This will not happen on my watch.
**Experiment 3b - Literary**

*First Piece*

On the next page you will read a quote that is seen as a good example of literary language and can offer some insight to authors and readers.

The quote is taken from Poetry Soup's "Top Poems Collection."

It features many classic literary devices like repetition and alliteration in creative ways. It also features a little bit of irony and wit in the way it re-invents a familiar rhyme about "red," "blue," and "true."

I
Soaring, stars, eagles, and a little dream.
Stopping by this place. I am silly and sleepy.
Never shall I be so smart.
I am dumb like a foolish script.
But I march on, on, on.
On I said.
I march!

II
Because roses aren't always red,
and violets aren't always blue,
but blue was true,
and blue will always be the color
I shall feel for you.

III
Love is hard, but sometimes
It is worth it.
I wonder if that is that true time.

Optional Analysis Exercise for Second Piece

The quote is by the author Ernest Hemingway.
The “Ants on a Log” quote (that you are about to read) is all about how the narrator feels responsible for the tragic ends met by those he loved. From almost the beginning of his writing career, Hemingway’s distinctive style occasioned a great deal of comment and controversy.

Basically, his style is simple, direct, and unadorned, probably as a result of his early newspaper training. He avoids the adjective whenever possible, but because he is a master at transmitting emotion without the flowery prose of his Victorian novelist predecessors, the effect is far more telling.

In Observations on the Style of Ernest Hemingway, from "Contexts of Criticism" by Harry Levin (Harvard University Press, 1957), the critic says: "Hemingway puts his emphasis on nouns because, among other parts of speech, they come closest to things. Stringing them along by means of conjunctions, he approximates the actual flow of experience."

Consider how nouns can speak louder than adjectives.

Write an example: _______

Second Piece – Actual Quote

"How little we know of what there is to know. I wish that I were going to live a long time instead of going to die today because I have learned much about life in these four days; more, I think than in all other time. I’d like to be an old man to really know. I wonder if you keep on learning or if there is only a certain amount each man can understand. I thought I knew so many things that I know nothing of. I wish there was more time."

-Hemingway
Experiment 4a – Literary

**High Quality Quotes**

On the next pages you will read some quotes that are known for their strong and skilled use of literary language.

Hemingway quote from Experiment 3  
Yeats quote from Experiment 3  
Aeschylus quote Experiment 3

**Low Quality Quotes**

On the next page you will read some quotes that are known as bad examples of literary language and can offer some insight to authors on what not to do.

Some of the quotes are taken from Poetry Soup’s "Bad Poetry Examples."

“Have you ever gazed into a face  
and felt you wanted to cry?  
Have you ran life’s race  
knowing when you’re going to die?  
Have you ever given a smile or wink  
to someone who appeared blue?  
-PoetrySoup.com’s Bad Poetry Examples

“This is a great place. I have good feelings for it. And I will be nice to it. It is like the place I want to be. I think that my election would be good for it.”  
-Swanson (political speech excerpt)

“Say this with a grim,  
You but ok friend,  
But deep within,  
I tell you get in the wind,  
Going fine someone else.”  
-Jackson (from PoetrySoup.com’s Bad Poetry Examples)
Experiment 4b - Literary

High Quality Frame

We will start you off with a good example.

We want to say thanks to the M-Turk user who provided the good example from a class the M-Turk user was in by sending it our way. If you have any suggestions for future good examples please send them our way. Info is provided at the end of the survey.

The following is a passage that is used as a great example of literary writing in literary classes. It comes from a longer story, which is well written and quite interesting.

In literary classes teachers note this passage demonstrates masterful use of literary language and hits a couple key points very well.

The ambiguity of the passage allows for interpretation and depth.

The story is hauntingly tilted “The Bridge Home” by the esteemed author T. Hiduke.

Low Quality Frame

We will start you off with a bad example.

We want to say thanks to the M-Turk user who provided the bad example from a class the M-Turk user was in by sending it our way. If you have any suggestions for future bad examples please send them our way. Info is provided at the end of the survey.

The following is a passage that is used as a bad example of literary writing in literary classes. It comes from a generic “trashy romance” book that is known to be quite bad, even for “trashy romances.”

In literary classes teachers note that this passage fails on a couple key points.

The passage is quite ambiguous and fails to get a clear point across.

The story is melodramatically titled “The Bridge Home” by romance author T. Hiduke.

The Passage
I am almost over this bridge that spreads under my fleshy wet feet when I look down at the river that has rushed from springs’ first hope to this season’s last flood. My reflection appears and peers back at me. It is distorted by the ripples and I think I find it better that way. Behind me on this bridge are ghosts of forgotten jackets, splintered wood, and scattered footsteps that seemed to have tried to dance, walk straight, and then just retire. I am almost over this bridge and there’s my home in the distance. But who has come over this bridge when all I have are the stale memories of summer’s last lusting flood, washing down the river?
Appendix C: Word Game Activity Measure

(Experiments 4a-4b)

Now you will assume the role of a critic and play “The Word Game.”

Many people enjoy reviewing written items and thinking about what’s good and what might be improved.

Below we re-present different quotes and then give you a list of words to choose from to describe the quotes.

[re-displayed quote]

Check off all the word that you think describe the quote:

- Beautiful
- Clear
- Colorful
- Overly Emotional
- Meaningful
- Meaningless
- Mistaking the Metaphors
- Perfect Metaphors
- Pretentious
- Needs much more work
- Talented repetition
- Trying too hard

Please give the quote a grade on the following sliding scale.
References


Biography