



Case Report

Influencing those who influence us: The role of expertise in the emergence of minority influence ☆, ☆ ☆

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ABSTRACT

Although individuals are often influenced by experts, individuals themselves can be experts—and, in such instances, it is important to understand who influences their attitudes. That is, to whom do experts turn to for guidance when considering their own preferences? The present research proposes that, while novices are more influenced by majority endorsements, experts are more influenced by minority endorsements. This hypothesis is based on the premise that novices and experts perceive the reasons for their preferences to be similar to majority and minority groups, respectively (i.e., *basis similarity*). Specifically, experts perceive minority opinion to be based on innovation, whereas novices perceive majority opinion to be based on convention. Of importance, this effect is strongest in domains where the criteria for evaluation are subjective and non-normative opinion is difficult to invalidate. Four experiments support this framework and, in doing so, offer novel insight into the impact of expertise on the emergence of minority influence.

1. Introduction

The persuasiveness of majority opinion is well-documented (Asch, 1956; Festinger, 1954): Hotel patrons are more persuaded by signs signaling norms (e.g., the sign indicates that a majority of hotel patrons reuse their towels; Goldstein, Cialdini, & Griskevicius, 2008), college students are more likely to engage in risky behavior like drug and alcohol use to comply with the majority (Rose, Bearden, & Teel, 1992), and individuals hold more favorable preferences toward policies endorsed by the majority (Petrocelli, Tormala, & Rucker, 2007). Yet despite this prominent influence, individuals are at times more influenced by minority opinion (i.e., *minority influence*: Martin & Hewstone, 2010; Moscovici, 1985). That is, minority groups also influence individuals' preferences under certain circumstances, such as when they feel socially isolated (Wang, Zhu, & Shiv, 2011), when correctness is a matter of taste (Spears, Ellemers, & Doosje, 2009), or when they are adopting new ideas (Rogers, 2010; see Wood, Lundgren, Ouellette, Busceme, & Blackstone, 1994).

The purpose of the present research is to understand the role of expertise in the emergence of minority and majority influence.

Expertise can be broadly characterized as domain-specific knowledge that reflects both objective (Alba & Hutchinson, 1987; Clarkson, Janiszewski, & Cinelli, 2013) and subjective (Ottati, Price, Wilson, & Sumaktoyo, 2015; Tormala & Petty, 2007) components. Because expertise can be relative and contingent on the domain (i.e., a chess student may feel like an expert against a recreational player but a novice against a master) (Fernbach, Rogers, Fox, & Sloman, 2013; Ottati et al., 2015), we focus on domain-specific subjective (or perceived) expertise.

We propose that experts are more influenced by minority endorsers and novices are more influenced by majority endorsers. Specifically, we test that minority and majority groups can be differentially influential to experts and novices, respectively, as a function of the information they provide (i.e., innovative and conventional, respectively). Furthermore, we predict this pattern of influence stems from heightened perceptions of basis similarity, with the particular basis (i.e., conventional or innovative) varying as a function of social group.

Collectively, this research raises several conceptual and practical contributions. First, this question is unique to the social influence literature in that it focuses on the differential knowledge gain provided by

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minority and majority groups. Second, it details the role of expertise in determining the value of the knowledge gain provided by minority and majority groups as well as the role of objective and subjective standards in shifting the value of the information provided by these social groups. Finally, the present research offers important insight into the sources of influence that shape the preferences of experts.

2. A basis similarity hypothesis

The notion that individuals—whether novice or expert—are more persuaded by others with whom there is similarity is consistent with a wealth of research on social comparison. Indeed, individuals often evaluate the opinions expressed by similar others as correct (Festinger, 1954) and tend to rely on similar others when forming evaluations (Fazio, 1979; see Kruglanski & Mayseless, 1990). For example, an individual would be more likely to frequent an Indian restaurant recommended by a friend who shares similar (versus dissimilar) reasons for their food preferences (e.g., the friend enjoys a similar flavor of spices and heat versus a friend who enjoys plain seasoning and mild foods). Therefore, we propose that novices and experts perceive themselves similar to majority and minority groups, respectively, because they base their preferences on a shared criterion—what we term *basis similarity*.

Though novices and experts perceive that they base their preferences on the same criterion used by majority and minority groups, the specific criterion for these preferences should differ across social groups. Indeed, research shows majority opinion provides information about what is normative, whereas minority opinion provides information about what is non-normative (Moscovici, 1980; Nemeth, 1986; Seyranian, Atuel, & Crano, 2008). We find this distinction between normative and non-normative information crucial, as this information should be differentially valued by novices and experts.

Specifically, novices should value the normative information that forms the basis of the majority opinion, as it provides insight into what is considered socially accurate, valid, and correct (Cialdini, 1993; Deutsch & Gerard, 1955). Conversely, experts should value the non-normative information that forms the basis of the minority opinion as it provides insight into what is considered socially novel, original, and innovative (Kaufman, Baer, Cole, & Sexton, 2008; Micheli & Gemser, 2016). In support of this argument, research suggests novices show greater reliance on prototypical criteria than do experts (Celsi, Rose, & Leigh, 1993; Miletto, Pimenta, Bouchet, Sansonnet, & Keller, 2011), whereas experts challenge conventional thought when forming preferences (Fazio, 1979) and are defined by their idiosyncratic and innovative behavior (Hollander, 1961). Consequently, novices rely on majority groups because they provide conventional information, whereas experts rely on minority groups because they provide innovative information.

Of course, non-normative information is not always innovative. As such, we considered the role of evaluative standards and, specifically, the extent to which the standards for evaluation are subjective or objective. We believe the nature of standards is critical as research shows subjective standards make opinions more difficult to negate or invalidate (Marks & Miller, 1987; Sherman, Chassin, & Agostinelli, 1984). For instance, the merits of a creative argument (subjective) are much more difficult to invalidate than grammatical errors (objective). Consequently, we propose non-normative information is more likely to be interpreted as innovative when the evaluative standards are subjective rather than objective.

3. Overview

We hypothesize that novices and experts are influenced by majority and minority endorsements, respectively. Moreover, this effect should be driven by perceptions of basis similarity, with the particular basis (i.e., conventional or innovative) varying as a function of social group

(i.e., majority or minority). Finally, this effect should be most likely to occur in contexts where evaluative standards are subjective. These hypotheses were tested across four experiments. Sample sizes were based on a priori power analyses using the following criteria: power of 0.8, medium effect sizes, and an alpha level of 0.05 (Faul, Erdfelder, Lang, & Buchner, 2007).¹ All measures, manipulations, and exclusions are reported.

4. Experiment 1

Experiment 1 tested the hypothesis that expertise alters individuals' reliance on different forms of social endorsement (i.e., majority versus minority). We measured domain-specific expertise and manipulated whether the target stimulus was endorsed by the majority or minority. Importantly, we included a control (i.e., no endorsement condition) condition to test the direction of influence.

4.1. Method

4.1.1. Participants and design

One hundred ninety-eight undergraduates were recruited for course credit and randomly assigned to one of three conditions: a majority endorsement condition, a minority endorsement condition, or a no endorsement (control) condition. At the completion of the study, participants reported their expertise in the focal domain. One participant was excluded for failing an attention check which resulted in a final sample of 197 participants (53% female; $M_{\text{age}} = 20.06$).

4.1.2. Procedure

Participants were welcomed to the study where they were provided with information about Sarchimor, a hybrid coffee bean grown in Costa Rica and India and pretested to be unfamiliar to participants. To manipulate endorsement, we varied the percentages of individuals from an ostensible nationwide survey indicating a favorable preference toward Sarchimor-bean coffee (for similar manipulations, see Baker & Petty, 1994; Spears et al., 2009). In the *majority-endorsed* condition, participants were informed that an estimated 83% of individuals liked the coffee. In the *minority-endorsed* condition, participants were informed that an estimated 17% of individuals liked the coffee. Importantly, we also included a *control* condition in which participants were not provided with any endorsement information.

Given the complexities of interpreting meaningful attitude change within this particular domain (see Wood et al., 1994), we assessed behavioral intentions as a proxy for persuasion (Ajzen, 1991). Specifically, participants indicated their willingness to purchase a cup of Sarchimor-bean coffee on a 9-point scale anchored at *Not willing at all—Very willing*.

Upon indicating their purchase intention, participants completed a 3-minute filler task before reporting their knowledge, expertise, and experience toward coffee on 9-point scales anchored at *Not knowledgeable at all—Very knowledgeable*, *Not an expert at all—Very much an expert*, *Very little experience—Very much experience* ($\alpha = 0.92$; Tormala & Petty, 2007).

Finally, participants completed a series of demographics and an attention check (Oppenheimer, Meyvis, & Davidenko, 2009) before being debriefed and thanked for their participation.

4.2. Results

The purchase intention data were analyzed using indicator coding in

¹ Post-hoc sensitivity power analyses demonstrated that the samples used across experiments would detect effects of small to medium size (Experiment 1: $f^2 = 0.055$; Experiment 2: $f = 0.249$, Experiment 3: $f = 0.210$; Experiment 4: $f = 0.230$).

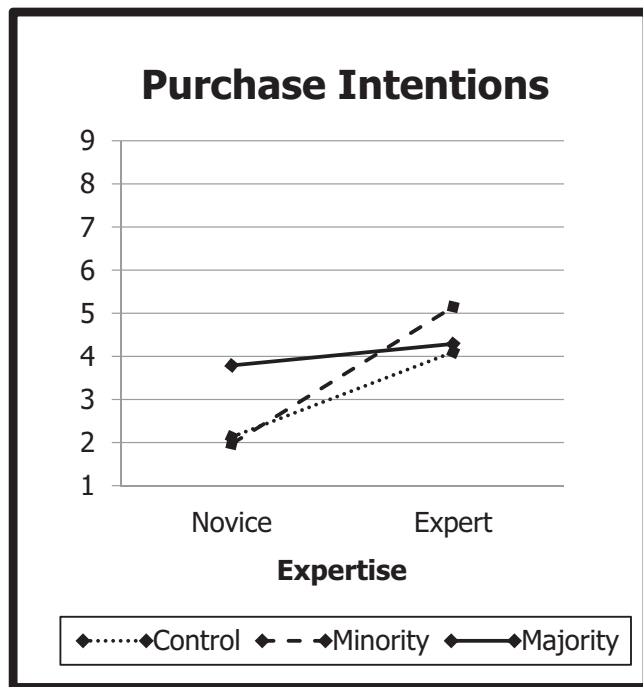


Fig. 1. Purchase intentions as a function of subjective expertise and endorsement in Experiment 1. Note. Mean estimates are presented at +1 SD (expert) and -1 SD (novices) on the expertise index.

two steps (Hayes & Preacher, 2014). First, we created three dummy variables which allowed us to alter the reference group to analyze all three contrasts: minority (control = 0, minority = 1, majority = 0), majority (control = 0, minority = 0, majority = 1), and control (control = 1, minority = 0, majority = 0). Second, interactions with expertise were computed for each dummy variable.

As depicted in Fig. 1, novices were more persuaded by the majority relative to the minority ($b = 2.10$, $t(193) = 4.37$, $p < .001$) and the control ($b = 1.82$, $t(193) = 3.38$, $p < .001$), which didn't differ from each other ($b = -0.28$, $p = .55$). Conversely, experts were more persuaded by the minority relative to the majority ($b = -1.15$, $t(193) = -2.25$, $p = .025$) and the control ($b = 1.17$, $t(193) = 2.31$, $p = .022$), which didn't differ from each other ($b = 0.03$, $p = .95$).

4.3. Discussion

Experiment 1 demonstrated the influence of endorsement varies by expertise. Indeed, experts and novices were *more* influenced when presented with the minority and majority endorsement, respectively, relative to the control.

5. Experiment 2

Experiment 2 tested the hypothesis that novices and experts base their preferences on similar criterion as majority and minority endorsers, respectively. Even though the specific criterion differs across groups (see Experiment 3), we tested the mediating role of basis similarity using measures that are agnostic to the underlying information. Additionally, we made two key changes from Experiment 1: we manipulated (rather than measured) expertise to directly test our causal model and altered the domain from coffee to movies to test the generalizability of the findings. Finally, given research shows minority endorsements are riskier (Erb, Hilton, Bohner, & Roffey, 2015) and signal distinctiveness (Wang et al., 2011; see Imhoff & Erb, 2009), we included measures of both risk-seeking and need for uniqueness to independently test these mediation pathways.

5.1. Method

5.1.1. Participants and design

Two hundred twenty undergraduates were recruited for course credit and randomly assigned to a 2 (Expertise: Expert or Novice) \times 2 (Endorsement: Majority or Minority) between-participants design. Eight participants were excluded for having seen or heard of the target movie and two participants were excluded for failing an attention check, which resulted in a final sample of 210 participants (56% male; $M_{\text{age}} = 41.14$).

5.1.2. Procedure

Participants were welcomed to the study and immediately exposed to our expertise manipulation in the form of a selective recall task (adapted from Petrocelli, Martin, & Li, 2010). In the *novice* condition, participants were told that people are less knowledgeable about movies than they think and to indicate two occasions when they felt like a movie novice. Conversely, in the *expert* condition, participants were told that people are more knowledgeable about movies than they think and to indicate two occasions when they felt like a movie expert.²

Afterward, participants were presented with the title and poster for a movie pretested to be unfamiliar (*Adult Life Skills*). To manipulate endorsement, participants read that a recent survey ostensibly revealed that either 82% (*majority*) or 18% (*minority*) of individuals across the country held a favorable attitude toward the movie. Participants then indicated their willingness to see the movie on a 9-point scale anchored at *Not willing at all*—*Very willing*.

Upon indicating their viewing intentions, participants reported the extent to which the basis of their preferences was similar to the endorsing group, their risk-seeking behavior, and their need for uniqueness (with the order of presentation randomized).³

To assess *basis similarity*, participants were asked to think about the percentage of people who held a favorable attitude toward the movie and to indicate the extent to which these individuals might have similar tastes as them, are likely to share their preferences, and probably appreciate the same things they appreciate. Responses were obtained on 7-point scales anchored at *Not at all*—*Very much* and averaged ($\alpha = 0.94$), with higher values indicating greater basis similarity with the endorsing group.

To assess *risk-seeking*, participants completed Weber, Blais, and Betz's (2002) social risk subscale to assess risky behavior relevant to the social expression of attitudes rather than general risky behavior. Sample statements include "Defending an unpopular issue that you believe in at a social occasion" and "Admitting that your tastes are different from those of your friends." Responses were obtained on a 7-point scale anchored at *Not risky at all*—*Extremely risky* and averaged ($\alpha = 0.65$), with higher values indicating greater social risk-seeking.

To assess *uniqueness needs*, participants completed the Self-Attributed Need for Uniqueness Scale (SANU: Lynn & Harris, 1997).

² For those interested, we included manipulation checks of the selective recall expertise manipulations in Experiments 2 and 4 using the items used to assess expertise in experiment 1. The index in experiment 2 ($\alpha = 0.90$) and experiment 4 ($\alpha = 0.91$) were submitted to independent *t*-tests. Consistent with expectations, those in the expert condition reported greater expertise than did those in the novice condition in both experiment 2 ($t(208) = -3.21$, $p = .002$) and experiment 4 ($t(245) = -3.56$, $p = .001$).

³ To test if the preference measures unintentionally influenced responses to the shared preference measures (Rosenthal, 1976), we conducted a conceptual replicate of Experiment 2 ($N = 166$) that presented the basis similarity measure ($\alpha = 0.91$) before the intention measure. The results revealed similar interactions for both viewing intentions ($F(1,162) = 10.58$, $p = .001$) and basis similarity ($F(1,162) = 9.59$, $p = .002$) as well as a significant mediating pathway (indirect effect = -0.264 , 95% CI: -0.656 , -0.017). Moreover, when both datasets are combined, there is no interactive effect of order for either viewing intentions or basis similarity ($F_s < 1$). Full details are available in Appendix A.

This four-item scale asks participants to indicate how different they want to be, how important being distinctive is to them, how often they intentionally try to differentiate themselves from others, and how strongly they need to be unique. Responses were obtained on 5-point scales anchored at *Not at all—Extremely* and averaged ($\alpha = 0.60$), with higher values indicating a greater uniqueness need.⁴

Finally, participants completed demographics and an attention check before being debriefed and thanked for their participation.

5.2. Results

Dependent measures were submitted to a two-way ANOVA, with expertise and endorsement as independent variables. Means are listed in Table 1.

5.2.1. Viewing intentions

Analysis of participants' intentions to view the movie revealed the predicted expertise \times endorsement interaction ($F(1,206) = 10.02$, $p = .002$, $\eta_p^2 = 0.046$). Those in the *novice* condition were more willing to view the movie when endorsed by the majority (versus minority) ($F(1,206) = 4.84$, $p = .029$, $\eta_p^2 = 0.023$). Conversely, those in the *expert* condition were more willing to view the movie when endorsed by the minority (versus majority) ($F(1,206) = 5.19$, $p = .024$, $\eta_p^2 = 0.025$). Neither main effect was significant ($F_s < 1$).

5.2.2. Basis similarity

The basis similarity data revealed a significant expertise \times endorsement interaction ($F(1,206) = 12.24$, $p = .001$, $\eta_p^2 = 0.056$). Those in the *novice* condition perceived greater similarity to those in the majority (versus minority) ($F(1,206) = 4.78$, $p = .030$, $\eta_p^2 = 0.023$). Conversely, those in the *expert* condition perceived greater similarity to those in the minority (versus majority) ($F(1,206) = 7.62$, $p = .006$, $\eta_p^2 = 0.036$). Neither main effect was significant ($F_s < 1$).

5.2.3. Risk-seeking

Analyses of the social risk-seeking subscale did not reveal any significant effects ($p_s > 0.20$).

5.2.4. Need for uniqueness

The need for uniqueness data revealed a significant effect of endorsement ($F(1,206) = 4.07$, $p = .045$, $\eta_p^2 = 0.019$); participants reported greater uniqueness in the minority ($M = 2.55$, $SD = 0.41$) relative to the majority ($M = 2.43$, $SD = 0.46$) condition. Neither the main effect of expertise nor the interaction was significant ($F_s < 1$).

5.2.5. Mediation analysis

As a direct test of our conceptual model, we constructed a 95% CI around the effect of the expertise \times endorsement interaction on viewing intentions through basis similarity (Model 4; Hayes, 2017). The analysis revealed a significant direct mediating pathway (indirect effect = -0.459 , 95% CI: -0.933 , -0.050). Moreover, this pathway remained significant when controlling for risk-seeking and need for uniqueness (indirect effect = -0.431 , 95% CI: -0.893 , -0.012).⁵ However, we cannot rule out that another, unidentified variable accounts for the variance between the interaction of expertise and endorsement on viewing intentions (Fiedler, Harris, & Schott, 2018).

⁴ For those interested, social risk seeking and need for uniqueness were not correlated ($r = 0.077$, $p = .265$).

⁵ Analysis of alternative mediation pathways revealed no direct mediating effect of risk-seeking (indirect effect = -0.003 , 95% CI: -0.066 , 0.081) or need for uniqueness (indirect effect = -0.015 , 95% CI: -0.104 , 0.042).

Table 1

Dependent measures as a function of expertise and endorsement in Experiment 2.

	Novice		Expert	
	Minority	Majority	Minority	Majority
Viewing intentions	4.30 (2.40)	5.35 (2.67)	5.17 (2.59)	4.08 (2.16)
Basis similarity	3.77 (1.68)	4.42 (1.39)	4.47 (1.37)	3.65 (1.64)
Social risk-seeking	4.86 (0.79)	4.84 (0.81)	4.64 (0.93)	4.90 (0.76)
Need for uniqueness	2.53 (0.41)	2.41 (0.53)	2.57 (0.42)	2.45 (0.39)

Note: Values in parentheses represent standard deviations.

5.3. Discussion

Despite manipulating expertise and altering the domains, Experiment 2 demonstrated that novices were more influenced by the majority endorsement and experts were more influenced by the minority endorsement. Moreover, this difference stemmed from heightened perceptions of basis similarity with the endorser. Importantly, though these findings do not preclude alternative causal models (Fiedler et al., 2018), the effect of expertise and endorsement could not be accounted for by risk-seeking or uniqueness needs. Expertise, then, elicits a causal role in determining the influence of minority and majority endorsement, and this difference in influence is driven by perceptions of basis similarity with the endorser.

6. Experiment 3

Though Experiment 2 demonstrated the causal importance of perceptions of basis similarity with the endorser, the specific criterion is theorized to vary across groups. Specifically, novices should value the conventional information provided by majority endorsers, whereas experts should value the innovative information provided by minority endorsers. Experiment 3 tested this distinction by directly manipulating the information used as a basis for preference of the endorsing group. We thus varied whether the majority or minority endorsement was based on conventional or innovative information and expected the preference basis (conventional versus innovative) to override the statistical position of the endorser (minority or majority). That is, novices should be influenced by *whichever endorsement* is based on conventional information, whereas experts should be influenced by *whichever endorsement* is based on innovative information.

6.1. Method

6.1.1. Participants and design

Three hundred sixty participants were recruited and randomly assigned to a 2 (Expertise: Expert or Novice) \times 2 (Endorsement: Majority or Minority) \times 3 (Preference Basis: Conventional, Innovative, or Control) between-participants design.⁶ Six participants were excluded for failing attention checks which resulted in a final sample of 354 participants (59% female; $M_{age} = 35.67$).

6.1.2. Procedure

Participants were welcomed to the study and immediately exposed to our manipulation of expertise. Specifically, participants responded to a biased-scale of five items asking about their expertise with music (e.g., How much knowledge do you have about music? How familiar are you with music?). Those in the *expert* condition responded to each item on a 5-point scale ranging from *An average amount* to *A great deal*,

⁶ Given this experiment varied the mechanism using a novel manipulation, we adjusted to a more conservative estimate in line with recommendations from prior research (Cohen, 1988, 1992).

whereas those in the *novice* condition responded to each item on a 5-point scale ranging from *Very little amount* to *An average amount*. Thus, those in the expert condition reported their expertise was to some degree at or above average, whereas those in the novice condition reported their expertise was to some degree at or below average (Clarkson, Janiszewski, & Cinelli, 2013).

Participants next read information about *Q Magazine*, a UK magazine about the music industry, which served as our manipulation of preference basis. Specifically, those in the *conventional* condition read that *Q Magazine's* success is due to its conventional and traditional perspective on music by ignoring the fluff and hype and reflecting dominant popular opinion. Those in the *innovative* condition read that *Q Magazine's* success is due to its unconventional and non-traditional perspective on music by ignoring the fluff and hype and reflecting true innovation and novelty. Those in the *control* condition were not provided with any additional information about *Q Magazine*.

Participants then saw information about an ostensible new band called *Lifeline*. To control for personal preferences, we kept the description vague by only stating that *Lifeline* was recently featured in *Q Magazine* as part of a piece on up and coming bands. Importantly, participants learned that the magazine conducted an online survey which revealed that either 84% (*majority*) or 16% (*minority*) of nearly 3500 *Q* magazine followers would download music by *Lifeline*. Participants indicated their willingness to download one of *Lifeline's* songs on a 9-point scale anchored at *Not willing at all—Very willing*.

Finally, participants answered demographics and an attention check before being debriefed, thanked, and compensated.

6.2. Results

Participants' willingness to download ratings were submitted to a three-way ANOVA, with expertise, endorsement, and preference basis as independent variables. The analysis revealed an unexpected expertise \times preference basis interaction ($F(2,342) = 7.927, p = .001, \eta_p^2 = 0.044$)⁷ that was qualified by the predicted expertise \times endorsement \times preference basis interaction ($F(2,342) = 4.24, p = .015, \eta_p^2 = 0.024$; see Fig. 2). No other effect was significant ($F_s < 1$). For clarity, we deconstructed the interaction by preference basis.

Analysis of the *control* condition revealed a significant expertise \times endorsement interaction ($F(1,133) = 7.92, p = .006, \eta_p^2 = 0.056$) in a pattern consistent with prior experiments. Specifically, those in the *novice* condition were more willing to download the song when endorsed by the majority (versus minority) ($F(1,133) = 4.45, p = .037, \eta_p^2 = 0.032$). Conversely, those in the *expert* condition were marginally more willing to download the song when endorsed by the minority (versus majority) ($F(1,133) = 3.51, p = .063, \eta_p^2 = 0.026$). Neither main effect was significant ($F_s < 1$).

When *Q Magazine* was positioned as *conventional*, only a main effect of expertise emerged ($F(1,102) = 6.33, p = .013, \eta_p^2 = 0.058$), as novices ($M = 2.96, SD = 2.19$) were more willing to download the song than were experts ($M = 1.94, SD = 1.80$). Neither the main effect of endorsement nor the expertise \times endorsement interaction was significant ($F_s < 1$).

When *Q Magazine* was positioned as *innovative*, only a main effect of expertise emerged again ($F(1,111) = 11.55, p = .001, \eta_p^2 = 0.097$), though here experts ($M = 2.96, SD = 2.09$) were more willing to download the song than were novices ($M = 1.79, SD = 1.32$). Again, neither the main effect of endorsement nor the expertise \times endorsement interaction was significant ($F_s < 1$).

⁷ Consistent with our hypotheses, experts were more willing to download the song when the preference basis was innovative (vs. conventional: $F(1, 213) = 8.02, p = .005$), whereas novices were more willing to download the song when the preference basis was conventional (vs. innovative: $F(1, 213) = 10.69, p = .001$).

6.3. Discussion

Experiment 3 tested the assumption that novices and experts are more influenced by majority and minority endorsements because these endorsements are based on a particular shared criterion (conventional and innovative, respectively). Consistent with this assumption, novices were influenced by conventional information and experts were influenced by innovative information, regardless of whether that endorsement represented the majority or minority. Importantly, however, this effect only occurred when the preference basis was made explicit; when implicit (i.e., the control condition), the effect from Experiments 1 and 2 emerged such that novices were more influenced by the majority endorsement and experts were more influenced by the minority endorsement.

7. Experiment 4

Importantly, though minority endorsements provide non-normative information (Moscovici, 1980), non-normative information is not inherently innovative and, at times, can be inferior. In such circumstances, both novices and experts should favor the normative information provided by majority endorsements. To test this possibility, we explored the role of evaluative standards in dictating when minority endorsements are viewed as more or less innovative. Specifically, the nature of standards is critical as research shows subjective standards make opinions more difficult to negate or invalidate (Marks & Miller, 1987; Sherman et al., 1984). For instance, the merits of a strong argument (subjective) are much more difficult to invalidate than grammatical errors (objective). Consequently, we propose experts are more influenced by minority endorsements in contexts where the standards for evaluation are subjective (versus objective). We test this possibility in Experiment 4.

7.1. Method

7.1.1. Participants and design

Two hundred fifty participants were recruited through Amazon Mechanical Turk and randomly assigned to conditions in a 2 (Expertise: Expert or Novice) \times 2 (Endorsement: Majority or Minority) \times 2 (Standard: Subjective or Objective) between-participants design. Three participants were excluded for failing attention checks which resulted in a final sample of 247 participants (66% female; $M_{age} = 36.81$).

7.1.2. Procedure

Participants were welcomed to the study and immediately presented with the standards manipulation. Specifically, participants were told the study aimed to gauge their reaction to a particular wine. In the *subjective standards* condition, participants were told that neuroscience shows people's satisfaction with wine is ultimately a function of their personal tastes, regardless of objective ratings, and thus wine is a domain where definitions of good and bad are more a matter of subjectivity rather than objectivity. Conversely, in the *objective standards* condition, participants were told that neuroscience shows people's satisfaction with wine is ultimately a function of the objective standards we see in various rating systems, regardless of personal tastes, and thus wine is a domain where definitions of good and bad are more a matter of objectivity rather than subjectivity.⁸

⁸ We exposed a separate sample ($N = 70$) to the standards manipulation and asked them to indicate the standards by which they evaluate wine on a 7-point scale anchored from *Completely objective* to *Completely subjective*. Consistent with expectations, those in the subjective standard condition ($M = 5.58, SD = 1.62$) reported they evaluate wine using more subjective standards than did those in the objective standard condition ($M = 4.35, SD = 1.77$) ($t(68) = 3.03, p = .003$).

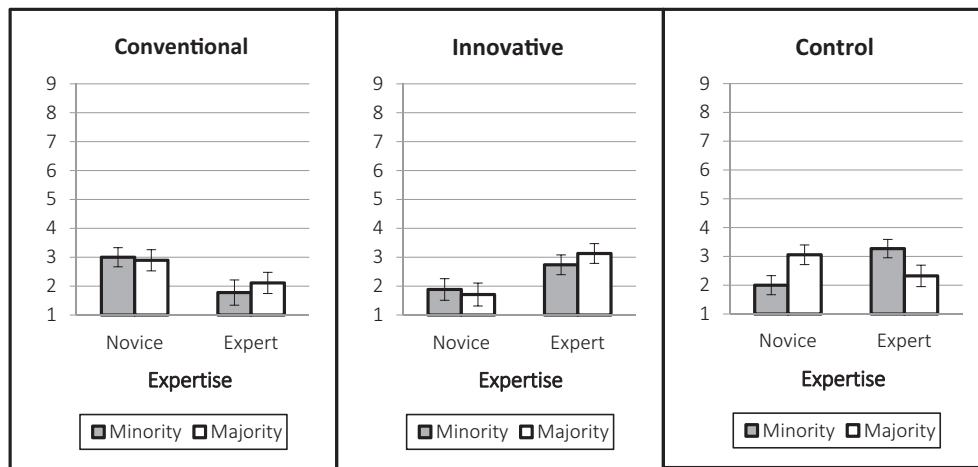


Fig. 2. Willingness to download as a function of expertise, endorsement, and preference basis in Experiment 3. Note. Bars represent standard error.

To manipulate expertise, participants completed the selective recall manipulation described in Experiment 2. In the *novice* condition, participants read that people are less knowledgeable than they think about wine and asked to indicate two occasions when they felt like a novice with respect to wine. Conversely, in the *expert* condition, participants read that people are more knowledgeable than they think about wine and asked to indicate two occasions when they felt like an expert with respect to wine.

Participants were then told of a new winery called *Burgess Winery*. To manipulate endorsement, participants were informed that either an estimated 82% (*majority*) or 18% (*minority*) of nearly 4000 people from the general population reported a favorable attitude toward the winery. Participants then indicated their willingness to purchase a Burgess wine on a 9-point scale anchored at *Not willing at all—Very willing*.

Finally, participants answered demographics and an attention check before being debriefed, thanked, and compensated.

7.2. Results

Participants' purchase intentions were submitted to a three-way ANOVA, with expertise, endorsement, and standard as independent variables. The findings revealed a main effect of endorsement ($F(1,239) = 4.92, p = .027, \eta_p^2 = 0.020$), an expertise \times standard interaction ($F(1,239) = 5.73, p = .017, \eta_p^2 = 0.023$), and an expertise \times endorsement interaction ($F(1,239) = 6.26, p = .013, \eta_p^2 = 0.026$). Yet these effects were qualified by the predicted expertise \times endorsement \times standard interaction ($F(1,239) = 4.39, p = .037, \eta_p^2 = 0.018$; see Fig. 3). No other effects were significant ($ps > 0.22$). To test our

hypothesis, we decomposed this interaction by evaluative standard.

In the *subjective standard* condition, analysis of participants' intentions to purchase the wine revealed an expertise \times endorsement interaction ($F(1,118) = 12.42, p = .001, \eta_p^2 = 0.095$). Those in the *novice* condition were more willing to purchase the wine endorsed by the majority (versus minority) ($F(1,118) = 5.20, p = .024, \eta_p^2 = 0.042$). Conversely, those in the *expert* condition were more willing to purchase the wine endorsed by the minority (versus majority) ($F(1,118) = 7.26, p = .008, \eta_p^2 = 0.058$). Neither main effect was significant ($ps > 0.057$).

In the *objective standard* condition, the analysis revealed only a main effect of endorsement ($F(1,121) = 10.71, p = .001, \eta_p^2 = 0.081$); participants were more willing to purchase the wine endorsed by the majority ($M = 8.10, SD = 1.80$) relative to the minority ($M = 6.61, SD = 2.77$). Neither the main effect of expertise nor the expertise \times endorsement interaction was significant ($ps > 0.13$).

7.3. Discussion

Experts and novices were differentially influenced by minority and majority endorsements, respectively, though only when the evaluative standards were subjective; when objective, both experts and novices demonstrated the well-documented effect of majority influence (Asch, 1956; Petrocelli et al., 2007; Terry & Hogg, 2000). These findings reveal the importance of the perceived subjectivity of evaluative standards in altering when minority groups are viewed as providing innovative (vs. inferior) information and, consequently, when experts are influenced by minority endorsements.

Of note, the lack of effect of endorsement in the objective standard condition offers further evidence that specific features of the group are not driving the effect. That is, if the effect was due solely to aligning with a risky group or a group that signals uniqueness, then the position of the endorsement (i.e., minority or majority) would be influential regardless of the evaluative criteria. Yet because minority endorsements were only influential under subjective criteria, the present findings further rule out alternative accounts based on specific group characteristics.

8. General discussion

Though experts exert a significant impact on others (Hovland & Weiss, 1951; see Pornpitakpan, 2004), the current research considered who influences experts by considering the role of social groups. Four experiments demonstrate that novices and experts are more influenced by majority and minority endorsements, respectively. This effect is driven by the belief that the influential group uses a shared criterion for

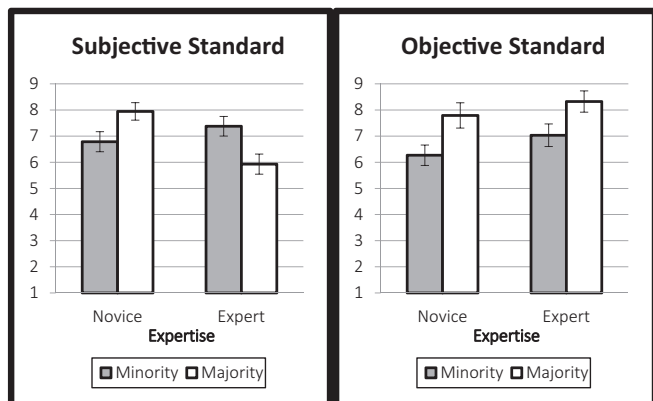


Fig. 3. Purchase intentions as a function of expertise, endorsement, and standard in Experiment 4. Note. Bars represent standard error.

their preferences (i.e., *basis similarity*), with the particular basis (i.e., conventional or innovative) varying as a function of social group (i.e., majority or minority). Furthermore, the effect is most likely in domains where evaluative standards are subjective and non-normative opinion is difficult to invalidate.

Collectively, this research provides several key contributions. First, this question is unique to the social influence literature in that it focuses on the potential knowledge gain by adhering to minority and majority groups. For instance, though prior work shows that individuals align their preferences with the minority because it signals their distinctiveness from others (Spears et al., 2009) or fits with their affective state (Wang et al., 2011), we demonstrate that minority endorsements convey innovative information that is persuasive to those who value such information. Second, it details the role of objective and subjective standards in shifting the value of the information provided by these social groups. As noted, while research demonstrates that minority influence conveys non-normative opinion (Moscovici, 1980; Nemeth, 1986; Seyranian et al., 2008), this finding elucidates when counter-normative opinion is perceived as innovative rather than inferior. Finally, it offers novel insight into the sources that influence experts. Indeed, though experts are generally less susceptible to evaluative cues that do not signal objective quality (Bettman & Sujan, 1987; Maheswaran, 1994; Rao & Monroe, 1988), the present findings show that experts do focus on cues to information (i.e., innovative knowledge) that is consistent with their self-schema.

Finally, the current work offers ample directions for future research. For instance, this work focuses on the value of conventional and innovative information given its relevance to knowledge acquisition. Yet majority and minority endorsements cue other types of information (Erb et al., 2015; Moscovici, 1980) that would be differential persuasive to individuals who value that information. Relatedly, the perception of basis similarity could impact individuals' inferences about attitude similarity with the group. Though one might imagine basis similarity increasing attitude similarity, the two constructs are distinct (Tormala, DeSensi, Clarkson, & Rucker, 2009) and research should consider when basis similarity emphasizes both attitude similarity and dissimilarity (see Clarkson, Tormala, Rucker, & Dugan, 2013). Lastly, this work focuses on subjective expertise. However, it is important to test this conceptual framework with objective expertise, as the value of different knowledge types may vary by one's actual (versus perceived) knowledge.

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