The Prototypical Framing Effect in Product Recommendation

Yimei Yuan
Guangdong Polytechnic of Water Resources and Electric Engineering, Guangzhou, China, 709979196@qq.com

bin ling
Hohai University, Nanjing, China, ling.bin@hotmail.com

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Yimei Yuan [1]
Bin Ling [2,*]

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*Corresponding author
[1] Senior Engineer, Guangdong Polytechnic of Water Resources and Electric Engineering, Guangzhou, China, 709979196@qq.com
[2] Associate Professor, Hohai University, Nanjing, China, ling.bin@hotmail.com

ABSTRACT

Product recommendations influence consumers' purchasing decisions, but not all advice is equally persuasive. This research examines how the framing of recommendations impacts advice-taking and buying behavior. Integrating prototypicality and framing theories, we propose the concept of a prototypical framing effect whereby advice framed with prototypical cues is more influential than advice framed peripherally. A pilot study conceptualizes this effect and develops experimental materials. Study one tests hypotheses that prototypically-framed advice increases advice-taking (H1) and buying behavior (H2) compared to peripherally-framed advice. Study two also examines identity salience as a moderator, hypothesizing stronger prototypical framing effects when identity salience is high (H3 & H4). Results will demonstrate the persuasive impact of prototypical recommendation frames, offering theoretical and practical insight into effective advice-giving. This research elucidates how subtle framing techniques can shape consumers' receptiveness to recommendations and willingness to purchase recommended products.

Keywords: framing effect, prototypicality, product recommendation, advice-taking

INTRODUCTION

Product recommendations play a vital role in informing consumers' purchasing choices. For instance, consumers rely on advice to select an appropriate memory card model for their digital camera before buying (Kowatsch & Maass, 2010). Recommendations provide useful information to help consumers find satisfactory products, both in-store and online. However, not all advice is equally effective or persuasive. Consumers may accept certain recommendations while dismissing others (Gershoff et al., 2001; Yeomans, 2019). This research aims to elucidate this issue by examining how the framing of recommendation information impacts its influence (e.g., framing effect, see Tversky & Kahneman, 1981).

Specifically, integrating theories of social identity and identity framing (Hogg, 2012; Seyranian, 2013, 2014), we propose the concept of a prototypical framing effect for product recommendations. This refers to the principle that the way advice is represented, via prototypical cues or situations, shapes whether it is accepted. Framing induces cognitive biases that systematically affect choices (Tversky & Kahneman, 1981). Different frames for recommendation information may elicit varying product evaluations and preferences.

This research aims to elucidate the proposed prototypical framing effect in product recommendations, testing whether prototypically-framed advice increases advice-taking and purchasing. Group prototypicality provides a cognitive channel for framing advice differently, such as through prototypical vs. peripheral cues. Prototypical frames establish stronger ties between the recipient's self-concept and the advice, whereas peripheral frames have weaker self-concept ties. We expect prototypical advice to be more effective and persuasive than peripheral advice. This is because prototypicality draws attention and encourages deliberative processing (van Knippenberg & Hogg, 2003). It strengthens the recipient's self-perception of membership in the group giving the advice. In this way, prototypical framing enhances advice receptiveness and persuasiveness compared to peripheral framing.

RESEARCH QUESTIONS

This research attempts to resolve the following three main questions:
1) What is the prototypical framing effect in a product recommendation context (conceptualization and characteristics)? And how to represent recommendation with prototypicality?
2) What do people obtain from the prototypical framing? To compare whether there is a difference of advice-taking and buying behavior between prototypical framing and peripheral framing?
3) When does this prototypical framing effect hold and when does it not hold? To investigate the boundary condition of the prototypical framing effect in term of identity salience.

THEORETICAL FRAMEWORK AND HYPOTHESIS

We develop two propositions explore the construct of the prototypical framing effect of product recommendation and its characteristic.

Proposition 1: There is a prototypical framing to represent advice in product recommendation system.
Proposition 2: The prototypical framing effect can be classified as two frames—prototypical frame and peripheral frame.

In recent years, consumer behavior research has increasingly recognized the influential role of social identity in shaping individuals' decision-making Babar et al. (In press). A person's choices as a consumer are motivated not solely by their personal tastes and preferences. Their purchases are also driven by a psychological sense of belongingness to salient social groups and a desire to express this identification. When consumers feel a strong affinity and allegiance with a particular social group, whether based on demographics, culture, lifestyle, or values, their consumption tendencies are swayed by this salient identity (van Knippenberg & Hogg, 2003). Marketers can leverage this effect by framing brands and products as encapsulating the central, prototypical qualities of an identity group. When a product is positioned and marketed in a way that taps into the core values, norms, and attributes symbolizing a consumer's meaningful social identity, those who strongly identify with that group become more compelled to purchase the product. This strategic product framing strengthens consumers' perception that buying the product helps affirm and signal their group identification and loyalty (see Figure 1).
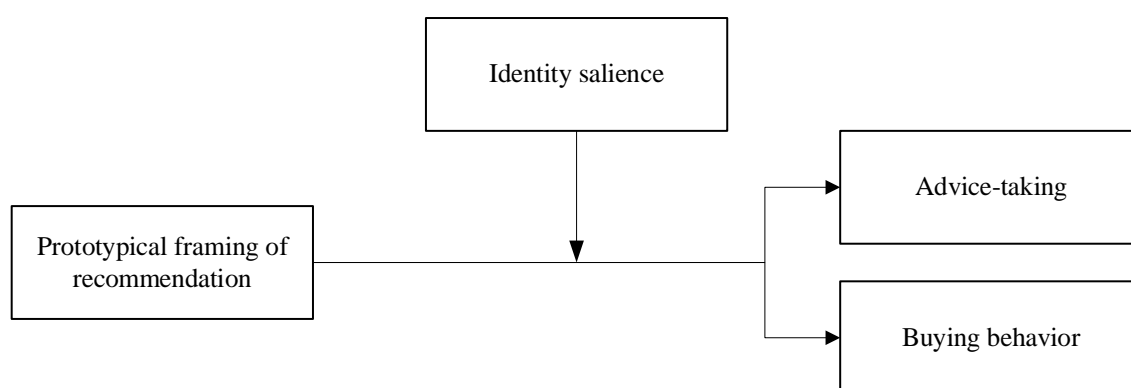

Figure 1: Theoretical framework

In addition to product framing, the way in which recommendations are communicated and framed influences how receptively consumers respond. Recommendations that are expressed in a manner that underscores essential, prototypical qualities of a valued social group resonate more strongly with consumers who identify with that group. When a recommendation accentuates attributes, values, and norms perceived as integral to the identity of the group, it takes on special meaning as a prototypical group recommendation. Consumers are more inclined to accept and internalize advice when it is prototypically framed in this way, as it allows them to feel alignment with the core values of their ingroup. In contrast, recommendations framed peripherally, calling attention to superficial preferences or ancillary traits, are viewed as tangential (Goldman & Hogg, 2016; Hogg, 2012, 2014; Hogg & Adelman, 2013). Rather than tapping into the defining essence of a group identity, peripheral framing only touches on incidental styles and tastes. This fails to elicit a strong sense of identity-based motivation to follow the recommendation. As such, consumers are less likely to be persuaded or give significant weight to peripherally framed recommendations, as they do not provide meaningful identity affirmation.

Therefore, to further examine these effects, we propose and test several hypotheses regarding the influence of prototypical versus peripheral framing of recommendations on critical consumer behaviors. Specifically, we develop hypotheses to investigate how prototypical framing impacts advice-taking and product purchase intent compared to peripheral framing. We also explore identity salience as a potential boundary condition that could enhance these framing effects. Identity salience refers to the prominence and significance that a particular identity holds for an individual, both in their own self-concept and in their perceptions of others (Hohman & Hogg, 2015; Stryker & Serpe, 1994). An identity with high salience is one that tends to be chronically accessible and active for the individual across different situations. When an identity is highly salient, individuals are motivated to maintain and affirm that identity through their attitudes and actions. Thus we predict identity salience may interact with recommendation framing, strengthening framing effects on behavior when salience is higher. Testing these hypotheses can provide greater insight into the relationship between social identification, advice persuasiveness, and consumption choices.

Hypothesis 1: The prototypical framing of recommendation has a more positive effect on advice-taking than the peripheral framing of recommendation.
Hypothesis 2: The prototypical framing of recommendation has a more positive effect on product buying behavior than the peripheral framing of recommendation.
Hypothesis 3: Identity salience has an interactive effect with recommendation framing on advice-taking. There is a stronger prototypical framing effect on advice-taking when the recipient has a higher identity salience.

Hypothesis 4: Identity salience has an interactive effect with recommendation framing on product buying behavior. There is a stronger prototypical framing effect on product buying behavior when the recipient has a higher identity salience.

RESEARCH DESIGN

A pilot study will be used to develop the concept of prototypical framing of the product recommendation and its characteristic. Two experimental studies will be used to testify to the proposed hypotheses.

Pilot Study

To effectively operationalize and test the effects of prototypical versus peripheral recommendation framing, we will first need to clearly conceptualize and develop concrete experimental materials instantiating these framing approaches. We will develop the conceptual foundation for prototypical framing of product recommendations by extensively reviewing relevant literature across social psychology, consumer research, and communication studies. This will identify recurring themes and dimensions characterizing messages and appeals framed to resonate with the core identity of a group. We will also conduct in-depth interviews with consumers to capture their perspectives on what makes a product recommendation feel prototypically representative of an identity group versus more peripheral.

The goal of this initial pilot study phase is twofold. First, synthesizing prior research and consumer insights will allow us to comprehensively delineate the key rhetorical and stylistic elements that define prototypical and peripheral framing of advice. Secondly, these characteristics will inform the systematic development of experimental recommendation materials embodying prototypical and peripheral framing conditions. Crafting controlled manipulations of recommendation framing is essential for rigorously testing causal effects on advice-taking and consumer behavior in subsequent experiments. Clearly delineating prototypical and peripheral framing dimensions through literature and interviews will provide a strong empirical basis for developing materials to directly compare their effects. Establishing a clear conceptual and methodological foundation will set the stage for controlled experiments examining how advice framing impacts important outcomes like advice adherence and purchase decisions.

Experiment One

After developing well-defined prototypical and peripheral framing manipulations through the pilot study, we will conduct a between-subjects experiment to test the proposed main effect of prototypical framing on advice-taking and purchase behavior. The independent variable will be recommendation framing with two levels: prototypical vs. peripheral. The two key dependent variables are advice-taking and product purchase intent.

We will recruit participants to complete an online shopping scenario presenting a series of product recommendations. The framing of these recommendations will be experimentally manipulated between subjects as either prototypical or peripheral. After viewing each recommendation, participants will report their likelihood of following the advice on multi-item measures of advice-taking. They will then make a product selection and purchase choice.

This experiment will allow us to directly compare the effects of prototypical versus peripheral recommendation framing on advice-taking and simulated purchasing decisions. We hypothesize that exposure to advice framed prototypically will increase participants' reported intentions to follow the recommendations, compared to peripheral framing. We also predict prototypical framing will make participants more likely to choose the recommended product option to purchase. Observing these hypothesized main effects would provide evidence that prototypical recommendation framing enhances consumers' advice adherence and propensity to buy recommended products, compared to peripheral framing.

Experiment Two

To test Hypotheses 3 and 4 regarding the proposed moderating role of identity salience, we will conduct a 2 (identity salience: high vs. low) x 2 (recommendation frame: prototypical vs. peripheral) between-subjects factorial experiment. The first independent variable will be identity salience, manipulated at two levels: high versus low. The second independent variable will again be recommendation framing: prototypical versus peripheral.

The key dependent variables measured will be the same as Experiment 1: advice-taking and product purchase intent. Participants will complete a similar simulated online shopping scenario with recommendation prompts. Additionally, we will incorporate identity salience manipulation tasks at the start of the study adapted from prior research. This will allow us to experimentally induce high or low identity salience related to the product domain.

The factorial combination of identity salience and recommendation framing conditions will enable analyzing their interaction on the dependent measures. We predict that identity salience will moderate the effect of framing on advice-taking and purchase decisions. Specifically, we hypothesize there will be stronger positive effects of prototypical framing on advice adherence and buying likelihood when identity salience is high rather than low. Observing this interactive pattern would provide evidence for Hypotheses 3 and 4 that identity salience enhances the impact of prototypical recommendation framing on consumer behavior. This experiment will build on the first by clarifying the boundary role of identity salience. It will demonstrate how group identification strengthens consumers' responses to strategically framed recommendations that tap into identity-relevant values.

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