How does the construal level affect consumers’ intention to adopt product ratings and individual reviews?

Zihinsel yorumlama düzeyi tüketici ürün puanı ve bireysel yorumları benimseme niyetini nasıl etkiler?

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Abstract

The study aims to examine how and why consumers’ intention to adopt aggregate review metrics (ARM) (e.g., product ratings) versus individual reviews (IR) (e.g., specific review texts) in an online shopping setting is differentially affected when both types of cues are salient. First, we provide a novel conceptualization of ARM as a “base rate cue” consisting of abstract, aggregated, category-level, and pallid elements; likewise, IR as a “case information cue” consisting of concrete, characteristic, and vivid elements. Construal level theory constitutes the theoretical foundation of this study. The research includes two major studies. First, a list of elements that influence the relative importance of the cue types (i.e., ARM vs IR) on consumer decision-making is compiled using in-depth interviews. Then, a pilot and an experimental study are designed to test our hypothesis. Findings prove that consumers’ intention to adopt ARM (IR) is increased (decreased) when they are in a concrete mind-set. Likewise, consumers’ intention to adopt the ARM (IR) is increased (decreased) when they are in the abstract mind-set. The results contribute to the existing literature on electronic word of mouth (eWOM) and construal level theory, as well as provide novel insights for managers as to the prioritization of cue types in line with the mental construal of consumers.

Keywords: Ewom, Online Consumer Reviews, Mental Construal

Jel Codes: M31, D91, L80

Öz

Bu çalışmamızın amacı; tüketıcı açısından, çevrimiçi ortamda yığın metrikler (örn., ürün puanları) ya da bireysel yorumların (örn., belirli kullanıcı yorumları) önem düzeylerinin neden ve nasıl farklılaştırıldığını incelemektir. Bu çalışmada yığın metrikler; soyut, yığın ve kategori düzeyinde öğelerden oluşan temel oran; bireysel yorumlar ise, somut, kendine özgü ve görselleştirilebilir unsurlardan oluşan tekil vaka enformasyonu olarak yeni bir düzeyde kavramsallaştırılmıştır. Zihinsel yorumlama düzeyi, çalışmamızın kuramsal altyapısı oluşturulmuştur. Araştırmımız kapsamında, tüketičilerin yığın metrik ve bireysel yorumlara verdiği önemi etkileyen unsurlar derinlemesine görüşmelerle tespit edilmiştir. Araştırmamız ipuçları, test etmek için, bir pilot test ve deneysel araştırma tasarımını oluşturmuştur. Araştırma sonuçunda; soyut zihinsel durum tetiklenen tüketiciyi yığın metrikleri; soyut zihinsel durum tetiklenenler ise bireysel yorum ipuçlarını daha fazla benimsenme niyetinde oldukları gözlemlenmiştir. Bu çalışma, elektronik ağdan ağıza pazarlama ve zihinsel yorumlama düzeyi kurumuna katkıda bulunurken, pazarlama yöneticilerine de tüketici zihin durumlarına göre hangi tip ipuçlarının ön çıkarılması gerektiğini konusunda işgörü sağlamaktadır.

Anahtar Kelimeler: Elektronik Ağdan Ağıza Pazarlama, Tüketici Yorum ve Değerlendirmeleri, Zihinsel Yorumlama Düzeyi

JEL Kodları: M31, D91, L80
Introduction

With the increasing popularity of online consumer review platforms, consumers have long begun to rely on cues from other consumers rather than information provided by firms. (Bernick, 2015; Fedewa, Holder, Teichner, and Wiseman, 2021; The Nielsen Company, 2015) Furthermore, with a recent dramatic increase in e-commerce transactions due to the COVID-19 pandemic, the importance of consumer reviews and ratings has become even more prominent for firms and consumers (Power Reviews, 2020). Insights from the industry show that the COVID-19 pandemic has raised the volume and significance of consumer reviews. (Fedewa et al., 2021; Kaemingk, 2020).

Many e-commerce retailers such as Amazon and independent platforms such as Yelp and TripAdvisor.com provide an opportunity for consumers to review, rate and discuss goods and services. Additionally, these firms allow consumers to retrieve valuable information about these goods and services before making a purchase decision. A bidirectional relationship between consumers and these platforms provides a fruitful research avenue for marketing scholars.

In these platforms, several conceptually and practically distinct elements have the potential to be further investigated in the domain. For example, consumers can learn and judge products by reading individual reviews (hereafter IR). In addition, product ratings (i.e., aggregate review metrics, hereafter ARM) can also be used as a means of evaluating products. In this context, IR mainly refers to specific reviews consumers typically post in a textual format. Meanwhile, ARM refers to aggregated evaluations of consumers, which are typically summarized and presented in a format of star ratings or numeric cues.

Consumers may use an ARM to get an overall gist of a product’s performance (Park, Lee, and Han, 2007) and read single reviews to reduce uncertainty and form a more comprehensive opinion toward the product (Park and Lee, 2008). ARM and IR jointly play an important role in consumers’ evaluative judgments. Nonetheless, the majority of research focuses on these eWOM cues in isolation (Of note, the term “cue types” is used interchangeably with “review types” throughout this article). However, in a field setting, both types of cues are salient to consumers (Chatterjee, 2001). Additionally, the conflict between IR and ARM in valence is not unusual (Qiu, Pang, and Lim, 2012). In this respect, several questions are noteworthy. First, do conflicting ARM and IR affect the intention to adopt review types? Second, which cue types are more diagnostic for consumers? Third, what are the underlying psychological mechanisms through which ARM and IR exert their respective influences? Researchers have failed to provide consistent answers to these questions, and the findings are mixed.

Online consumer review literature is abundant (e.g., De Langhe, Fernbach, and Lichtenstein, 2016; Hodac, Carson, and Moore, 2013; Hoffart, Olschewski, and Rieskamp, 2019; Klaus, 2013; Kozinets, 2016; Naylor, Lamberton, and Norton, 2011; Powell, Yu, DeWolf, and Holyoak, 2017; Ordabayeva, Cavanaugh, and Dahl, 2022; Van Laer, Edson, Ludwig, and van den Hende, 2019; Zheng, 2021). Despite the magnitude of the research outputs in the domain, few studies compare and contrast the ARM and IR (Qiu et al., 2012), two of the most salient cues in the online review environment. Besides, they lack a theoretical unity (i.e., consilience).

The study’s major aim is to examine how and why consumers’ intention to adopt ARM versus IR in an online shopping setting differs when both cues are salient. In order to develop the hypotheses, we adopted construal level theory (CLT), which has a rich and potential epistemological basis for explaining the differential influence of ARM and IR on consumer decision-making and judgment.

As an explanatory and predictive basis for the present study, CLT suggests that objects, events, and individuals can be perceived along a continuum of psychological closeness or distance (Trope and Liberman, 2010). A large number of studies have indicated that objects, people, or events that are temporally (Liberman, Sagristano, and Trope, 2002; Trope and Liberman, 2003), spatially (Fujita, Trope, Liberman, and Levin-Sagi, 2006), socially or hypothetically (Trope, Liberman, and Wakslak, 2007) distant are construed at a higher, more abstract level than are proximal ones. People rely more on generalized category-level information than specific details in an abstract mind-set. In contrast, psychologically close objects are represented as concrete and contextual rather than generalized abstract categories (Yan and Sengupta, 2013). Specifically, we develop a novel conceptualization of ARM as a “base rate cue” consisting of abstract, aggregated, category-level, and pallid elements; likewise, IR is a “case information cue” consisting of concrete, characteristic and vivid elements.

The present study was designed three-fold agenda. First, we conceptualized two distinct types of review cues (i.e., ARM and IR) based on the base rate and case information concepts, which would be a good conceptual base to generate novel hypotheses in the OCR domain. Second, based on this conceptualization, a qualitative study is conducted using in-depth interviews. Third, a two-group
experimental study was conducted to test our main hypothesis. After presenting the results of the studies, the rest of this paper focuses on the contributions and practical implications.

Literature review

While buying a product or service, consumers typically obtain information from three sources: professional paid agents, nonpaid experts, friends, and family members using oral communication (i.e., word-of-mouth, WOM) (Naylor et al., 2011; Solomon, 1986). It has been well-documented that traditional (offline) word-of-mouth plays a critical role in consumers’ purchase decisions (Richins and Root-Shaffer, 1988). However, with an increase in consumers’ online shopping frequency and the popularity of online social media platforms (e.g., Facebook, Twitter, Instagram), e-commerce websites (e.g., Amazon, eBay, Trendyol), and consumer review sites (e.g., Yelp, Tripadvisor.com, Zomato) electronic word-of-mouth (eWOM) have become a vital source of information for consumers.

EWOM is “any positive or negative statement made by potential, actual, or former customers about a product or company, which is made available to a multitude of people and institutions via the Internet” (Hennig-Thurau, Gwinner, Walsh, and Gremler, 2004, p. 39). Online consumer reviews (OCR) are a type of eWOM communication that can be addressed as “peer-generated product evaluations posted on the company’s or a third party’s websites” (Mudambi and Schuff, 2010).

Recently, with a dramatic increase in e-commerce transactions due to the COVID-19 pandemic, the importance of OCR has become even more prominent for firms and consumers (Fedewa et al., 2021). Supportively, a recent survey found that 99.9% of shoppers consult reviews when shopping online, while 98% consider reviews to be crucial when making purchase decisions (Power Review, 2021).

OCR is addressed in the literature based on various classification schemes, such as a five-factor communication process framework or based on valence, rating scores, and volume (Zheng, 2021). In parallel, numerous studies have examined how OCR-related factors such as volume and product rating scores (i.e., an average rating given to a product; Hoffart et al., 2019) affect the utilization of OCR. The literature also highlights OCR as an important predictor of consumer behaviour, including information adoption decisions, purchase intentions, and sales (e.g., Chevalier and Mayzlin, 2006; Chintagunta, Gopinath, and Venkataraman, 2010; Hofmann, Clement, Völckner, and Hennig-Thurau, 2017; Kaleta and Aasheim, 2022; Lee and Choeh, 2020; Li, Wu, and Mai, 2019).

Aggregate review metrics versus individual reviews

Consumers can learn about and form an attitude toward products by reading IR, which are specific reviews that consumers post, and by focusing on ARM, which is an aggregation of customer assessments typically presented in the form of star ratings or numeric cues in various formats. These two typologies regarding eWOM are frequently available in online settings. For example, in addition to IR, various online retail platforms provide the ARM that summarizes all consumer evaluations of a product, usually by providing the product’s mean rating and a total number of ratings.

The ARM may be presented in different forms, including but not limited to the total number of reviews, answered questions, and followers. ARM, by definition, includes all types of cues signalling aggregated, decontextualized, base-rate and central information about a target (Yan and Sengupta, 2013; Ziegele and Weber, 2015). In contrast, IR is specific reviews posted by individuals signalling specific, idiosyncratic, peripheral, contextual, exemplified, and individuating details about a target (Qiu et al., 2012), which can, by definition, be considered as case information (Daschmann, 2008; Yan and Sengupta, 2013).
Figure 1: An Example of ARM and IR on Amazon.com

Base-rate neglect

Base-rate neglect, also called a base-rate fallacy, is a type of cognitive bias in which people tend to ignore or underutilize the base rate in favour of case information (Kahneman and Tversky, 1973; Yan and Sengupta, 2013). In other words, people are inclined to rely more on individuating information than base-rate information. However, studies in this domain suggest that people base their judgments of a target merely on base-rate information when both base-rate and case information is available to them (Kahneman and Tversky, 1973; Nisbett and Ross, 1980; Welsch and Navarro, 2012).

When they are told that a person is “short, slim and likes to read poetry,” people are more likely to guess that the person is a professor of classics than a truck driver, ignoring the much higher base rate of truck drivers than classics professors in the population (Nisbett and Ross, 1980). Numerous studies have consistently replicated base-rate neglect (e.g., Bar-Hillel, 1980; Lyon and Slovic, 1976). The “Heuristic and biases” school of thought further argues that base rate neglect is robust (Kahneman and Tversky, 1996). However, some scholars have suggested that base-rate neglect may be attenuated or even disappear under different experimental conditions (Cosmides and Tooby, 1996; Gigerenzer, 1996) or depending on people’s mental construal (Yan and Sengupta, 2013). In an attempt to test an underlying psychological mechanism through which base-rate operates in consumers’ minds, the present study also contributes to the literature regarding “base-rate neglect”.

Construal level theory

Scholars have long been interested in the psychological states of human beings that transcend the “here and now”. Transcendence of the “here-and-now” implies that beyond physical limits, the self and experiences here and now, human beings can contemplate themselves in the past, and future, put themselves into others’ shoes, cognize spatially distant places and consider counterfactual alternatives to reality. In other words, people traverse psychological distance (Trope, 2012).

A vast number of studies in social psychology, evolutionary psychology, and neuroscience are also supportive of the argument that humans have evolved with a capacity to broaden their spatial, temporal, and social horizons (Gilead, Liberman, and Maril, 2014; Saad, 2017; Stillman, Lee, Deng, Unnava, Cunningham, and Fujita, 2017; Trope, 2012). For instance, we can plan our careers, try to predict future events, and contemplate hypothetical scenarios of what would happen if we did behave in a particular way. Furthermore, by putting ourselves into others’ shows, we can anticipate and
contemplate others’ opinions about themselves (i.e., the meta perception concept; a detailed review of meta perception, see Varnali and Cesmeci, 2022).

Construal level theory (CLT) is a theory developed in social psychology, explaining the relation between psychological distance and the extent to which an individual’s thinking of objects and events is abstract and concrete (Trope and Liberman, 2010; Trope, 2012). The basic tenets of construal level theory of psychological distance lean on the assumption that only the here and now can be directly experienced; the future, distant places and other people are thought to be represented in a more abstract manner, such as imaginations, memories, plans or hopes (Raue, Streicher, Lermer, and Frey, 2015). In other words, the more distant a phenomenon from an individual is, the more abstract the phenomenon is processed. Contrarily, the more proximate a phenomenon from an individual, the more concrete way it is processed.

Psychological distance varies along temporal, spatial, social and hypotheticality (Trope and Liberman, 2010). Liberman and Trope (2014, p. 365) also assert that “it is ever important whether an object is real or imagined, certain or probable, present, future or past, mine or somebody else’s.” People adopt higher construal levels when psychological distance increases, whereas they operate at lower construal levels when psychological distance decreases. Psychological distance in each dimension denotes how far the distance is from the present (temporal), here (spatial), self (social) and probability (hypotheticality). Although researchers suggest other dimensions, when the term “distance” is used, it refers to these four dimensions specifically (Liberman, Trope, and Wakslak, 2007).

According to CLT, people mentally represent distant future events more abstractly and focus on the desirability and central features of that event. Specifically, when the event is near, people construe it more concretely, focus on feasibility and consider secondary features of that event. For example, planning a vacation for the next summer is construed at a high level of abstraction in terms of “having fun”, “relaxing”, and “beauty of nature”. However, the day before going on vacation, the same event is construed at a low level of abstraction, such as “where can I stop by during the journey” and “selecting the appropriate clothes for packing”. Furthermore, the same abstraction level can be applied to different dimensions. For example, people are more prone to construe remote places abstractly than their immediate surroundings.

Although the relationship between psychological distance and construal levels is well-established, a conceptual distinction between these two mechanisms is noteworthy. While psychological distance refers to the perception of when an event occurs, where it occurs, to whom it occurs, and whether it occurs, construal levels are, on the other hand, related to the processes that give rise to the representation of the event itself (Liberman et al., 2007).

Assumptions on which construal level theory is constructed are: First, psychological distance is a selfish concept relative to the self, here, and now. Second, the causal link between psychological distance and construal level is bidirectional. In other words, psychological distance affects the mental representation of objects, while the mental representation of objects (i.e., either abstract or concrete) affects the perceived psychological distance. Third, the effect of psychological distance on one dimension (e.g., temporal) impacts other psychological dimensions (e.g., spatial, social, hypotheticality). These assumptions can be used to unconfound the effects of psychological distance from other variables (i.e., alternative explanations) (Liberman et al., 2007; Trope, 2012).

A growing body of research examined the main or joint effect (e.g., along with different theoretical constructs) of construal level on advertisement effectiveness, product appeal (Spassova and Lee, 2013); subjective probability estimates (Waksalak and Trope, 2009), risk perceptions (Lerner, Streicher, Sachs, Raue, and Frey, 2015; Sagristano, Trope, and Liberman, 2002; Trope, 2012), price perception in the advance selling of experience services (Wakefield and Wakefield, 2018), service satisfaction (Pizzi, Marzocchi, Orsingher, and Zammit, 2015), health-risk perception (Yan and Sengupta, 2013), and consumers’ wait duration judgment (Wang, Hong, and Zhou, 2018). However, studies addressing online consumer reviews in light of CLT are very scarce to date. Specifically, research on the effects of ARM versus IR is inconclusive. However, as a general theory, CLT has the potential to explain and reconcile the mixed finding in the literature. Thus, we adopt CLT as a theoretical base to develop our focal hypothesis.
Table 1: Keywords concerning the Level of Construal

<table>
<thead>
<tr>
<th>High-Level Construal</th>
<th>Low-Level Construal</th>
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<tr>
<td>Abstract</td>
<td>Concrete</td>
</tr>
<tr>
<td>Simple</td>
<td>Complex</td>
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<tr>
<td>Structured, Coherent, Decontextualized, Primary, Core,</td>
<td>Unstructured, Incoherent, Contextualized, Secondary,</td>
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<tr>
<td>Superordinate</td>
<td>Surface, Subordinate</td>
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<tr>
<td>Goal relevant</td>
<td>Goal irrelevant</td>
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<tr>
<td>Ends</td>
<td>Means</td>
</tr>
<tr>
<td>Desirability</td>
<td>Feasibility</td>
</tr>
<tr>
<td>Desirable risky acts</td>
<td>Feasible, safe acts</td>
</tr>
<tr>
<td>Focus on similarities/stereotypes</td>
<td>Focus on differences/distinctions</td>
</tr>
<tr>
<td>Base rate</td>
<td>Case information / Narrative communication</td>
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<tr>
<td>Promotion focus</td>
<td>Prevention focus</td>
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</table>

Note: The authors produce the table.

Hypotheses development

Upon conceptualising ARM and IR as a base rate and case information, we provide an important base for generating novel hypotheses about consumers’ intention to adopt ARM or IR when making a judgment about a product or service.

With this conceptualization in mind, research related to base rate neglect suggests that the exemplars (i.e., case information) exceed the influence of structural, summarized accounts (base-rate information) (Brosius and Bathelt, 1994; Gibson and Zillmann, 1994). Because individuating information is more natural for people to process specific information about a particular individual than to process structural and abstract accounts. Another substantiation for this argument is that individuating information is more related to the human perception of the non-mediated social environment (c). However, recent studies of exemplification cast doubt on the simple assumption of a general dominance of case information. Accordingly, base-rate information can be influential as well or has shown to be even more influential than case information (Betsch, Renkewitz, and Haase, 2013; Peter and Brosius, 2010). Some other scholars in the domain also suggest that base-rate neglect may be attenuated, dissipated, and even reversed under different experimental conditions (Cosmides and Tooby, 1996; Gigerenzer, 1996) or depending on people’s construal level of psychological distance (Yan and Sengupta, 2013).

Despite the magnitude of the research outputs in the domain, few studies compare and contrast the ARM and IR (equally applicable to the comparison of the base-rate vs case information in a more general sense), two of the most salient cues in the online review environment. The findings are mixed and lack a theoretical unity (i.e., consilience). To address this gap in the literature, we adopt construal-level theory as an explanatory base to solve the inconsistent findings in the relevant literature and develop hypotheses accordingly. More specifically, consumers are expected to adopt ARM or IR based on their mental construal. Thus, consumers’ intention to adopt ARM increases when they are in an abstract mind-set. Contrarily, their intention to adopt IR increases when they are in a concrete mind-set.

H1a: Consumers’ intention to adopt ARM (aggregate review metrics) for making a judgment about a product/service increases (decreases) when they adopt an abstract (versus concrete) mind-set.

H1b: Consumers’ intention to adopt IR (individual reviews) for making a judgment about a product/service increases (decreases) when they adopt a concrete (versus abstract) mind-set.

Methodology & results

Study 1: In-depth interviews

This study performed a two-stage qualitative study (e.g., a modified version of the method used in Varnali and Cesmeci, 2022). In the first stage, 24 subjects participated in the study (50% female; Mage = 38.5 years). The data were collected with convenience sampling. First, the participants were asked to explain a list of elements on which they based their intention to adopt the review types in consumer decisions (i.e., ARM and IR). Next, two research assistants familiar with the OCR literature reviewed the phrases participants reported separately and coded the distinct and most generalized dimensions/categories based on the words that appeared most frequently. Then, each transcript was considered on its terms and coded. Next, the entire transcripts were reviewed and compared to look for
expressions with similar meanings and the elements implicit in the transcripts. Finally, a list of mutually exclusive elements was compiled. The initial inter-rater agreement was 90%. They resolved disagreements through discussion, resulting in a list of 5 items.

In the second stage, another sample of 10 was recruited (MAge: 34, 60% female, frequent online shoppers) and was taken through the same steps. However, this time, they were shown the list of elements compiled in the first stage of the study and were asked to evaluate the list of items in terms of wording, semantic structure, and general adequacy. Next, the research team interviewed the respondents to assess if the items were understood as anticipated. Minor wording adjustments were applied to the items based on the interviews. Based on the final list of items, a five-item bipolar scale was developed to measure the intention to adopt review types in consumers’ decisions.

Key concepts labelled in study 1

The distinct and logical categorization of concepts in Study 1 also aligns with relevant literature. These are helpfulness, informativeness, persuasiveness, and importance for purchase intention. Of note, these constructs may be an antecedent or consequence of each other. However, given the high correlation between the constructs and the question of interest of this qualitative study, the key concepts addressed under the proposed concept “intention to adopt review types”.

Helpfulness

Online platforms such as Amazon allow readers to give helpful votes to reviews posted by reviewers. Consumers are more receptive to and influenced by reviews that are perceived to be more helpful (Zhu, Yin, and He, 2014; Schuckert, Liu, and Law, 2016). Websites that identify and indicate helpful reviews achieve higher consumer attention and stickiness (Yin, Bond, and Zhang, 2014).

A great deal of research has investigated factors that affect online review helpfulness. These factors include both review-related (i.e., IR) and rating-related factors (i.e., ARM) such as review length (e.g., Forman, Ghose, and Wiesenfeld, 2008; Salehan and Kim, 2016), rating valence (e.g., King, Racherla, and Bush, 2014; Pan and Zhang, 2011; Racherla and Friske, 2012).

Review helpfulness describes the perceived value of a review to its readers and measures consumers' evaluation of a review. However, perceived helpfulness is dependent on the goal consumers pursue. For example, for consumers whose goal is to obtain information about a product/service, a review would be perceived as helpful to the extent that it serves this end goal.

The words and phrases “helpful, support my decision-making, contribute to” are coded under helpfulness.

Informativeness

One of the elements that affect consumers in an online shopping setting is informativeness. Consumers read online reviews and consider ratings a source of information about a product or service. In some respect, consumers rely more on information conveyed by reviews and ratings rather than firms’ official websites or owned media platforms (Ngarmwongnoi, Oliviera, AbedRabbo, and Mousavi, 2020; Ozanne, Liu, and Mattila, 2019; Rynarzewska, 2019). In other words, consumers may deem OCR less biased than a marketing message (Hennig-Thurau, Walsh, and Walsh, 2003).

In this in-depth interview, the words and phrases such as when searching for a product, illuminating, information, misleading, message, and signal are generally categorized under the “informativeness” concept by coders.

Persuasiveness

Almost all (98%) consumers in an online setting reported reading peer reviews before deciding on products (Freedman, 2008). Nevertheless, offering online peer reviews is likely insufficient to attract and retain consumers. Therefore, website owners need customers to post reviews that consumers find favourable and persuade them to buy.

According to Richard M. Perloff, “Persuasion is a symbolic process in which communicators try to convince other people to change their attitudes or behaviours regarding an issue through the transmission of a message in an atmosphere of free choice.” (2010, p. 12). More comprehensively, persuasion is a process of attitude formation involving cognitive (i.e., beliefs), affective (i.e., emotions and feelings) and behavioural dimensions (Cesmeci, 2017). In line with this definition, in Study 1, the phrases such as attitude toward a product and the words such as feeling, sense, thoughts, belief, attraction, and influence are categorized under the “persuasiveness” concept.
Authenticity

Online reviews may play an important role in consumers’ decision-making processes. However, we cannot conclude that all positive (negative) online reviews influence consumers positively (negatively). Because consumers consider the authenticity of OCR as another important element in forming attitude toward OCR (Kim and Kim, 2020). Prior studies also support this argument in the context of the contents of websites (Evrard and Krebs, 2018; Koiso-Kanttila, 2005).

Authenticity denotes an object’s originality, sincerity, genuineness, reality, or truthfulness (Lu, Gursoy, and Lu, 2015). Previously, the authenticity construct was conceptualized as a perception of authenticity based on the idea that authenticity is “a social construction that may change due to different evaluators’ perceptions and interpretations of the place, situation, person, or object.” (Grayson and Martinec, 2004, p. 298). In parallel, consumers judge the authenticity of reviews or ratings based on their perception, regardless of the inherent accuracy of the reviews.

The words and phrases including “veracity, valid, realistic, authentic, not misleading, genuine, true, truthful” are generally categorized under the “authenticity” concept by coders.

Importance in purchase intention

Purchase intention can be defined as an individual’s willingness and readiness to give purchase behaviour. The theory of planned behaviour suggests that people’s intention is an immediate antecedent of real behaviour. The theory modelled human behaviour as a function of behavioural intention (Ajzen, 1991; 2002). Similarly, purchase intention is a strong predictor of actual purchase.

Based on the extant literature, the concept of purchase intention strongly correlates with the concepts addressed in this study. Nevertheless, based on the qualitative study and relevant literature, we include this concept as an important element for the proposed concept (i.e., intention to adopt review types, IART).

The words and phrases, including but not limited to “important/dominant role in my purchase decision, buying decision, the importance for my decision, base my judgment on…” are categorized under the “importance for purchase intention” concept by coders.

Study 2: The intention to adopt the review types

Pilot test

First, a separate pilot study was designed to test the consistency and reliability of the scale. Fifty participants (52% female, MAge = 24.86) were recruited from an online panel in return for monetary compensation. Additionally, we aim to test the base level (i.e., default level) of the construct “intention to adopt the review type” without a mental construal manipulation. In doing so, descriptive baseline scores are provided using the novel scale. However, this pilot study should be carefully interpreted because the participants’ chronic construal level is mixed.

An exploratory factor analysis on the 5-item was performed. Bartlett’s test of sphericity was significant (p <0.001), and the Kaiser–Meyer–Olkin measure of sampling adequacy was 0.95. The 5-items were then subjected to principal components analysis with Varimax rotation. All items were successfully grouped into a single dimension. As shown in Table 2, the factor loadings were significant (p <0.001) and higher than 0.89 (all items are higher than 0.50; see Tabachnick and Fidell, 2001). No item had cross-loadings. Cronbach’s alpha value of the scale is 0.95.

The list of items is also shown in Table 2. The IART scale consists of a 101-point, 5-item bipolar measure (0 = intention to fully adopt ARM, 100 = intention to adopt IR for each item in question fully). In other words, higher scores indicate that IR is dominant, while lower scores indicate that ARM is dominant for adoption when making a judgment about a target.

As expected, the results provide initial evidence concerning the base rate neglect phenomenon in the OCR setting. In the absence of mental construal manipulation, people tend to adopt IR compared to ARM (see Table 3, MIART = 78.65, which is higher than the midpoint of the 101-point IART scale).
Table 2: Factor Loadings of the Items Representing the Intention to Adopt Review Types in Consumer Decisions

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Helpfulness</td>
<td>0.95</td>
</tr>
<tr>
<td>2. Informativeness</td>
<td>0.89</td>
</tr>
<tr>
<td>3. Persuasiveness</td>
<td>0.92</td>
</tr>
<tr>
<td>4. Importance in Purchase Intention</td>
<td>0.95</td>
</tr>
<tr>
<td>5. Authenticity</td>
<td>0.92</td>
</tr>
<tr>
<td>Eigenvalue</td>
<td>4.29</td>
</tr>
<tr>
<td>Cumulative variance explained (per cent)</td>
<td>85.86</td>
</tr>
<tr>
<td>Cronbach’s alpha</td>
<td>0.95</td>
</tr>
</tbody>
</table>

Table 3: Descriptive Statistics of the Intention to Adopt the Review Types (IART)

<table>
<thead>
<tr>
<th></th>
<th>Authenticity</th>
<th>Helpfulness</th>
<th>Informativeness</th>
<th>Persuasiveness</th>
<th>Importance</th>
<th>Summated IART</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>72.80</td>
<td>76.96</td>
<td>82.76</td>
<td>80.14</td>
<td>76.78</td>
<td>78.65</td>
</tr>
<tr>
<td>S.D.</td>
<td>24.23</td>
<td>21.25</td>
<td>15.68</td>
<td>19.12</td>
<td>22.08</td>
<td>18.39</td>
</tr>
<tr>
<td>Min.</td>
<td>6.00</td>
<td>10.00</td>
<td>37.00</td>
<td>20.00</td>
<td>20.00</td>
<td>22.80</td>
</tr>
<tr>
<td>Max.</td>
<td>100.00</td>
<td>100.00</td>
<td>100.00</td>
<td>100.00</td>
<td>100.00</td>
<td>99.76</td>
</tr>
</tbody>
</table>

Consumers’ intention to adopt review types based on the mental construal: An experimental study

The study is designed to test whether there is a significant difference between the intention to adopt ARM and IR depending on consumers’ mental construal when both types of cues are salient (H1a and H1b). In parallel, the study was designed with a three-fold agenda: (1) to test the scale developed in the previous study in an experimental setting, (2) to manipulate consumers’ mental construal with an external manipulation by adapting the well-established category-exemplar task to the Turkish language (see appendix A1 for the manipulations), (3) to test the focal hypothesis H1 (H1a and H1b), that is, whether consumers’ intention to adopt ARM is higher than IR (IR higher than ARM) for making a judgment about a target when they adopt abstract (vs concrete) mental construal.

Procedure

Study 2 was conducted with 104 participants from an online panel (57.7% female; Mage = 32.60 years, SD = 8.80). The participants' identities were completely anonymous to ensure they were comfortable with the questions. However, they all are active online shoppers. Participants are told that the study aimed to evaluate their behavioural tendencies in online shopping. In doing so, potential demand characteristics in the study are minimized.

Before this online experiment, a pilot study was conducted with 15 participants via the online survey tool Qualtrics. Although the forward-translations and back-translation methods adapted the original experimental tasks into Turkish, the tasks were checked in the pilot study in terms of wording, semantic structure, and general adequacy. In addition, several phrases were revised upon collecting the data in light of participants’ feedback.

The main study employed a 2 group (Target: concrete vs abstract mental construal) between-subject experimental design. Participants were randomly assigned to one of the two experimental conditions after reporting online shopping frequency. First, participants in the abstract and concrete mental construal conditions were given a category exemplar task that aimed at manipulating their construal level externally (e.g., Freitas, Gollwitzer, and Trope, 2004; see Appendix A1 for the modified version in Turkish). Then, in the concrete mind-set condition, participants were asked to think of a word that is a specific example of that word. Contrarily, in the abstract mind-set condition, they were asked to come up with a broad category in which the given word is an exemplar of that category. Then, participants were rated on the IART scale based on the qualitative study performed. Lastly, participants were asked to report their gender and age, respectively.

Manipulation checks

Behaviour Identification (BIF): After participants were given a category exemplar task, a BIF manipulation check was administered to ensure that their mental construal was manipulated as intended.

Participants’ responses to a modified version of the BIF (Vallacher and Wegner, 1989; Yan and Sengupta, 2013; see Appendix A2 for the modified version in Turkish) questionnaire were subjected to binary coding (high level of construal = 1, low-level of construal = 0), and summed. A higher (lower) score indicated a higher (lower) construal level. As expected, a one-way ANOVA on participants’ BIF scores
shows that participants in the abstract mental construal condition had higher BIF scores than did those in the buying for themselves condition (Mabstract = 8.69, Mconcrete = 6.60, F(1, 102) = 22.43; p < .001, η2 = 0.18). These results indicate that the mental construal manipulation was successful.

Results

To test H1a and H1b, an ANOVA was performed. As expected, the results show that people who adopt abstract mental construal scored lower on the IART scale as compared to people who adopt abstract mental construal (Mabstract = 66.46 vs Mconcrete = 79.70; F(1, 102) = 9.01, p < .01, η2 = 0.081), (see Figure 2). Thus, the hypotheses (i.e., H1a and H1b) were supported. In other words, consumers’ intention to adopt ARM for making a judgment about a product/service is higher when they adopt abstract construal (versus concrete construal). However, on the flip side, consumers’ intention to adopt IR for making a judgment about a product/service is higher when they adopt concrete construal (versus abstract construal).

Motivation check: Lastly, if the observed effect in this study were driven by a higher (lower) level of processing motivation for the psychologically close (distant) condition, we would have observed such a difference to be revealed in the motivation index. However, the results indicated no significant difference between the two experimental groups regarding participants’ motivation (F < 1), indicating the alternative account was not at play.

Figure 2: The Level of Importance of Review Types in Consumer Decisions based on Consumers’ Mental Construal

Discussion

Along with increased customer migration to digital marketplaces, online consumer reviews and ratings are becoming more critical to evaluate for firms (Changchit, Klaus, and Lonkani, 2022). Due to the subjective nature of customer experience, the evaluations can be profoundly different for the same product or experience. Nevertheless, consumers utilize online reviews and ratings as a source of information before making a consumption decision. To fully utilize online reviews, it is critical to consider how consumers carefully process information and avoid bias. For example, in conflicting ratings and reviews, consumers infer which review types (i.e., ARM or IR) are more diagnostic for their decisions. Furthermore, they selectively weigh and allocate their attention between the type of reviews. However, they are mostly unaware of the psychological mechanism in the process. This study aims to reveal this psychological mechanism (i.e., mental construal) that influences consumers’ intention to adopt and weigh ARM vs IR when deciding on a marketing offer.

Considering the important role of OCR for both consumers and firms, the present study has provided novel insights as to how and why consumers adopt ARM or IR when deciding about goods or services encountered in an online setting. In doing so, CLT served as a theoretical base for our predictions. The results provide initial evidence that consumers’ intention to adopt ARM for making a judgment about a product/service is higher when they adopt abstract construal (versus concrete construal). On the flip side, consumers’ intention to adopt IR for making a judgment about a product/service is higher when they adopt concrete construal (versus abstract construal).
Findings in this study may provide preliminary implications and valuable insights to the practitioners. For example, firms can make either ARM or IR more salient depending on consumers’ mental construal. As noted, studies in CLT have suggested that different dimensions of psychological distance (i.e., time, space, social distance, and hypotheticality) influence consumers’ mental construal and, in turn, it affects the prediction, evaluation, and behaviour of consumers (Trope and Liberman, 2010). With this in mind, customers buying a product for others (e.g., gift giving, buying on behalf of others) adopt a more abstract mind-set than customers buying a product for themselves (e.g., Baskin, Waksilak, Trope, and Novemsky, 2014). Similarly, consumers at the informational stage of a customer journey are more likely to be in an abstract mind-set. In contrast, consumers at the transactional stage of the customer journey are more likely to be in a concrete mind-set (Humphreys, Isaac, and Wang, 2021). In addition, the spatial distance between consumers and firms (e.g., tourists’ hometown and their spatial proximity to a hotel) or a consumer to a reviewer (e.g., spatial proximity among online users in a review platform) can serve as an important cue for detecting consumers’ mental construal. Since consumers’ mental construal influences their intention to adopt either IR or ARM in the decision-making process, firms can increase or decrease the salience of the review types as a part of their user experience strategy. Rigorously monitoring similar instances on these platforms, firms can manage their marketing communications mix accordingly to gain competitive advantages in the market. Policy-makers can also leverage the behavioural findings of the study to increase the effectiveness of their persuasive communications.

While the present study provides important insights for firms and policymakers, it is believed that it also fills the gap in the relevant literature. In the context of ARM and IR and their downstream consequences, the study shows that CLT may serve as a good explanatory base with the potential to reconcile seemingly disparate findings and, in an attempt, to reveal the underlying mechanisms at play. For instance, Ordabayeva et al. (2022) suggest that negative reviews might benefit identity-relevant brands when the reviewers are perceived as more socially distant. Identity-relevant, semantic memories may serve as abstract information instead of individual reviews and mitigate the effect of negative individual reviews. On the other hand, another study examines a conflicting aggregated rating on individual reviews’ perceived credibility and diagnosticity (Qiu et al., 2012). The results show that a conflicting aggregated rating decreases review diagnosticity and credibility via its negative effect on consumers’ product-related attributions of the reviews. Considering consumers’ chronic construal level as a trait and contextual factors that influence it, mental construal may also play a role as an underlying psychological mechanism. Additionally, Naylor et al. (2011) suggest that consumers are similarly persuaded by reviews written by ambiguous and similar reviewers, and ambiguous reviewers are more persuasive than dissimilar reviewers. Since it is conclusive that abstract construal induces a similarity focus (McCrea, Weber, and Myers, 2012), the similarity inference from ambiguousness may be accounted for the level of construal. We believe that our study is a promising alternative and has the potential to explain seemingly disparate findings in the literature. Thus, it is expected that the results of this study make significant theoretical and practical contributions by identifying and testing a new mechanism through which consumers’ utilization of review types is differentially affected on OCR platforms.

Although a rigorous research program was conducted to test our focal hypothesis, several limitations should be addressed. First, since the experimental setting limits the external validity of the findings, the results should only be interpreted in light of methodological limitations. Second, although the dependent variable (DV) intention to adopt review types includes a novel scale developed about the comprehensive qualitative study and tested rigorously in the subsequent studies, future research in this domain can measure DV with different operationalizations. For instance, participants can be provided real or crafted reviews and ratings to evaluate their attitude toward the product and purchase intention rather than self-reporting bipolar measures. Further, “choice” as a behavioural measure would corroborate the findings and a field experiment. Third, several factors, such as consumers’ risk perception, scepticism about OCR, goal orientations, and product types (i.e., utilitarian or hedonic), may serve as a boundary condition or improve the explanatory power of the proposed model. By examining these factors and replicating the studies in a different cultural context, future research can further contribute to the OCR and eWOM literature.

**Peer-review:**

Externally peer-reviewed
Conflict of interests:
The authors have no conflict of interest to declare.

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Ethics Committee Approval:
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Author Contributions:

References


Appendices

Appendix 1: Mental Construal Manipulation used in Study 2

Category vs. Exemplar Task / Kategori-Örnek Manipülasyonu (Turkish version)

**Yüksek Seviye (Soyut) Düşünme Şekli Manipülasyonu**


**Düşük Seviye (Somut) Düşünme Şekli Manipülasyonu**


**Uyarı:**

<table>
<thead>
<tr>
<th>GAZLI İÇECEK</th>
<th>AYAKKABI</th>
<th>İÇECEK</th>
<th>RESİM TABLOSU</th>
<th>POSTER</th>
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<tr>
<td>BİLGİSAYAR</td>
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<td>TELEFON</td>
<td>ÇANTA</td>
<td>DİZİ</td>
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<td>SU</td>
<td>NEHIR</td>
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<td>MEYVE</td>
<td>ÜNİVERSİTE</td>
<td>MATEMATİK</td>
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<tr>
<td>MAKARNA</td>
<td>ÖĞLE YEMEĞİ</td>
<td>MADENI_PARA</td>
<td>DANS</td>
<td>PADIŞAH</td>
</tr>
<tr>
<td>KİTAP</td>
<td>TREN</td>
<td>RESTAURANT</td>
<td>ŞEKERLEME</td>
<td>BALİNA</td>
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<tr>
<td>SPOR</td>
<td>POSTA</td>
<td>AĞAÇ</td>
<td>GİTAR</td>
<td>ŞARKICI</td>
</tr>
<tr>
<td>MASA</td>
<td>AKTÖR</td>
<td>OYUN</td>
<td>DĄG</td>
<td>KAMYON</td>
</tr>
</tbody>
</table>
Appendix 2: Mental Construal Manipulation Check used in Study 2

Behavior Identification Form / Davranış Kimlikleme Formu (Turkish version)

Herhangi bir davranış birçok şekilde tanımlanabilir. Örneğin; bir kişi, gözlenen bir davranış "makale yazmak" olarak tanımlarken başka bir kişi aynı davranış "klavyedeki tuşlara basmak" olarak tanımlayabilir. Yine başka bir kişi bunu "düşüncelerini ifade etmek" olarak ifade etmek olarak tanımlayabilir. Bu form, bir dizi farklı davranışın sizce nasıl tanımlanacağına dair kişisel tercihlerinize odaklanır. Aşağıda listelenmiş olan birkaç davranış bulacaksınız. Her davranıştan sonra seçeneklerde, davranışın tanımlanabileceği iki farklı yol olacaktır.

Sizden beklenen, aşağıdaki davranışları sizin için en iyi tanımlayan a ya da b tanımlayan seçmektedir. Unutmayın, burada doğru cevap yoktur. Sadece her davranış için kişisel olarak daha uygun olduğuna inandığınız tanımlama seçeneğini işaretleyiniz.

<table>
<thead>
<tr>
<th>1. Bir liste yapma</th>
<th>6. Oy kullanma</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Bir şeyleri sıralayarak yazma</td>
<td>a. Oy pusulasında bir partiye mühür vurma</td>
</tr>
<tr>
<td>b. Organize ve düzenli olma*</td>
<td>b. Ülkenin geleçğini belirleme*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Okuma</th>
<th>7. Kişilik testi/envanteri doldurma</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Metnin satırlarını takip etme</td>
<td>a. Testteki sorulara cevap verme</td>
</tr>
<tr>
<td>b. Bilgi edinme*</td>
<td>b. Nasıl bir kişi olduğunu belirleme*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. Evi temizleme</th>
<th>8. Diş fırıcalama</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Elektrik süpürgesiyle evi süpürme</td>
<td>a. Ağzıda oval hareketlerle diş fırçasını hareket ettirme</td>
</tr>
<tr>
<td>b. Yaşam alanın temizliğini sağlama*</td>
<td>b. Çıırtıkları önleme*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4. Bir odaya boya badana yapma</th>
<th>9. Yemek yeme</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Fırçaya duvarlara boya sürme</td>
<td>a. Çiğneme ve yutma</td>
</tr>
<tr>
<td>b. Odaya yeni bir görünüm kazandırma*</td>
<td>b. Beslenme*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5. Kapıyı kilitleme</th>
<th>10. Kapının zilini çalma</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Anahtarı kilide sokup çevirme</td>
<td>a. Parmakla kapı ziline basma</td>
</tr>
<tr>
<td>b. Evi emniyete alma*</td>
<td>b. Evde birisinin olup olmadığını bakma*</td>
</tr>
</tbody>
</table>

*Yüksek seviye (soyut) seçenek.