



Erasmus School of Economics

Master Thesis Economics and Business

Determinants of Consumer Preference for Accuracy or Representativeness in Online Reviews

Name Student: Pim Swank
Student ID number: 572818

Supervisor: Max Gaerth
Second assessor:

Date final version: 31-7-2024

The views stated in this thesis are those of the author and not necessarily those of the supervisor, second assessor, Erasmus School of Economics or Erasmus University Rotterdam.

Table of Contents

Introduction.....	4
Literature review	6
Main Research Question and Hypotheses	8
Methodology	11
Research Design.....	11
Survey.....	11
Format of the Survey	11
Variables	12
Participants.....	13
Procedure	13
Measures	14
Statistical Techniques	16
Data Analysis	18
Data Descriptives	18
Assumptions of a Linear Regression.....	19
Homoscedasticity.....	19
Normality Test.....	20
Endogeneity	20
Results	22
The Effect of the Review Platform’s Approach	22
The Role of Uniqueness	24
Discussion.....	26
Summary of Findings	26
Implications	26
Limitations	27

Future research.....	27
Appendix.....	28
Appendix 1, The Survey Instrument	28
Appendix 2, Tables.....	33
References.....	35

Introduction

The way people make purchase decisions has changed greatly with the rise of e-commerce. The importance of online reviews as a source of information for customers has increased widely and now online reviews are a pivotal tool influencing consumer choices (Chevalier & Mayzlin, 2006). The growing importance of online reviews is evident in the expanding Chinese e-commerce market, reflected in iResearch's 691.41 billion RMB transaction size during the 3rd quarter of 2014, and the surge in Chinese internet users to 649 million by December 2014, indicating an increasing reliance on online reviews in shaping consumer decisions both before and after purchases (Mo et al., 2015).

A survey conducted by Survata, an independent research firm in San Francisco, underscores the influence of online reviews once again. The survey, which interviewed 2005 online respondents in January 2017, revealed that 93% of consumers acknowledge that online reviews impact their purchase decisions. This finding illustrates the crucial role that online reviews play in shaping consumer perceptions and actions. Furthermore, the survey highlights that a minimum star rating of 3.3 is necessary for a company to engage consumers. This threshold demonstrates that consumers are discerning and rely heavily on the experiences of others before deciding to interact with a company (Online Review Stats: Podium State Of Online Reviews | Podium, n.d.).

This master's thesis will focus on two important approaches consumer review sites can adopt to shape user satisfaction: accuracy and representativeness. In the realm of online reviews, the tension between accuracy and representativeness takes centre stage, exemplified by the IMDb controversy surrounding the 2019 remake of "The Little Mermaid." Faced with an influx of negative reviews attributed to the black skin colour of the main actress, IMDb opted for a weighted, representativeness approach, in which they devalued the reviews of some reviewers.

In the case of accuracy, all reviewers are considered equally important. That is, each reviewer's contribution is valued for its potential to provide insight into the product or service being reviewed. Furthermore, every reviewer's opinion is taken into account when assessing overall sentiment. In contrast, in the case of representativeness, all reviewers have the right to express their opinions. Still, not all opinions carry the same weight due to their expertise in the subject matter, reputation within the community, or alignment with the reader's

preferences (Dellarocas et al., 2007). While previous research in the domain of online reviews has narrowly focused on the influence and the growing importance of online reviews, the present master thesis will contribute to the related literature by examining when and why consumers think representativeness is more acceptable than accuracy or vice versa.

In summary, accuracy in online reviews ensures democratic representation, as every consumer's voice is weighted equally (Lee & Youn, 2009). On the other hand, representativeness, or weighted votes, empowers influential reviewers and could provide consumers with a clear hierarchy of opinions (Godes & Mayzlin, 2004). Both approaches can work but both have their limitations as well. Understanding when and why people think one approach is more acceptable is crucial for designing effective review systems through which consumers get the best information to make decisions.

In particular, in the present research, the following questions are raised: What are the contexts and circumstances under which the strategic decision for accuracy over representativeness is more acceptable? And when would consumers be more likely to deem this strategic decision as morally wrong? The present master's thesis will address these questions and shed light on the delicate balance between ensuring the authenticity of individual opinions and recognising the broader impact of diverse perspectives.

Literature review

Extant research documents the growing importance of internet-based opinions in purchasing decisions (Dellarocas, 2006). Online reviews are crucial in shaping consumer behaviour and influencing purchasing decisions. They serve as electronic word-of-mouth and play a vital role in e-commerce by providing information that consumers rely on before making purchases (Pooja & Upadhyaya, 2022; Zhu & Zhang, 2010). For example, Smith and Smith (2024) found that nearly all consumers read reviews before purchasing, focusing significantly on technology and household products. Dai et al. (2019) highlight that people are particularly likely to rely on consumer reviews for experiential purchases compared to material purchases.

Theoretical models help explain how consumers process review information and assess its credibility (Pooja & Upadhyaya, 2022). One of the significant challenges facing review platforms is to get credible reviews and leave out fake reviews, which can mislead consumers and erode trust in the platform (Kutabish et al., 2023). Certain review sites have also taken steps to exclude reviews from individuals who may have a conflict of interest or those who have not verified their purchases.

Importantly, two systems in online reviews have been identified by previous research: equal weight and weighted vote systems (Bean et al., 2009). While equal-weight systems describe voting systems where each voter has an identical influence on the outcome, weighted vote systems describe decision-making mechanisms where each voter's vote carries a different weight, reflecting their varying levels of influence or power (Alturki & Rushdi, 2016).

Weighted voting systems are employed by platforms to improve effectiveness and decisiveness according to Kirsch (2023). By assigning different weights based on expertise or reliability, these systems ensure that decisions are more informed and representative of key contributors. This approach enhances the success rate of decisions by minimizing the influence of less knowledgeable participants, leading to more robust outcomes.

In some academic discussions on voting systems, researchers analyse how different weighting strategies affect the outcomes and fairness of collective decisions. Applying these principles to review platforms means each user's input is valued equally, thus promoting a more trustworthy and balanced aggregation of reviews (Theory Of Voting | Public Law And Economics | Oxford Academic, n.d.). Maaser and Napel (2006) outlined other principles that can be adopted for an equal-weight approach in survey platforms. According to their

principles, equal-weight systems ensure fairness, accuracy, and inclusivity. By giving each respondent's input the same value, this method prevents disproportionate influence and reflects diverse perspectives accurately, thereby enhancing the reliability and representativeness of the survey results.

An integrative literature review in Borchers (2023) highlights the importance of trust in online reviews, emphasizing that trustworthy reviews are crucial for consumer decision-making processes. Research by Flanagin and Metzger (2013) explores how information volume, valence, and consumer characteristics influence the trustworthiness of user-generated versus expert-generated ratings, reinforcing the need for accurate and credible reviews to help consumers make informed decisions.

Although understanding the different determinants that play a role in consumer preferences for review systems can help firms and platforms tailor their approaches to match consumer preferences, empirical concerning review systems remains scarce (Wolf & Muhanna, 2011). This master's thesis will begin to fill this gap by investigating consumer responses to accuracy versus representativeness approaches in the context of online reviews. We will discuss this next.

Main Research Question and Hypotheses

Prior research demonstrates that consumers have a strong tendency to believe in the equal importance of each person's unique identity and preferences. Cheibub (2010) emphasises in his study that despite their inherent challenges, most of the population considers democracy more desirable than dictatorships. This preference is based on the belief that democratic governments are more accountable and better able to protect the interests and freedoms of citizens.

Building on this prior research, we propose that consumers may evaluate an accuracy approach more favourably than a representativeness approach in online review platforms. An accuracy approach treats every review equally, regardless of the reviewer's background or expertise, aligning with democratic principles where every individual's vote counts the same.

H1: Consumers find it more acceptable if an online review platform adopts an accuracy (vs. representativeness) approach.

Other research has established that consumers' self-concept significantly influences their behaviour. Specifically, the importance individuals place on specific identities predicts their likelihood of engaging in identity-consistent behaviours (Chen et al., 2023). Moreover, Schroeder et al. (2019) identify fairness as one of the core values significantly influencing human behaviour. Fairness, along with respect, care, and honesty, serves as a primary motivator for consumer actions and reactions. Yeoman (2013) further supports this by showing that fairness in pricing and reviews is closely linked to consumer satisfaction and loyalty.

Tian et al. (2001) developed the Consumers' Need for Uniqueness (CNFU) scale, which measures the extent to which individuals seek to differentiate themselves through unique consumption. Their research shows that the CNFU scale is reliable and valid in capturing uniqueness-seeking behaviour. Furthermore, Tian and McKenzie (2001) demonstrated the long-term predictive validity of the CNFU scale, indicating that consumers with a high need for uniqueness consistently make distinctive product choices over time.

We argue that the accuracy (vs. representativeness) approach resonates more with individuals who perceive a stronger alignment with their preference to be unique as the

accuracy approach ensures that all voices, including those that are less common or unconventional, are heard. This inclusivity allows consumers to find and identify with unique perspectives that might otherwise be overshadowed by more popular opinions. This aligns with the desire for individuality and differentiation among consumers with a high need for uniqueness.

H2: The relationship between the accuracy (vs. representativeness) approach and normative acceptability occurs because consumers perceive a stronger alignment with their preference to be unique in the accuracy (vs. representativeness) approach.

Despite the strong evidence for the positive impact of online reviews on sales, consumer preferences and purchase decisions, research has yet to examine the contexts in which consumers think representativeness or accuracy is more acceptable on online review platforms. This study seeks to provide insights that can inform the design and customisation of review systems to better meet consumer expectations.

We argue that the identity relevance of the focal good or service may importantly change consumers' responses to the online review platform's approach. Identity-relevant goods, as defined by Belk (1988), are products or services that extend the self and play a crucial role in the construction and expression of an individual's identity. These goods are selected and valued based on their alignment with the consumer's identity, contributing to the shaping of personal and social identities. Oyserman (2009) further explores this concept, emphasising the role of identity-based motivation in consumer behaviour. Identity-based motivation highlights the importance of performing specific tasks integral to one's identity through consumption (Reed et al., 2012).

We argue that in contexts where the product or service is integral to a consumer's identity, the desire for accuracy may be stronger, highlighting the nuanced moral considerations in strategic decision-making. In particular, we anticipate that consumers have an increased desire for alignment of the review system with uniqueness in identity-relevant consumption contexts (Lynn, 1991; Mazodier and Merunka, 2014). Since accuracy (vs. representativeness) review systems are more likely to be perceived as more closely aligned with uniqueness preferences, consumers judge accuracy (vs. representativeness) approaches as more acceptable.

This master's thesis will therefore contribute to the existing literature but it has as much a managerial contribution as it seeks to help companies and platforms optimise their review systems.

H3: The relationship proposed in H2 is pronounced for high (vs. low) identity-relevant contexts.

Methodology

Research Design

Survey

An experimental study will be conducted using a survey to test the proposed hypotheses. The experiment will be designed to examine how consumers' normative acceptability changes due to the review approach used by the survey platform (accuracy vs. representativeness). The usage of the experimental survey instrument is grounded in its efficacy for analytical data collection and comprehending the attitudes and perceptions of respondents, as emphasised by Dillman et al. (2014). The survey methodology is embraced for its capacity to efficiently accumulate data sets and extract individual opinions across varied demographics and contexts, a perspective supported by Couper (2008).

Format of the Survey

The survey design involves four distinct arms each designed to test different aspects of the hypotheses. In particular, the study will adopt a 2 (review approach: representativeness vs. accuracy) \times 2 (consumption context: identity-relevant vs. control) between-subjects design.

Participants in the "identity-relevant + accuracy condition" will be asked to imagine reading reviews on a review platform that adopts an accuracy approach to rating a booking website for fishing holidays. Important in this condition is that they have to imagine that this service is identity-relevant since fishing is an "important part of who they are". Following this scenario, participants will then provide assessments on the acceptability of the review platform's rating system and communicate their satisfaction with the consumer review platform. In the "identity-relevant + representativeness condition", participants will imagine reading reviews regarding the same booking website for fishing holidays, which is assumed to be an identity-relevant service. In contrast, these participants will imagine reading these reviews on an online review platform utilizing a representativeness approach. Subsequently, participants will again evaluate the acceptability of the review platform's rating system and convey their satisfaction with the consumer review platform.

Participants in the control groups "no identity-relevant + accuracy condition" or "no identity-relevant + representativeness" will imagine reading reviews regarding the same service on an online review platform adopting an accuracy or representativeness approach,

respectively. These participants will get a scenario in which they must imagine that fishing is not an important part of their life and therefore the service is not identity-relevant. Afterwards, participants will again assess the acceptability of the review platform's rating system and express their satisfaction with the consumer review platform.

Figure 1, Graphical overview of experimental conditions

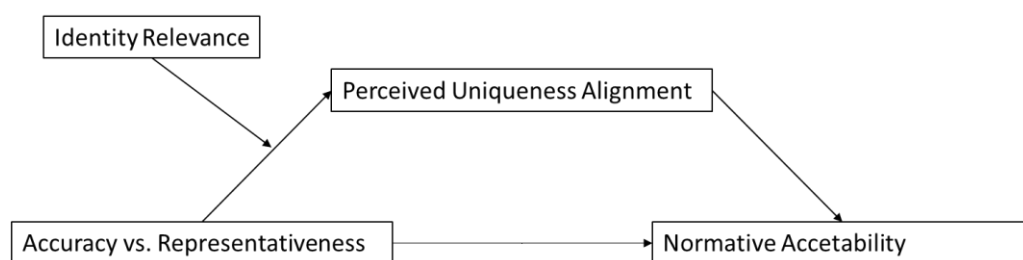
		Consumption Context	
		Identity-relevant	Control
Review platform's approach	Accuracy	1	2
	Representativeness	3	4

Variables

In this master's thesis, the normative acceptability of the review approaches serves as the dependent variable, while review approaches (i.e., accuracy versus representativeness) act as the independent variable. The perceived uniqueness alignment will serve as a mediator in this relationship. The hypotheses propose that consumers may perceive the accuracy (vs. representativeness) approach as more acceptable as they perceive a stronger alignment with their preference to be unique and that this relationship will be robust across high (vs. low) identity-relevant contexts.

Identity-relevant goods or services function as a moderator in the relationship between review approaches (i.e., accuracy versus representativeness) and the perceived uniqueness alignment, the moderator in the relationship. This implies that the impact of the review approach on the normative acceptability through the perceived uniqueness alignment varies depending on the identity relevance of the reviewed goods and/or services. This gives the following conceptual model:

Figure 2, Conceptual Model of Proposed Mediation



Participants

Enrolment of participants will be facilitated through Prolific.com, this is a platform where people answer survey questions. Assuming a minimum sample size of 300 participants to substantiate the power analysis, a process was conducted using the widely employed statistical power analysis program, G*Power. Determined with a confidence level of .95, a margin of error of five per cent, and a population of 5 million people (Cohen, 1990; Lakens, 2013; Qualtrics, 2023). The decisions regarding these numbers are informed by standard practices in social science research (Kang, 2021; Fitzner & Heckinger, 2010).

Participants will be randomly assigned to one of four experimental conditions in a 2 (review approach: representativeness vs. accuracy) \times 2 (consumption context: identity-relevant vs. control) between-subjects design. Upon accessing the survey, participants will first be presented with an informed consent form. This form will outline the nature of the study, their rights as participants, and the anonymity of their responses. Participants must click "I agree to participate in this study" to proceed. Those who do not consent will be directed to exit the survey.

Procedure

The survey starts after the consent process, where participants will be welcomed and given a brief overview of the study's purpose, emphasizing the importance of their honest responses. Participants will then be presented with one of two scenarios designed to manipulate the consumption context. In the identity-relevant scenario, participants will imagine planning a fishing holiday, which ties into a personal and nostalgic activity (fishing with their father), making it an identity-relevant context. In the control scenario, participants will imagine planning a fishing holiday without any prior personal connection or experience with fishing, making it a neutral context.

After reading the scenario, participants will be introduced to "Trip Assess," an online review platform. In the accuracy condition, participants will read that on Trip Assess, each consumer's opinion is weighted equally, meaning all ratings are averaged to contribute equally to the final rating. In the representativeness condition, participants will read that on Trip Assess, some users' opinions are given more weight than others, suggesting a more selective approach to the final rating.

Participants will then answer a series of questions related to their perceptions and evaluations of the review platform. These questions will assess the likelihood of writing a review, the acceptability of the platform's rating approach, the perceived helpfulness of the average star ratings, and the credibility of these ratings. These questions are asked to measure the dependent variable. To ensure participants are paying attention, they will be asked a factual attention question about identifying a vegetable after this section. There will be one attention check, a factual attention check (Geiner, 2022). A factual check asks respondents to confirm a fact that everyone knows. This check is placed carefully in the survey to keep things clear and simple for the respondents. The goal is to keep them engaged and focused on the important parts of the study (Kane & Barabas, 2018).

Following this attention check, participants will answer questions regarding their uniqueness preferences, the mediation effect, including how well the review platform's approach aligns with their preference for being different from others. Another question about participants' preference for being different is asked to be used as a control variable. Finally, participants will provide demographic information, including their age, gender, country of residence, and highest level of education completed. The decision to place demographic questions at the end of the survey is thoughtful. By doing so, the aim is to capitalize on the initial attention and engagement of respondents while minimizing potential dropout rates. Beginning the study with essential inquiries ensures respondents focus on critical aspects early on, postponing demographic queries to a later stage (Savino, 2009). The demographics can later on be used to see if the randomisation succeeded. At the end of the survey, participants will be thanked for their participation. The exact wording of the scenarios and the questions can be found in Appendix 1, the survey instrument.

Measures

This study will measure both dependent and independent variables to test the hypotheses related to the acceptability of the review platform's rating system and participants' satisfaction with the consumer review platform.

The acceptability of the review platform as a dependent variable encompasses the concepts of writing a review, credibility, acceptability, and helpfulness of a review platform. It suggests that the platform is trustworthy, widely accepted by users, and considered helpful. It

will be measured with the first four questions of the study. Participants rated their responses on various 7-point Likert scales, each anchored at both ends with specific descriptors. Intermediate points (2 through 6) were not labelled, allowing participants to use their discretion in choosing a point that best represented their opinion or likelihood.

Likert scales are utilized because they provide a nuanced measurement by capturing the degree of agreement or disagreement. They offer a structured yet flexible approach to quantifying respondents' perceptions quantitatively (Likert, 1932). This research uses a 7-point Likert scale because it provides more detailed and nuanced feedback compared to a 5-point scale. The 7-point scale offers a greater range of options, allowing for a more precise understanding of respondents' attitudes and perceptions. This is particularly beneficial when the research aims to explore complex ideas or gather specific opinions, as it enhances the granularity of the data collected, leading to more insightful and actionable results (Collaborators, 2024). The following Likert Scales will be used:

1. Likelihood of Writing a Review: Participants will indicate their likelihood of writing a review on Trip Assess by responding on a 7-point Likert scale ranging from 1 (Not at all likely) to 7 (Very likely).
2. Acceptability: Participants will respond to each item on a 7-point Likert scale ranging from 1 (Not at all acceptable) to 7 (Very acceptable).
3. Helpfulness: Participants will provide their responses on a 7-point Likert scale ranging from 1 (Not at all helpful) to 7 (Very helpful).
4. Credibility: Responses will be recorded on a 7-point Likert scale ranging from 1 (Not at all credible) to 7 (Very credible).

The independent variable, the review approach, will be manipulated by presenting participants with different descriptions of the Trip Assess platform. The accuracy condition will be described as a platform where each consumer's opinion is weighted equally. While the representativeness condition will be described as a platform where some users' opinions are given more weight than others.

The consumption context will be manipulated through the scenarios presented to participants. In the identity-relevant scenario, participants will imagine planning a fishing holiday tied to a personal and nostalgic activity and in the control scenario, participants will

imagine planning a fishing holiday without any personal connection or experience with fishing. This measure is derived from another paper by Leung et al. (2018), in which they also wanted to express the importance of internal attribution of consumption outcomes in identity-based consumption.

Participants' perceived uniqueness alignment will be measured using two items. The first item will measure how important the participants think it is to be different from others. This item will be used as a control variable and is called the individual difference. The next item will measure how well the review platform's approach aligns with their preference for being different. This variable will be used to measure the mediation effect and is called the perceived uniqueness alignment. Both questions will again use a 7-point Likert scale ranging from 1 (Not at all) to 7 (Very much).

The attention check and demographic variables will be collected using multiple-choice questions. Participants will provide information on their age (with the options Under 18, 18-24 years old, 25-34 years old, etc.), gender (Male, Female, Non-binary/third gender, Prefer not to say), country of residence, and highest level of education completed (Some high school or less, High school diploma, Some college but no degree, Associate's or technical degree, Bachelor's degree, Graduate or professional degree, Prefer not to say).

These measures are designed to provide a comprehensive assessment of participants' perceptions and evaluations of the review platform, as well as relevant individual differences and demographic information. The use of Likert scales for most variables allows for nuanced responses, while multiple-choice questions ensure clarity and ease of response for factual and demographic data.

Statistical Techniques

For analysing the relationships in this study, linear regression techniques will be employed using SPSS and Stata. Linear regression allows assessing the associations between variables such as the review approach (accuracy vs. representativeness) and normative acceptability, mediated by the perceived uniqueness alignment and moderated by the identity relevance of goods or services.

Given the successful randomization and demonstrated similarity between groups, there is no immediate need to include additional control variables in the analyses. Still, due to

the p -value of the Chi-square test nearly being significant for gender, Gender will function as a control variable in the linear regression model. The randomization process ensures that any other potential confounding variables are evenly distributed across treatment groups, reducing the likelihood of bias in estimating the effects of the review approach on normative acceptability.

In this study, moderated mediation analyses will be conducted using the macro, PROCESS by Andrew Hayes for SPSS. Specifically, Model 8 from the PROCESS by Andrew Hayes will be employed, as this model is designed to examine moderated mediation effects. This approach allows for an in-depth exploration of how identity relevance moderates the indirect effects of review approaches (accuracy vs. representativeness) on various dependent variables through the mediator, the perceived uniqueness alignment.

Data Analysis

Data Descriptives

The survey initially got 309 responses. Three respondents answered the consent question that they did not agree to participate, so they were excluded from the survey directly. Three others said they agreed to participate but did not fill in any questions, and one participant failed to answer the factual attention check correctly, so this participant was excluded as well. This means that the final number of participants with useful answers is 302.

To assess the comparability of the demographic characteristics between the groups, the results of the variables age, gender, country, and education level are examined, see Appendix 2, Table 1. Chi-square tests, see Appendix 2, Tables 2-5, were conducted to determine if there were significant differences between the groups in demographics. With these tests, it should be possible to see if the randomisation worked. The demographic summary and Chi-square test results indicate no significant differences between the groups regarding age, gender, country, and education level ($p \geq .065$), suggesting that the randomisation process was successful.

The correlation table, Table 1, reveals significant positive correlations between the acceptability, helpfulness, and credibility of the review platform's approach. The correlation coefficients among these variables range from .736 to .843, indicating strong interrelationships. However, the likelihood of writing a review shows weaker correlations with the other variables (ranging from .258 to .411). These correlations highlight the potential for combining acceptability, helpfulness, and credibility into a single factor. However, it is expected that the variables would load onto different components, as each variable measures a unique aspect of the review platform. For instance, a review approach perceived as helpful does not necessarily mean it is also seen as credible, reflecting the distinctiveness of each variable. This justifies the need for further analysis via factor analysis to determine the suitability of these variables for a composite measure.

Table 1, Correlation table

	Write review	Acceptability	Helpfulness	Credibility
Write review	1			
Acceptability	.2578	1		
Helpfulness	.4110	.7608	1	
Credibility	.4077	.7357	.8434	1

A Confirmatory Factor Analysis (PCA) with Varimax rotation was conducted to examine the underlying structure of the four variables. The rotated component matrix, Table 2, revealed that each variable loads strongly on a distinct component, suggesting the presence of four separate factors. Specifically, Acceptability loaded highly on Component 1 (.897), Write review on Component 2 (.977), Credibility on Component 3 (.819), and Helpfulness on Component 4 (.768). These results support the hypothesis that the four variables represent distinct constructs, validating the use of these components in subsequent analyses.

Table 2, Rotated Component Matrix

	Component			
	1	2	3	4
Write review	.088	.977	.145	.132
Acceptability	.897	.096	.316	.294
Helpfulness	.422	.214	.432	.768
Credibility	.389	.211	.819	.365

Note: Extraction Method, Principal Component Analysis.

Assumptions of a Linear Regression

Homoscedasticity

To ensure the validity of the regression analysis, the Breusch-Pagan/Cook-Weisberg test for heteroskedasticity was conducted. This test examines whether the variance of the errors is constant (homoscedastic). For this analysis, the test was conducted using the fitted values of the composite variable, Acceptability. The results of the Breusch-Pagan/Cook-Weisberg test are as follows, the Chi-squared (1 degree of freedom) is equal to .62, while the p-value equals .4294.

Given that the p-value is .4294, which is significantly greater than the conventional threshold of .05, the null hypothesis cannot be rejected. This indicates that there is no evidence of heteroskedasticity in the model, suggesting that the variance of the residuals is constant. Therefore, the assumption of homoscedasticity is satisfied in the regression analysis.

Normality Test

To validate the normality assumption of the regression model's residuals, a kernel density estimation test is performed. This non-parametric way of estimating the probability density function allows us to visually inspect the distribution of the residuals and compare it to a normal distribution. The resulting kernel density plot of the residuals, see Figure 3, indicates that they are approximately normally distributed around zero. The residuals' distribution closely follows the shape of a normal distribution curve, with a peak centred around zero and tails tapering off symmetrically.

Endogeneity

In regression analysis, endogeneity can pose a significant issue, leading to biased and inconsistent estimates. Endogeneity typically arises from three main sources: omitted variable bias, measurement error, and simultaneity (reverse causality). When one or more independent variables are correlated with the error term, the standard ordinary least squares (OLS) estimators are no longer unbiased.

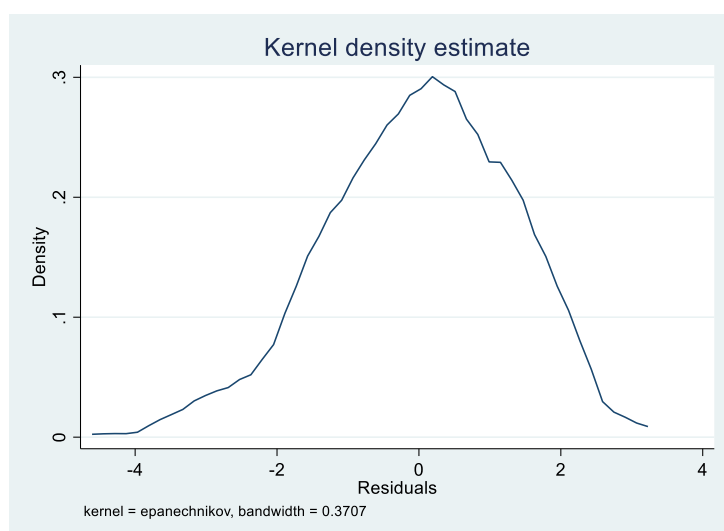
A common method to test and correct for endogeneity is the use of an instrumental variable. An instrumental variable is correlated with the endogenous predictor but uncorrelated with the error term, allowing for consistent estimation. Unfortunately, in this study, no suitable instrumental variables are available. This limitation prevents us from performing standard tests for endogeneity.

Given the context of this research, where the primary independent variable is the review approach (a dummy variable), the risk of endogeneity is somewhat mitigated. However, several points still need consideration. One such point is omitted variable bias. There might be unobserved factors that influence both the review approach and the normative acceptability of the review platform. If these factors exist and are not included in the model, they could bias the results.

Another consideration is measurement error. If there is any measurement error in the variables used, it could introduce endogeneity. While the categorical nature of the key independent variable reduces the likelihood of measurement error, it cannot be entirely ruled out. Lastly, reverse causality is a potential concern in regression analysis. However, the design of this study does not suggest a reverse causality problem, as the review approach is likely exogenous to the perceived normative acceptability.

To ensure the validity of the regression analysis, some key assumptions are tested, homoscedasticity, normality, and endogeneity. The Breusch-Pagan/Cook-Weisberg test confirmed homoscedasticity with no evidence of heteroskedasticity. A kernel density estimation test showed that the residuals are approximately normally distributed. Although no test is done for endogeneity due to the lack of suitable instrumental variables, the risk is mitigated by the nature of the primary independent variable. However, potential issues such as omitted variable bias and measurement error should still be considered.

Figure 3, Kernel density plot of the residuals



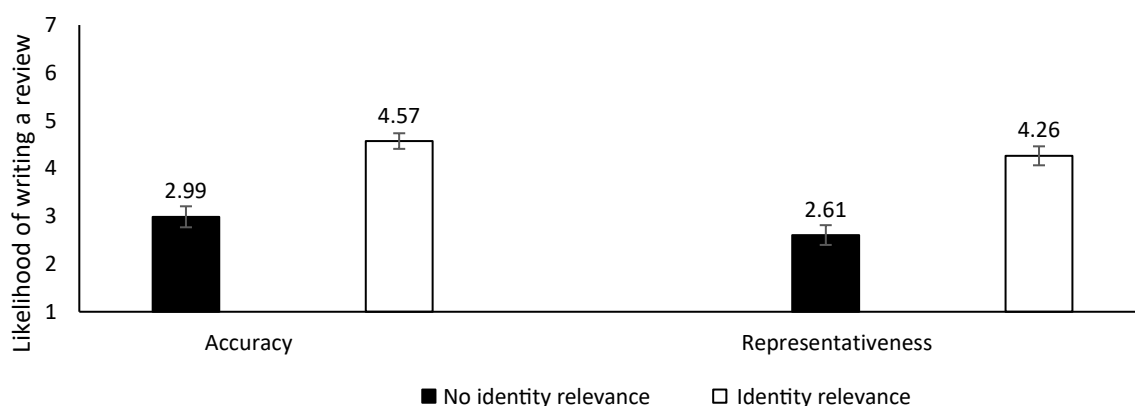
Results

The Effect of the Review Platform's Approach

To analyse the main effects of a review platform's approach on the four dependent variables, four separate linear regressions are conducted.

A linear regression with approach as independent variable and propensity to write a review revealed no significant effect ($M_{\text{accuracy}} = 3.77$, $SD = 1.86$ vs. $M_{\text{representativeness}} = 3.43$, $SD = 1.95$; $b = -.46$, $SE = .31$, $t(299) = -1.50$, $p = .136$). In contrast, there was a significant effect of identity relevance ($M_{\text{low_identity-relevance}} = 2.80$, $SD = 1.86$ vs. $M_{\text{high_identity-relevance}} = 4.41$, $SD = 1.59$; $b = 1.54$, $SE = .27$, $t(299) = 5.63$, $p < .001$), suggesting that identity relevance strongly encouraged individuals to write reviews. However, the interaction term between the approach and identity relevance did not reach statistical significance ($b = -.18$, $SE = .40$, $t(299) = .44$, $p = .663$).

Figure 4, Model 1, Likelihood to write a review as the dependent variable



Note: Error bars denote standard errors of the means.

A linear regression with approach as independent variable and normative acceptability as dependent variable revealed a significant negative effect ($M_{\text{accuracy}} = 5.43$, $SD = 1.51$ vs. $M_{\text{representativeness}} = 3.90$, $SD = 1.70$; $b = -1.48$, $SE = .24$, $t(299) = -6.02$, $p < .001$), indicating that the representativeness approach considerably reduced the acceptability compared to the accuracy approach. The effect of identity relevance on acceptability was not significant ($M_{\text{low_identity-relevance}} = 4.76$, $SD = 1.67$ vs. $M_{\text{high_identity-relevance}} = 4.55$, $SD = 1.88$; $b = -.13$, $SE = .25$, $t(299) = -.52$, $p = .603$). The interaction term between the approach and identity relevance did not reach significance ($b = -.14$, $SE = .36$, $t(299) = -.37$, $p = .710$).

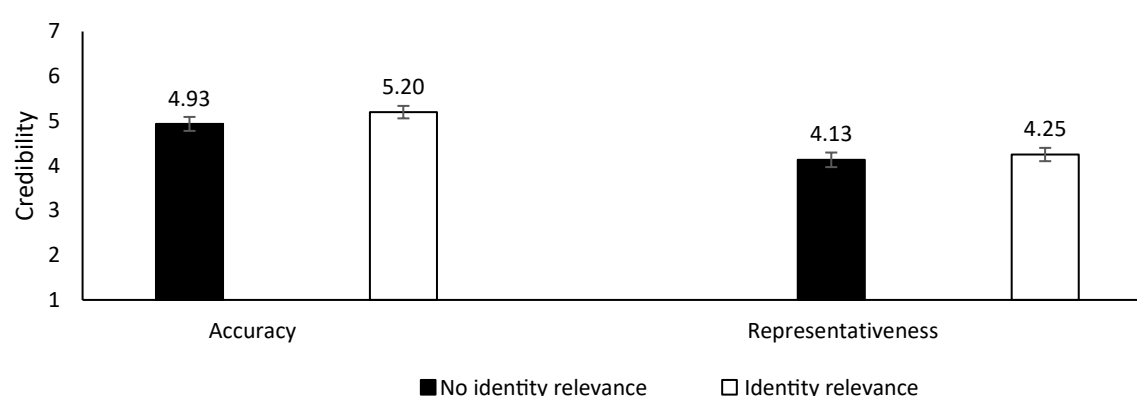
Figure 5, Model 2, Acceptability as the dependent variable



Note: Error bars denote standard errors of the means.

A linear regression with approach as independent variable and perceived credibility of the reviews on the review platform as dependent variable revealed a significant negative effect ($M_{\text{accuracy}} = 5.06$, $SD = 1.29$ vs. $M_{\text{representativeness}} = 4.19$, $SD = 1.36$; $b = -.83$, $SE = .22$, $t(299) = -3.73$, $p < .001$), meaning that the representativeness approach (vs. accuracy approach) notably decreased the perceived credibility. The identity relevance did not have a significant effect on credibility ($M_{\text{low_identity-relevance}} = 4.53$, $SD = 1.44$ vs. $M_{\text{high_identity-relevance}} = 4.71$, $SD = 1.33$; $b = .24$, $SE = .21$, $t(299) = 1.15$, $p = .250$). The interaction between the approach and identity relevance did not reach statistical significance ($b = -.10$, $SE = .30$, $t(299) = -.33$, $p = .740$).

Figure 6, Model 3, Credibility as the dependent variable

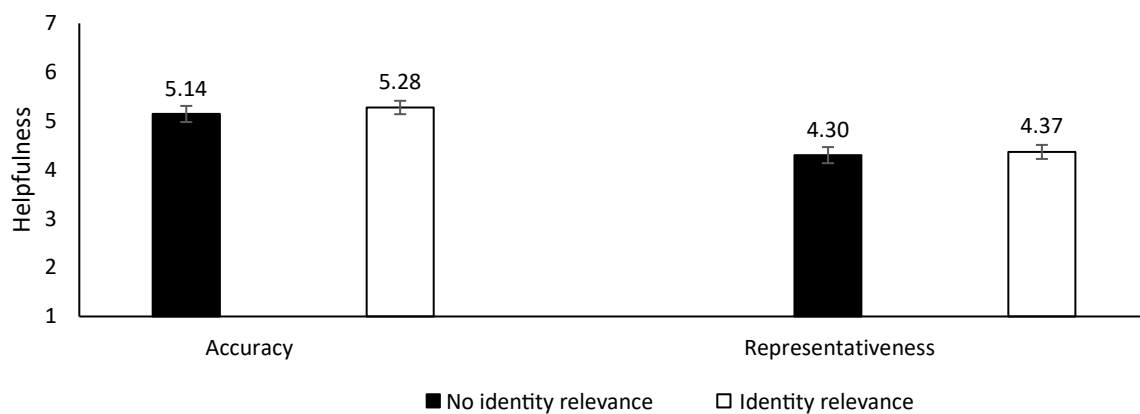


Note: Error bars denote standard errors of the means.

A linear regression with approach as independent variable and perceived helpfulness of the reviews as the dependent variable revealed a significant negative effect ($M_{\text{accuracy}} = 5.21$, $SD = 1.32$ vs. $M_{\text{representativeness}} = 4.34$, $SD = 1.34$; $b = -.88$, $SE = .23$, $t(299) = -3.86$, $p < .001$),

suggesting that the representativeness approach compared to the accuracy approach significantly diminished the perceived helpfulness. The identity relevance variable did not significantly influence helpfulness ($M_{\text{low_identity-relevance}} = 4.72$, $SD = 1.49$ vs. $M_{\text{high_identity-relevance}} = 4.81$, $SD = 1.30$; $b = .10$, $SE = .21$, $t(299) = .50$, $p = .619$). The interaction term between the approach and identity relevance did not reach statistical significance ($b = -.02$, $SE = .30$, $t(299) = -.05$, $p = .960$).

Figure 7, Model 4, Helpfulness as the dependent variable



Note: Error bars denote standard errors of the means.

The Role of Uniqueness

To analyse the impact of the mediating role of perceived uniqueness alignment, a series of mediation analyses are conducted using the PROCESS macro (Model 4, Hayes 2018, 5,000 bootstrap intervals). The analyses revealed that perceived uniqueness mediated the effect of approach on the likelihood of writing a review (indirect effect = .21, $SE = .08$, 95% CI = -.3761, -.0808). The strength of the indirect effect of review approach on the likelihood of writing a review via perceived uniqueness alignment did not significantly vary across different levels of identity relevance (moderated mediation = .05, $SE = .13$, 95% CI = -.2004, .3110, Model 8, PROCESS)).

Furthermore, perceived uniqueness significantly mediated the effect of approach on acceptability (indirect effect = -.34, $SE = .10$, 95% CI = -.5560, -.1569). The strength of the indirect effect of review approach on normative acceptability via perceived uniqueness alignment did not significantly vary across different levels of identity relevance (moderated mediation = .07, $SE = .18$, 95% CI = -.2884, .4299).

Furthermore, perceived uniqueness significantly mediated the effect of approach on helpfulness (indirect effect = $-.25$, $SE = .08$, 95% CI = $-.4069$, $-.1118$). The strength of the indirect effect of review approach on perceived helpfulness via perceived uniqueness alignment did not significantly vary across different levels of identity relevance (moderated mediation = $.05$, $SE = .14$, 95% CI = $-.2207$, $.3279$).

Lastly, F, perceived uniqueness significantly mediated the effect of approach on credibility (indirect effect = $-.26$, $SE = .08$, 95% CI = $-.4245$, $-.1132$). The strength of the indirect effect of review approach on credibility via perceived uniqueness alignment did not significantly vary across different levels of identity relevance (moderated mediation = $.05$, $SE = .15$, 95% CI = $-.2353$, $.3476$).

The mediation analyses consistently demonstrated the mediating role of uniqueness as well when including control variables (i.e., age, gender, country, education, individual difference). However, it did not change for different levels of identity relevance. The consistency in the direction and significance of the effects across different models suggests that the relationships among variables are robust and not likely due to random variation.

Discussion

Summary of Findings

Overall, the results shed light on the impact of review platforms' approaches on consumer perceptions and behaviour. In particular, we find that a review platform's approach affects consumers' normative acceptability, credibility, and perceived helpfulness of online reviews. This effect occurs because consumers find it more acceptable if an online review platform adopts an accuracy (vs. representativeness) approach (H1).

We provide empirical evidence that the impact of the accuracy (vs. representativeness) approach on normative acceptability occurs because consumers perceive a stronger alignment with their preference to be unique in the accuracy (vs. representativeness) approach (H2).

Lastly, we do not find supporting evidence for H3. Instead, the impact of online review platforms' approaches on normative acceptability remains robust across high (vs. low) identity-relevant contexts.

Implications

The findings from this study have significant implications for online review platforms and their strategies to enhance consumer engagement and satisfaction. By adopting an accuracy-focused approach rather than a representativeness-focused one, review platforms can improve consumers' perceptions of normative acceptability, credibility, and perceived helpfulness of the reviews. This suggests that platforms should prioritize accuracy to better align with consumer preferences for uniqueness, thereby ensuring that all opinions are weighted equally. This means that IMDb's decision to employ a representativeness-focused approach by rating the remake movie "The Little Mermaid" does not align with our results.

Although the effect of this approach on the likelihood of writing a review was not supported, the overall positive impact on consumer perception indicates that review platforms can benefit from emphasizing accuracy. Moreover, the robustness of these findings across varying levels of identity relevance underscores the broad applicability of the accuracy approach in terms of identity relevance, making it an adaptable strategy for diverse consumer groups. Consequently, review platforms aiming to enhance user experience and

engagement should consider integrating accuracy-based mechanisms to better cater to consumers' desires for credible reviews.

Limitations

Several limitations should be noted. The study's sample size and demographic composition might limit the generalizability of the findings. Additionally, the way of measuring the variables, particularly the distinction between identity relevance and non-identity relevance goods or services, might have influenced the results. It is possibly still difficult for participants to imagine that a random good or service is close to the identity of that person. Future research should consider alternative ways of measuring these variables and broader samples to validate the findings.

Future research

Future research can build on the current study by exploring various dimensions and extending the findings in meaningful ways. One promising direction is to investigate additional moderators that might influence the relationship between the review platform's approach and users' perceptions. Factors such as cultural background, prior experience with review platforms, or the nature of the product or service being reviewed could be examined to see if they change the impact of representativeness vs. accuracy approaches. Conducting longitudinal studies could also provide valuable insights into how users' perceptions evolve, shedding light on whether initial impacts are sustained, diminish, or change as users become more familiar with the platform.

Our study did not specify the basis for the representativeness approach used by review platforms. Future research could explore various justifications for adopting such an approach. For instance, in the case of the "Little Mermaid" controversy, IMDb's representativeness approach was influenced by concerns about racism. It would be valuable to investigate whether consumers might have reacted less negatively if the motivation behind representativeness had been known. Similarly, examining how consumers respond when firms enhance the visibility and impact of historically underrepresented groups could provide further insights. These areas present intriguing opportunities for future research and could shed light on the nuanced effects of representativeness strategies on consumer perceptions and engagement.

Appendix

Appendix 1, The Survey Instrument

Section 1: Consent

Dear Survey Participant:

This survey you are about to start should take you no more than 2 minutes to complete. You may only complete this survey once.

Please offer your candid opinions regarding the questions in this survey. We may have some questions to check that you were paying attention to the stimuli and to the other questions being asked.

There are no foreseeable risks associated with this project, nor are there any direct benefits to you. This information is anonymous and your identity will not be disclosed to anyone. The data will only be analysed in aggregate. Your participation is voluntary, and you may withdraw from this project at any time. There is no penalty for doing so, but you will only receive payment if you complete the study.

If you have questions or comments, please contact us via 572818ps@student.eur.nl.

If you consent to participate in this study, please click "I agree to participate in this study".

- I agree to participate in this study
- I do not agree to participate in this study

[Page Break]

Section 2: Welcome page

Welcome to our survey!

In this study, we are interested in examining consumer perceptions.

As you enter the survey, you will be asked to read a scenario as carefully as possible and provide your answers to the related questions. Your honest answers are vital for obtaining meaningful results.

Thank you for dedicating your time and effort to our study!

[Page Break]

Section 3: Scenarios

Identity-relevant

Imagine you want to go on a fishing holiday with a friend. You used to go **fishing with your father** during your childhood. Although you might not have gone fishing for a while, you still consider yourself a recreational fisherman.

Fishing is an **important part of who you are** as this was one of the things you liked to do with your dad.



Control

Imagine you want to go on a fishing holiday with a friend. You **never went fishing before** and you do not even exactly know how it works.

Fishing has **never been part of your life**, but your friend really likes fishing and he promises such a holiday will be a huge success.



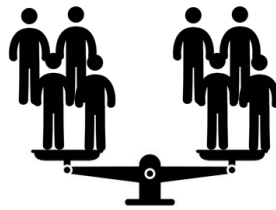
[Page Break]

Section 4: Online review platform

Accuracy approach

You decide to explore Trip Assess, an online review platform, before booking your fishing holiday.

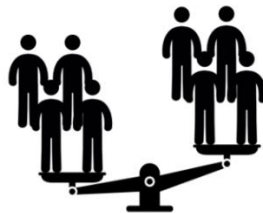
On Trip Assess, each consumer's opinion is **weighted equally**. This means that all ratings from users are averaged, so that every rating contributes equally to the final rating.



Representativeness approach

You decide to explore Trip Assess, an online review platform, before booking your fishing holiday.

On Trip Assess, some consumer's opinions are **weighted more heavily** compared to others, to preserve the reliability of the rating system. This means that ratings from some users have an increased impact on the overall rating.



Section 5: Likelihood of writing a review

How likely are you to **write a review** on Trip Assess?

(Scale: 1 - Very unlikely to 7 - Very likely)

[Page Break]

Section 6: Acceptability

1. How **acceptable** do you think is Trip Assess' approach (i.e., each user's opinion is weighted equally)?

(Scale: 1 - Very unacceptable to 7 - Very acceptable)

1. In your opinion, how **helpful** are the average star ratings on Trip Assess?

(Scale: 1 - Not at all helpful to 7 – Very helpful)

2. How **credible** do you think are the average star ratings on Trip Assess?

(Scale: 1 - Not at all credible to 7 – Very credible)

[Page Break]

Section 7: Factual Attention Check

Which of the following is a vegetable?

- Tuna
- Milkshake
- Cheese
- Broccoli
- Hamburger
- Fries

[Page Break]

Section 8: Mediator – Uniqueness

1. To what extent do you agree with the statement: 'It is important for me to be different from others'?

(1 = not at all, 7 = very much)

2. How well do you think the review platform's approach aligns with your preferences for being different from others?

(1 = not at all, 7 = very much)

[Page Break]

Section 9: Demographics

1. What is your age?

- Under 18
- 18-24 years old
- 25-34 years old
- 35-44 years old
- 45-54 years old
- 55-64 years old
- 65+ years old

2. What is your gender?

- Male
- Female
- Non-binary/third gender
- Prefer not to say

3. In which country do you currently reside?

(List of 193 countries which the VN recognises)

4. What is the highest level of education you have completed?

- Some high school or less
- High school diploma
- Some college, but no degree
- Associates or technical degree
- Bachelor's degree
- Graduate or professional degree (MA, MS, MBA, PhD, JD, MD, DDS etc.)
- Prefer not to say

Appendix 2, Tables

Table 1, Summary of Demographic Characteristics

Condition	Age	Gender	Country	Education
Accuracy_control	3.63	1.68	184.94	4.26
Representativeness_control	4.05	1.42	187	4.39
Accuracy_identity	3.84	1.53	187	4.31
Representativeness_identity	3.76	1.61	187	4.05
Total	3.82	1.56	186.4851	4.25

Table 2, Chi-Square Test for Gender by Condition

Gender	Accuracy_ control	Representativeness_ control	Accuracy_ identity	Representativeness_ identity	Total
1	30	44	36	30	140
2	42	32	37	46	157
3	2	0	1	0	3
4	2	0	0	0	2

Pearson chi2(9) = 16.0928 $p = .065$

Table 3, Chi-Square Test for Age by Condition

Age	Accuracy_ control	Representativeness_ control	Accuracy_ identity	Representativeness_ identity	Total
2	10	11	11	12	44
3	30	19	25	25	99
4	23	21	16	21	81
5	8	10	12	9	39
6	1	10	7	5	23
7	4	5	3	4	16

Pearson chi2(15) = 12.3665 $p = .651$

Table 4, Chi-Square Test for Country by Condition

Country	Accuracy_ control	Representativeness_ control	Accuracy_ identity	Representativeness_ identity	Total
Canada	1	0	0	0	1
US	75	76	74	76	301

Pearson $\chi^2(3) = 2.9967$ $p = .392$

Table 5, Chi-Square Test for Education by Condition

Education	Accuracy_ control	Representativeness_ control	Accuracy_ identity	Representativeness_ identity	Total
1	0	0	1	3	4
2	9	10	12	9	40
3	20	12	10	16	58
4	4	2	6	11	23
5	30	42	33	27	132
6	11	10	11	10	42
7	2	0	1	0	3

Pearson $\chi^2(18) = 26.1232$ $p = .097$

References

- Alturki, A. M., & Rushdi, A. M. A. (2016). Weighted voting systems: A threshold- Boolean perspective. *Mağallaġ Al-abġaġ Al-handasiyyaġ*, 4(1). <https://doi.org/10.7603/s40632-016-0007-1>
- Bean, D. R., Friedman, J., & Parker, C. (2009). Proportional quota weighted voting system hierarchies. *Social Choice And Welfare*, 34(3), 397–410. <https://doi.org/10.1007/s00355-009-0404-6>
- Belk, R. W. (1988). Possessions and the Extended Self. *Journal of Consumer Research*, 15(2), 139–168. <https://doi.org/10.1086/209154>
- Borchers, N. S. (2023). Why do we trust in online reviews? Integrative literature review and future research directions. *Cyberpsychology Journal Of Psychosocial Research On Cyberspace*, 17(2). <https://doi.org/10.5817/cp2023-2-7>
- Chen, S. Y., Urminsky, O., & Yu, J. (2023). We Do What We Are: Representation of the Self-Concept and Identity-Based Choice. *Journal Of Consumer Research*. <https://doi.org/10.1093/jcr/ucad066>
- Chevalier, J. A., & Mayzlin, D. (2006). The Effect of Word of Mouth on Sales: Online Book Reviews. *Journal of Marketing Research*, 43(3), 345–354. <https://doi.org/10.1509/jmkr.43.3.345>
- Cohen, J. (1990). Statistical power analysis for the behavioral sciences. *Computers, Environment and Urban Systems*, 14(1), 71. [https://doi.org/10.1016/0198-9715\(90\)90050-4](https://doi.org/10.1016/0198-9715(90)90050-4)
- Collaborators, Q. (2024). 5-point vs 7-point Likert scale: Choosing the Best. *QuestionPro*. https://www.questionpro.com/blog/5-point-vs-7-point-likert-scale/#Advantages_of_5-Point_vs_7-Point_Likert_Scale
- Couper, M. P. (2008). Designing effective web surveys. <https://doi.org/10.1017/cbo9780511499371>
- Dai, H., Chan, C., & Mogilner, C. (2019). People rely less on consumer reviews for experiential than material purchases. *Journal of Consumer Research*, 46(6), 1052–1075. <https://doi.org/10.1093/jcr/ucz042>
<https://doi.org/10.1504/ijbe.2014.064995>

- Dellarocas, C. (2006b). Strategic Manipulation of Internet Opinion Forums: Implications for Consumers and Firms. *Management Science*, 52(10), 1577–1593.
<https://doi.org/10.1287/mnsc.1060.0567>
- Dellarocas, C., Zhang, X., & Awad, N. (2007). Exploring the value of online product reviews in forecasting sales: The case of motion pictures. *Journal of Interactive Marketing*, 21(4), 23–45. <https://doi.org/10.1002/dir.20087>
- Dillman, D. A., Smyth, J. D., & Christian, L. M. (2014). Internet, phone, mail, and Mixed-Mode surveys: The Tailored Design Method. *John Wiley & Sons*.
- Fitzner, K., & Heckinger, E. (2010). Sample Size Calculation and power Analysis: A quick review. *The Diabetes Educator*, 36(5), 701–707.
<https://doi.org/10.1177/0145721710380791>
- Flanagin, A. J., & Metzger, M. J. (2013). Trusting expert- versus user-generated ratings online: The role of information volume, valence, and consumer characteristics. *Computers in Human Behavior*, 29(4), 1626–1634.
<https://doi.org/10.1016/j.chb.2013.02.001>
- Geiner, E. (2022, August 4). Improve data quality by using a commitment request instead of attention checks . Retrieved from: <https://www.qualtrics.com/blog/attention-checks-and-data-quality/>
- Godes, D., & Mayzlin, D. (2004). Using Online Conversations to Study Word-of-Mouth Communication. *Marketing Science*, 23(4), 545–560.
<https://doi.org/10.1287/mksc.1040.0071>
- Kane, J. V., & Barabas, J. (2018). No Harm in Checking: Using Factual Manipulation Checks to Assess Attentiveness in Experiments. *American Journal Of Political Science*, 63(1), 234–249. <https://doi.org/10.1111/ajps.12396>
- Kang, H. (2021). Sample size determination and power analysis using the G*Power software. *Journal of Educational Evaluation for Health Professions*, 18, 17.
<https://doi.org/10.3352/jeehp.2021.18.17>
- Kim, Y. A., & Srivastava, J. (2007, August). Impact of social influence in e-commerce decision making. In *Proceedings of the ninth international conference on Electronic commerce*, 293-302. <https://doi.org/10.1145/1282100.1282157>

- Kirsch, W. (2023). Effectiveness, Decisiveness, and Success in Weighted Voting Systems: Collective Behavior and Voting Measures. *In Studies in choice and welfare*, 115–141. https://doi.org/10.1007/978-3-031-21696-1_8
- Kutabish, S., Soares, A. M., & Casais, B. (2023). The Influence of Online Ratings and Reviews in Consumer Buying Behavior: A Systematic Literature Review. *In Lecture notes in business information processing*, 113–136. https://doi.org/10.1007/978-3-031-42788-6_8
- Lakens, D. (2013). Calculating and reporting effect sizes to facilitate cumulative science: a practical primer for t-tests and ANOVAs. *Frontiers in Psychology*, 4. <https://doi.org/10.3389/fpsyg.2013.00863>
- Lee, M., & Youn, S. (2009). Electronic word of mouth (eWOM) How eWOM platforms influence consumer product judgement. *International Journal of Advertising*, 28(3), 473–499. <https://doi.org/10.2501/S0265048709200709>
- Leung, E., Paolacci, G., & Puntoni, S. (2018). Man versus Machine: Resisting Automation in Identity-Based Consumer Behavior. *Journal of Marketing Research*, 55(6), 818–831. <https://doi.org/10.1177/0022243718818423>
- Likert, R. (1932). A technique for the measurement of attitudes. <https://psycnet.apa.org/record/1933-01885-001>
- Lynn, M. (1991). Scarcity effects on value: A quantitative review of the commodity theory literature. *Psychology & Marketing*, 8(1), 43–57. <https://doi.org/10.1002/mar.4220080105>
- Maaser, N., & Napel, S. (2006). Equal representation in two-tier voting systems. *Social Choice And Welfare*, 28(3), 401–420. <https://doi.org/10.1007/s00355-006-0186-z>
- Mazodier, M., & Merunka, D. (2014). Beyond Brand Attitude: Individual Drivers of Purchase for Symbolic Cobranded Products. *Social Science Research Network*. https://papers.ssrn.com/sol3/Delivery.cfm/SSRN_ID2574059_code2109720.pdf?abstractid=2574059&mirid=1
- Mo, Z., Li, Y., & Fan, P. (2015). Effect of Online Reviews on Consumer Purchase Behavior. *Journal of Service Science and Management*, 08(03), 419–424. <https://doi.org/10.4236/jssm.2015.83043>
- Online Review Stats: Podium State of Online Reviews | Podium. (n.d.). <https://www.podium.com/resources/podium-state-of-online-reviews/>

- Oyserman, D. (2009b). Identity-based motivation and consumer behavior. *Journal Of Consumer Psychology*, 19(3), 276–279. <https://doi.org/10.1016/j.jcps.2009.06.001>
- Pooja, K., & Upadhyaya, P. (2022). What makes an online review credible? A systematic review of the literature and future research directions. *Management Review Quarterly*. <https://doi.org/10.1007/s11301-022-00312-6>
- Qualtrics. (2023, 8 december). *Sample size calculator*. Qualtrics. <https://www.qualtrics.com/blog/calculating-sample-size/>
- Reed, A. Y., Forehand, M. R., Puntoni, S., & Warlop, L. (2012). Identity-based consumer behavior. *International Journal of Research in Marketing*, 29(4), 310–321. <https://doi.org/10.1016/j.ijresmar.2012.08.002>
- Savino, E. A. (2009). Placement of sensitive and nonsensitive demographic questions: An empirical study. *ProQuest*. <https://www.proquest.com/openview/a6749f51f9b97b7609c580642952ea89/1?pq-origsite=gscholar&cbl=18750>
- Smith, A., & Smith, A. (2024, 14 April). 2. Online reviews. *Pew Research Center*. <https://www.pewresearch.org/internet/2016/12/19/online-reviews/>
- Theory of Voting | Public Law and Economics | Oxford Academic. (n.d.). <https://academic.oup.com/book/44439/chapter/376362684>
- Tian, K., Bearden, W. O., & Hunter, G. L. (2001). Consumers' Need for Uniqueness: Scale Development and Validation. *Journal of Consumer Research*, 28(1), 50–66. <https://doi.org/10.1086/321947>
- Tian, K., & McKenzie, K. S. (2001). The Long-Term Predictive Validity of the Consumers' Need for Uniqueness Scale. *Journal of Consumer Psychology*, 10(3), 171–193. https://doi.org/10.1207/s15327663jcp1003_5
- Wolf, J. R., & Muhanna, W. A. (2011). Feedback Mechanisms, Judgment Bias, and Trust Formation in Online Auctions. *Decision Sciences*, 42(1), 43–68. <https://doi.org/10.1111/j.1540-5915.2010.00301.x>
- Zhu, F., & Zhang, X. (2010b). Impact of Online Consumer Reviews on Sales: The Moderating Role of Product and Consumer Characteristics. *Journal of Marketing*, 74(2), 133–148. <https://doi.org/10.1509/jm.74.2.133>