REPRODUCABILITY IN THIRTY-SIX YEARS OF CONSUMER INTENTIONS RESEARCH: A LONGITUDINAL REVIEW AND DIRECTIONS FOR FUTURE RESEARCH

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ABSTRACT

This study examined replications in consumer intentions research over the last thirty-six years (1986 to 2022). With the rapid penetration of the Internet and Web 2.0 technologies in consumers' daily lives, previous reproducibility claims specific to consumer intentions need to be verified and validated over time. The results revealed that very few replication studies have been published in the consumer intentions research. Findings also showed that there were more close replications than exact replications in these publications. There was a clear emphasis on null hypothesis significance testing in the replications studied. Recommendations are offered to ensure that replications become a recognized and frequent component of research pertaining to consumer intentions in marketing, advertising, and other business and management areas. Directions for future replication research and practice in this area are provided.

INTRODUCTION

This study addresses the state of replications in consumer intentions research over the last thirty-six years. A popular phenomenon among marketing, advertising, and business researchers, consumer behavioral intentions refer to people's willingness to buy a brand's offerings (Bagozzi 1992; Spears and Singh 2004). From a brand's and marketer's perspective, consumer intentions indicate their likelihood of buying their products or services, which is also the ultimate economic goal of any persuasive brand messaging. However, with the constant penetration of digital, mobile, and social technologies into consumers' lives, their decision-making processes are rapidly evolving, and consequently their intentions to associate with brands and their offerings. Consequently, prior research using theories that were established decades ago need to be re-verified to improve the reliability and generalizability of results. Replications are instrumental for establishing a coherent body of knowledge within the field of research such as consumer psychology and behavior and ensuring reliability, robustness, and consistency in findings (Martin and Clarke 2017). Replication refers to a study which is an independent repetition of an earlier, published research, using sufficiently similar methods and conducted under sufficiently similar circumstances (Duvendack et al. 2017). The literature covers various types of replications including exact (Schmidt and Oh, 2015), direct, conceptual (Zwaan et al. 2018), operational, constructive (Adams et al. 2005), internal, theoretical (Beck 1994), similar (Easley et al. 2000), and model comparison (Evanschitzky and Armstrong 2010). Jasny and colleagues (2011) argued that replications are a gold standard in assessing reproducibility of research findings. Despite its important role in developing cohesive scientific knowledge, replications are published less frequently across different disciplines (Bergh et al. 2017). The need for the investigation is apparent considering the widespread agreement among consumer studies scholars that replication is needed for the advancement of knowledge in this field of research (Diwanji and Cortese, 2021; Liu et al. 1997; Park et al. 2015). Consequently, this paper helps in bridging the prevailing gap in the literature related to investigation of replications in consumer intentions and satisfaction research and also provides the path to better understanding consumer behavioral science.

Replications by independent researchers are rare, and thus raise credibility concerns as well as highlight measurement biases.

Replicability is the cornerstone of research across different disciplines, including consumer intentions research. Regardless of form, replications are rare, perhaps too rare in some disciplines. Literature indicates low replication rates in the published research in different fields including education (0.13%), psychology (1.07%), political science (0.49%), and economics (0.58%) (Gordon et al. 2020; Makel et al. 2016; Pridemore et al. 2018). Calls for greater focus on replication are increasingly prominent across disciplines (Makel et al. 2019) including psychology (Pashler and Harris 2012), political science (Key 2016), economics (Duven-dack et al. 2017), and educational psychology (Plucker and Makel 2021) among others. It is therefore of concern that replications are relatively rare in scientific research in general (Makel et al. 2016). Common to all these arguments across disciplines is the idea that replications are an important part of the scientific research and crucial for the development of evidence-based findings. Consequently, the aim of this study was to help increase both the visibility of current replications in the consumer intentions research and promote more replications in the future research, as the costs could be substantial otherwise (Ryan and Tipu 2022). Even a small number of replications could be very valuable to increase the posterior that publications in consumer behavior, satisfaction, and dissatisfaction research present a robust finding. Incentives for running replications are low. Replication projects are argued to lack novelty and can fail to attract interest (Tipu and Ryan 2021). The upshot of all of this could be a replication crisis in consumer studies research. The following section discusses the state of replications in consumer intentions research over the last three and a half decades.

THE STATE OF REPLICATION IN CONSUMER INTENTIONS RESEARCH

Defining Replication. Before presenting this review, the definitions and different forms of replication are discussed first. Replication is defined as a scientific method of verifying research findings, whereby there is repetition of a research procedure to assess the accuracy of truth of the findings reported previously (Gould and Kolb 1964). Replications, therefore, are important as a means of providing greater generalizability of findings, filtering out false positives, producing robust evidence regarding the effect size, and setting boundary conditions for findings. Systematic replications lend credibility to prior research, and help advance theory (Guest and Martin 2021; Irvine 2021; van Rooij and Baggio 2021). They can add a dimension to prior research. Collins (1985) called replications the Supreme Court of findings. Similarly, Schmidt (2017) argued that well-conducted replications are capable of transforming a finding into a piece of knowledge.

Types of Replications. Over the years, a variety of categories have been proposed to identify different types of replication studies (Schmidt 2009). However, the three most prevalent types of replications have been exact, close, and conceptual replications. Exact replications refer to replication studies of a research that operationalize independent and dependent variables in exactly the same way as the original study (Stroebe and Strack 2014). Exact replications are also often referred to as direct replications. For instance, Shaft and colleagues (2018) conducted an exact replication study of an experiment investigating the effects of website design on consumer intentions. While the replication confirmed the importance of website design features in forming consumer intentions, behavioral intentions were partially mediated by attitude toward the website in the replication. An exact replication follows as precisely as possible the procedures used in the original study. This approach was exemplified by the Reproducibility Project, a large-scale

collaborative effort to replicate studies published in prominent journals (Open Science Collaborations, 2012). Exact replications are considered less ambiguous than other replication types because the same operationalizations as the original research are used. Hence, exact replications are difficult to dismiss as uninformative in terms of the reliability of the effect demonstrated in the original study.

The second type of replications are close replications. The goal in such replications is to test the assumed theoretical relationships and processes by recreating the methods of the original study (Brandt et al. 2014). Meaning, the methods and procedures are kept as close as possible to the original study (Tsang and Kwan 1999). The only differences, ideally, between the replication and the original study would be the inevitable ones such as different participants (Tsang and Kwan 1999). For instance, Pryor and Brodie (1998) conducted a close replication of an original study investigating the effects of advertising slogans on evaluations of brand extensions. The findings confirmed the priming effects of advertising slogans on consumer brand evaluations, as per the original study. More recently, Haberstroh and colleagues (2017) executed a close replication of an original study to understand how consumers respond to unethical corporate behavior. The replication helped in extending the original study by using a more realistic stimulus to establish external and ecological validity.

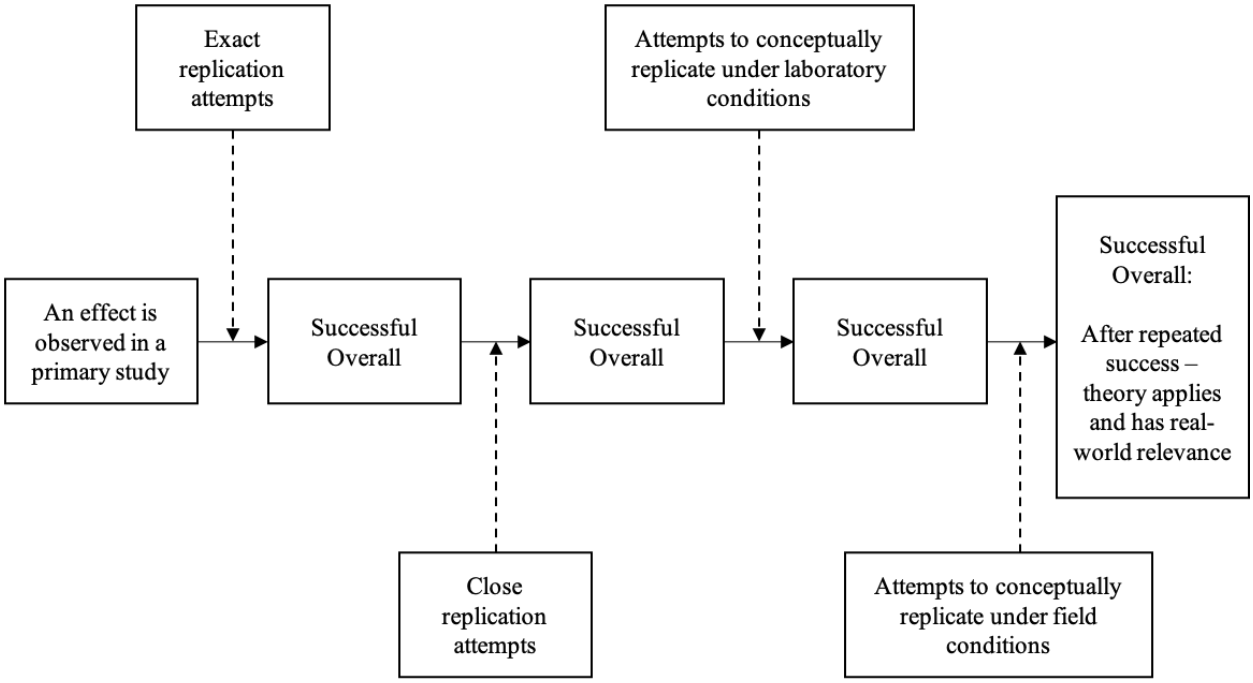
The third type of replications refers to conceptual replication studies. A conceptual replication is an attempt to test all or some of the hypotheses from the original study, but the operationalizations of the phenomenon, the independent and dependent variables, the research design, and the participants might all differ substantially (Crandall and Sherman 2016). Such type of replications helps to identify whether the original findings hold true across different research designs, methods, contexts, settings, populations, measures, and instrumentations (Brandt et al. 2014). For instance, Cheong and colleagues (2017) conducted a conceptual replication of viewer perceptions of TV commercials. The study was able to successfully replicate and extend the original research findings regarding how consumers evaluated commercials. Similarly, Diddi and Manchiraju (2018) used conceptual replication to assess the applicability of value-based segmentation of the U.S. luxury consumers using the Luxury Value Perception (LVP) model (Wiedmann et al. 2009). The findings confirmed the applicability of the LVP model in the U.S. context and helped extend the theoretical implications of the model. *Figure 1* represents replication as a process and showcases different replication types.

Regardless of the different replication types, replicating original work is of fundamental importance to science since scientific progress requires a stable empirical subject matter. Replications are an important component of cumulative science across different fields of research, and particularly in consumer intentions research as they help establish the veracity of a previously-tested effect and also help in precisely estimating the effect size. Consequently, this research aimed to examine the state of replication studies in the field of consumer intentions research.

Relevance of Replications. As established earlier, replications are crucial to any scientific field of research as they help ensure that research findings and implications are not biased (Walker et al. 2019). As Popper (1935, 1959) and Lakatos (1976) argued, evidence in favor of a specific hypothesis should not be regarded as confirmation that it is true. Replication is central to the goal of consumer intentions research because it increases the confidence in theories by increasing the number of times scholars have failed to falsify a theory (Chaffee and Berger 1987). This way, even unsuccessful replications are useful (Lakatos 1976). Many scholars in consumer intentions research and other scientific disciplines that rarely practice systemic replication, as identified above, often fall into the habit of assuming that a hypothesis is confirmed because an arbitrary *p*-

value threshold criterion is met (usually, $p<.05$ or $p<.01$), which is also referred to as *p*-hacking or *p*-hunting (Meyer et al. 2017). Nosek and Lakens (2014) noted that academic journal across different fields tend to be biased in favor of findings that reach traditional norms of statistical significance levels (*p*-value). Such journals rarely publish replications, and those that do publish them represent a tiny fraction of the published output. Additionally, much of the work in the field of marketing and communication science use convenience samples. Convenience samples are an acceptable choice, if findings could be replicated across varied samples. Furthermore, replications become an important indicator of external validity of research findings (Shadish et al. 2002). Replications can help expand the number of conditions under which the findings of the original study hold true. This is particularly relevant to the consumer intentions research where the goal often is to test the effects of product or brand specific messaging on consumer behavioral intentions. It requires several studies using different messaging strategies to gain confidence in the generalizability of findings (O'Keefe 2015). Many replications are required before researchers should confidently make recommendations about consumer intentions and decisions in general. Replications inarguably are worth the effort. To sum up, replications help with theory-testing, increasing the generalizability of findings, identifying critical boundary conditions specific to findings, and uncovering missing variables that might harmonize findings across studies.

Figure 1. Replication as a process



At this point, it is important to note that replication and meta-analysis address research quality issues and are complementary processes. However, they have distinct purposes and therefore assess research quality in different manners (Valentine 2019; Williams et al. 2017). Meta-analyses synthesize prior research, whereas replications aim to verify whether previous research findings could be replicated, and, hence, accurate. In a meta-analysis, a great variance in construct definition, instrumentation, sampling, and data analysis could result in a diverse pool of

studies, which might not have been previously replicated. Carter and colleagues (2019) argued that a carefully conducted meta-analysis of irreplicable studies is not much of a contribution to a scientific field. Furthermore, while meta-analysis help solve the problem of heterogenous findings, replications help address researcher bias. In other words, if an experimenter has a bias, such as they would want to find a specific outcome so that they are rewarded, a meta-analysis of multiple studies from the same research lab would potentially amplify the bias (Kvaren et al. 2020). While some may view replications as applying only to experimental research, they are important across all empirical approaches. Qualitative researchers are increasingly acknowledging the importance of replications (Leppink 2017; Makel et al. 2016). The recommendations found through replications are applicable to all forms of research, particularly within consumer intentions research in this context

Both meta-analysis and replication are important as they are both wonderful tools to help confirm and synthesize previously conducted research findings. These two concepts have been wedded for nearly three decades. Utts (1991) argued that meta-analyses help reinforce the importance of replications in research. Similarly, Allen and Preiss (1993) identified a symbolic relationship between replication studies and meta-analyses, insofar as meta-analysts analyze collections of studies that reinforce previous findings and authors of primary studies rely on meta-analyses to identify future research directions. Eden and Aviv (2002), on the other hand, noted that replications are the flip side of meta-analyses, in that without the latter, meta-analysts have nothing to cumulate. Smith and colleagues (2017) provided a more realistic view by stating that work that is important to a field gets replicated, however it is the meta-analyses that populate research journals. What makes meta-analyses more attractive than replications to journals? First, the large number of meta-analyses conducted imply researchers frequently engage in conceptual, if not direct, replications of previous research (Chen and Avery 2012). Cafri and colleagues (2010) noted that published meta-analyses typically produce nonzero effect sizes of a modest magnitude, giving the impression studies do replicate. Third, collection of studies as found in meta-analyses are viewed as more robust than any single study to flaws and limitations in research design (Williams et al. 2017). On the contrary, Kline (2013) suggested that meta-analyses are a stop gap until researchers change their mentality and behavior so that explicit replication is rewarded. Similarly, Nelson and colleagues (2018) argued that meta-analytic thinking fails to solve the problems of p-hacking, reporting errors, and dramatically exacerbates them. Makel and Plucker (2014) highlighted how meta-analyses integrate studies that have varied purposes while replications serve the primary purpose of replicating previous research. To sum up, as Allen and Preiss (1993) noted, meta-analyses require replications for effectiveness and replications require meta-analyses to effectively direct future research. This research focuses on examining the state of replicability in research on consumer behavioral intentions.

Replications in Consumer Intentions Research. The concept of replication has been existent in the fields of marketing and advertising since as early as the 1970s (Darley 2000; Easley and Madden 2000; Hunter 2001). Researchers in these fields agree that replications help in improving confidence in research-based generalizations about consumer-related phenomena (Easley and Madden 2000; Park et al. 2015). Literature, however, suggested that replications are rare in marketing and advertising research in general, and particularly in consumer studies research (Evanschitzky et al. 2007; Hubbard and Armstrong 1994; Reid et al. 1982). This infrequency of replications in the consumer behavior related fields can be attributed to multiple factors such as lack of cooperation among researchers (Easley and Madden 2000; Reid et al. 1981), inadequate research procedures and instructions (Hubbard and Armstrong 1994), misunderstandings about

replications in these fields (Easley et al. 2000), widespread emphasis on test of significance as a parameter of replication success (Hubbard and Lindsay 2013), and preference for original over replicated findings (Easley et al. 2000; Hubbard and Armstrong 1994; Park et al. 2015). Additionally, a damaging combination of questionable research practices (Hall and Martin 2019), coercive citation (Martin 2013), illusory theory development (Tourish 2020), lack of transparency (Christensen and Miguel 2018) and methodological and analytical weaknesses (Saylors and Trafimow 2021) undermines the credibility of business and consumer research in general. Bamberger (2019) noted that editorials welcoming replications in influential management journals, including consumer research have largely failed to increase the number of replications published. Overall, to establish the consumer studies research as a scientific discipline such as psychology and for the cumulative development of body of knowledge in this field, more replications are needed to verify the relationships between various consumer behavioral intentions related concepts (Easley and Madden 2000; Ryan and Tipu 2022). Therefore, the objective of this research was to respond to the previous call to examine the state of replications in this field (Bergh et al. 2017; Park et al. 2015). This renewed attention to replication seems increasingly important as we examine the sociocultural, environmental, and technological changes and of course, the COVID-19 global pandemic which are impacting marketing, advertising, and consumer research today, more than ever.

Certainly, there is enough evidence that the publication process in the marketing, advertising, and consumer behavior fields encourages the pursuit of one-off innovation (Easley et al. 2000; Eisend et al. 2016; Kitchen et al. 2014). That leaves little reward for producing and publishing replications, which are considered 'uncreative' or lacking new conceptual thinking or advancing new ideas. That said, there is increasing evidence that many new studies in these fields, and particularly in consumer research do not display innovation per-se, but rather, a form of incrementalism, which suggests that such studies add negligible insights to some overarching theories.

The focus of this research is on the phenomenon of consumer intentions within marketing, advertising, and business research fields. Consumer behavioral intentions, popularly called purchase intentions, has been a popular research phenomenon among the marketing, advertising, consumer studies, and business researchers (Bagozzi 1992; Cronin et al. 2000; Diwanji and Cortese; 2020; MacKenzie et al. 1986; Spears and Singh 2004). Consumer intentions are defined as their personal action tendencies relating to a brand or business (Bagozzi 1992; Spears and Singh 2004). Behavioral intentions are different than attitudes in that the latter are evaluations whereas the former are consumers' willingness to carry out a specific (purchasing) behavior (Eagly and Chaiken 1993). Many studies have examined the effects of consumers' attitudes on their behavioral intentions toward purchase, either independently or through a previously-defined theoretical models such as theory of reasoned action, planned behavior, and technology acceptance model. Finding significant effects of attitudes on purchase intentions of consumers are seen as the overall effectiveness of the advertising and marketing messages from a brand or a business (MacKenzie et al. 1986; Spears and Singh 2004). Additionally, Soderlund and Ohman (2003) argued that consumer behavioral intentions significantly influence their overall satisfaction or dissatisfaction with brands and their offerings.

Consumers' stated purchase intentions are considered as the primary inputs that marketing and business practitioners use to forecast sales (Harz et al. 2021; Whitlark et al. 2013). It also helps brands and marketers in evaluating how the actions they take would impact consumer's purchasing behavior. However, such causal relationships need to be verified and validated over time through

replications. With the rapid advancements in business communication technologies, the fields of marketing and advertising are evolving at an ever-increasing rate. In marketing, advertising, and consumer research, behavioral intentions and/or behavior is often the unit of analysis (Easley et al. 2000). One would think that most consumer behavior researchers would use and support replications as essential to knowledge advancement specific to consumer intentions and as a check for established findings. Without the replication of the established consumer intentions studies, we have little generalizability of findings and therefore, little to no real knowledge advancement (Cox 1948; Leone and Schultz 1980; Sheth and Sisodia 1999). Several studies have examined causal relationships between consumer attitudes toward ads and/or brands, their satisfaction with brands and their offerings, and their purchase or re-purchase intentions. These studies often use the same variables and similar theoretical frameworks. However, these are not considered close or conceptual replications, but rather single-shot studies (Easley et al. 2000; Jacoby 1978). Easley and colleagues (2000) argued that marketing and advertising literature is replete with one-shot studies of consumer intentions whose findings are different from the earlier findings. If the goal of such studies is to produce a universal explanation of the causal effects on consumer intentions as an outcome, inherent to this goal is the criterion of replication which should be intricately intertwined. Similarly, Eisend and colleagues (2016) warned of the dangers in overgeneralizing from one-shot studies of consumer intentions. Kwon and colleagues (2017) examined replications in leading marketing journals and found an over-emphasis on intra-study replications, rather than inter-study replications. They argued that if consumer researchers only replicate themselves, the scientific evidence conveyed in journal-supplied knowledge would suffer from lack on independent verification, which will result in distortion of the factual reality of consumer intentions.

There were no prior studies that examined replications in the consumer intentions research, which is a crucial aspect of knowledge on consumer satisfaction and dissatisfaction studies (Hong et al. 2018). Well (1993) deplored the insufficiency of replications in consumer research. Almost a decade later, Hunter (2001) called out consumer researchers to bridge the desperate gap in replications pertaining to consumer intentions and behaviors. The lack of replications in the consumer research area was still apparent one more decade later, as identified by Evanschitzky and Armstrong (2013). Literature suggests marketing and consumer research scholars generally continue to ignore calls for increased replication research (Evanschitzky et al. 2007; Kwon et al. 2017). Similarly, Kerr and colleagues (2016) noted that few advertising researchers would appreciate replication studies verifying their published work. If consumer research scholars continue to view replications as dull or threatening to their published work, then it would adversely affect the occurrence of replications, including in consumer intentions research (Easley et al. 2000). It is also important to assess validity of consumer intentions research findings across time and context. As Campbell and Stanley (1963) noted, verification at different times and contexts would help in increasing the confidence in prior findings. The problem, of course, is that consumer intentions and therefore, behaviors are dynamic. Just like the marketplace, consumers are constantly in a state of flux which challenges researchers to find comparable situations. Given the 'relativeness' of replicability within the consumer behavior field, this study conducted a longitudinal review of replications in published consumer intentions research in the areas of marketing, advertising, consumer studies, and business in the last three and a half decades. Replications are necessary to identify whether or not the previously established findings about consumers' behavioral intentions still hold true. This study examined replications in consumer

intentions research over time, and during this process, sought to answer the following overarching research question:

> **RQ1:** *How have replications in consumer behavioral intentions research been published in the marketing, advertising and business journals?*

This study used Brandt and colleagues' (2014) 'replication recipe' to evaluate the replications. It provides the standard criteria for a convincing replication. Following the replication recipe can help researchers identify the central parameters of a study and thus the key components of the replication, so that the replication is as convincing as possible. This also helps readers of both the replication and the original research by facilitating connection between the two efforts. This list of criteria for evaluating replications is not exhaustive, but it gives a concrete sense of how stabilizing procedures (see Radder 1992) can be employed to give greater credence to the quality and informativeness of replication efforts.

In order to understand the state of replications in consumer intentions research, it was also important to know what types of replication studies have been published in this area. Replications could be exact, close, or conceptually different (Brandt et al. 2014). Therefore,

> **RQ2:** *What types of replications are used in consumer behavioral intentions research in the marketing, advertising and business journals (exact or close or conceptually different)?*

Examining the state of replications within this area of study would also help in identifying inconsistencies, particularly statistical inconsistencies. This, in turn, would help improve the reproducibility of findings of future consumer studies research. Therefore,

> **RQ3:** (a) *Do replications in consumer behavioral intentions research include any statistical inconsistencies?* (b) *If yes, then what types of statistical inconsistencies are more prevalent in such replications?*

While what constitutes a replication may differ by field of research, it is important that such studies cover both positive and negative replications (Coffman et al. 2017). Both positive and negative replications should receive equal weight in the literature, where casual empiricism suggests that presently negative replications are more visible as they have a higher chance of publication. Therefore,

> **RQ4:** *Do replications in consumer behavioral intentions research include negative results?*

Finally, researchers across different scientific fields have observed that the published peer-reviewed literature reflects a widespread publication bias that favors statistically significant and novel outcomes (e.g., Nosek and Lakens 2014). Such preferences could lead to replication crisis within a field of research. Therefore, this review paper also addresses whether or not there exists a replication crisis in the consumer intentions research.

> **RQ5:** *Is there a replication crisis in consumer behavioral intentions research?*

The rest of this paper is organized in the following manner. In the next section, the method for data collection and analysis are discussed. This is followed by a presentation of findings and results. The findings are then discussed in light of the literature and implications are offered. Finally, limitations are addressed also offering recommendations for future research in this area.

METHOD

To answer the proposed research questions, this study involved a longitudinal analysis of replication studies on consumer intentions published in major marketing, advertising, consumer studies, and business publications over the last three and a half decades. This section describes the data collection and analysis process deployed in this review paper.

Replication Article Selection Process. The replication studies collection process began with the selection of online search engines Business Source Complete and Complementary Index/Web of Science. First, using the Business Source Complete search engine, the researcher searched for articles that contained the search term "replicat*" in combination with different keywords related to the concept of behavioral intentions and the field of research such as marketing and advertising in title, abstract and/or main text (Fanelli, 2010; 2011). After each round of search using different combinations of keywords, the researcher documented the search results in terms of the number of hits produced and timeframe for the search. Once each combination of keywords was run on each search engine and articles listed in the document, the researcher cleaned to data to remove any duplicates and articles that were outside of the focus of this study (i.e., they used the term "replicat*" but were not actual replications). The timeframe of all results was combined to identify the article with the oldest publication date. The oldest article was published in 1986, which was then set as the origin point of the timeframe. The keyword combination queries were re-run in the Web of science search engine within the timeframe of 1986 and 2022. After documenting the results of the new round of searches, database was again cleaned to remove duplicates and articles that did not fall within the context of this study as described above. A total of 38 articles was collected after the two rounds of search. The full articles were downloaded (in .pdf format) from the respective publications through the search engines. These articles were examined to see whether or not they were actually about replication of behavioral intentions in advertising or marketing research field. Six articles were removed in this process as they were not related to the core area of focus for this study. Consequently, the final sample consisted of 32 articles (N=32) from 21 different journals in marketing (11), advertising (6), and business (4) (See *Table 1*). The low number over a period of thirty-five years

Table 1. List of articles examined in this research

Article ID	Article title	Year of publication	Journal
01	The Role of Attitude toward the Ad as a Mediator of Advertising Effectiveness: A Test of Competing Explanations	1986	Journal of Marketing Research
02	The Impact of Inferences on Product Evaluations: Replication and Extension	1988	Journal of Marketing Research
03	The Mediating Role of Attitude Toward the Ad	1990	Journal of Marketing Research
04	Consumer Decision Making for Common, Repeat-Purchase Products-A Dual Replication	1993	Journal of Consumer Psychology
05	Male nudity in advertisements-A modified replication and extension of gender and product	1996	Journal of the Academy of Marketing Science
06	Religious Symbols as Peripheral Cues in Advertising	2000	Journal of Business Research
07	Brand Awareness Effects on Consumer Decision Making for a Common, Repeat Purchase Product: A Replication	2000	Journal of Business Research
08	A Replication of the Elaboration Likelihood Model	2000	Journal of Business Research
09	Exploring the Effectiveness of Business Gifts: Replication and Extension	2000	Journal of Advertising
10	The Web Motivation Inventory: Replication, extension and application to internet advertising	2007	Int Journal of Advertising
11	Online Shopping as Foraging: The Effects of Increasing Delays on Purchasing and Patch Residence	2008	IEEE Transactions on Professional Communication
12	Emotions by Design: A Consumer Perspective	2009	International Journal of Design
13	Re-inquiry into Advertising Avoidance on the Internet		
14	The influence of cultural aspects on public perception of the importance of CSR activity and purchase intention in Korea	2013	Asian Journal of Communication
15	Trust disposition, trust antecedents, trust, and behavioral intention	2015	The Service Industries Journal
16	Drink coca-cola, eat popcorn, and choose powerade: testing the limits of subliminal persuasion	2015	Marketing Letters
17	The effects of Communication in Social Media Consumer: a replication study of Schivinski and Dabrowski	2014	Journal of Marketing Communications
18	Drivers of Brand Trust in Internet Retailing: The Case of Indonesia	2015	International Journal of Online Marketing

19	Getting Labeled The Influence of Brand Prominence among Generation Y Consumers	2015	Journal of Business Research
20	African American Consumers' Evaluations of Ethnically Primed Advertisements	2016	Journal of Advertising
21	Reinquiry into Advertising Avoidance on the Internet: A Conceptual Replication and Extension	2016	Journal of Advertising
22	The relative influence of advertising and word-of-mouth on viewing new season television programmes	2016	European Journal of Marketing
23	Revisiting firm-created word of mouth	2016	International Journal of Research in Marketing
24	A sequential process of brand tribalism, brand pride and brand attitude to explain purchase intention: a cross-continent replication study	2017	Journal of Product and Brand Management
25	The Heart and the Head: On Choosing Experiences Intuitively and Possessions Deliberatively	2017	Journal of Behavioral Decision Making
26	Language divergence in service encounters: Revisiting its influence on word-of-mouth	2017	Journal of Business Research
27	The effects of online reviews on service expectations	2018	Journal of Business Research
28	Validating the Effects of Brand Quality on Attitude and Purchase Intention in Service–Product Alliances	2017	Service Marketing Quarterly
29	How Do Trust and Risk Affect Customers' Online Purchase Intention? A Study of Trust and Risk in the Online Shopping Context	2017	Journal of Research in Interactive Marketing
30	Does it actually feel right? A replication attempt of the rounded price effect	2017	Royal Society Open Science
31	Cross channel effects of search engine advertising on brick-and-mortar retail sales: Meta-analysis of large-scale field experiments on Google.com	2018	Quantitative Marketing and Economics
32	Antecedents and Consequences of Self-Congruity: Replication and Extension	2019	Journal of Consumer Marketing

shows the lack of replications in consumer behavioral intentions research. This was also reflected in the prior research (Tipu and Ryan 2021).

This study used Brandt and colleagues' (2014) '*replication recipe*' to examine the similarity between the replication articles collected in the sample. The recipe outlines standard criteria for conducting and evaluating close replication attempts. Brandt and colleagues (2014) did not require researchers to implement their entire replication recipe as is. Therefore, this study

Table 2. Replication recipe to compare the original and replication study and power level calculations for small and medium effect sizes across replications

Article ID	The similarities/differences in the instructions are:	The similarities/differences in the measures are	The similarities/differences in the stimuli are	The similarities/differences in the procedure are	The similarities/differences in the location (e.g., lab vs. online; alone vs. in	The similarities/differences in remuneration are	The similarities/differences between participant populations are	Power (small)	Power (medium)
1	2	2	2	1	0	0	0	0.08	0.553
2	2	2	2	2	0	0	2	N/A	N/A
3	1	2	2	1	0	0	2	0.003	0.289
4	2	2	2	2	0	0	2	0.03	0.829
5	2	2	2	2	0	0	2	0.99	0.99
6	2	2	2	2	0	0	2	N/A	0.05
7	1	1	1	1	2	0	2	0.341	0.99
8	2	2	2	2	0	0	2	0.646	0.99
9	2	2	2	2	0	0	2	0.99	N/A
10	2	2	2	2	0	0	2	0.067	0.817
11	2	2	2	2	0	0	2	0.078	0.299
12	0	0	0	0	0	0	0	0.216	0.936
13	2	2	2	2	0	0	2	0.216	0.936
14	0	0	0	0	0	0	0	0.936	0.99
15	0	2	2	2	0	0	3	0.099	0.868
16	1	1	2	1	0	0	3	0.11	0.665
17	2	2	2	2	0	0	2	0.161	0.846
18	2	1	2	2	0	0	2	0.16	0.841
19	0	0	0	0	0	0	0	N/A	N/A
20	2	2	2	2	0	0	2	0.983	0.99
21	0	0	0	0	0	0	0	N/A	N/A
22	0	0	0	0	0	0	0	N/A	N/A
23	2	2	2	2	0	0	2	N/A	N/A
24	1	1	1	1	0	0	1	0.99	0.99
25	1	1	1	1	0	0	1	0.004	0.023
26	2	2	2	2	0	0	2	0.222	0.99
27	1	1	1	1	0	0	1	0.196	0.636
28	2	2	2	2	0	0	2	0.249	0.99
29	2	2	2	2	0	0	2	N/A	0.613
30	2	2	2	2	0	0	2	0.003	0.874
31	1	1	1	1	0	0	1	N/A	N/A
32	2	2	2	2	0	0	2	0.527	0.999

**Note: 1=Exact; 2=Close; 3=Different; 0=No information; N/A=(Information) Not available to calculate power*

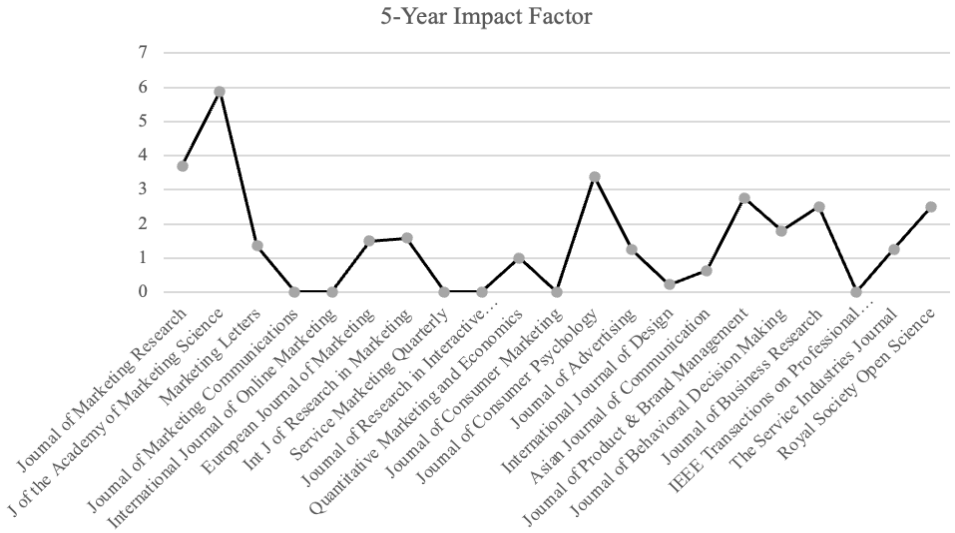
used a specific section of the recipe that would help to examine the similarities and differences in consumer intentions research replications. *Table 2* shows the results of the replication recipe, which are discussed in the analysis section below.

To examine the tests of significance among the collected set of articles on consumer behavioral intentions, this study used an automated procedure statcheck version 1.3.0 (Epskamp and Nuijten 2019). statcheck helps in extracting statistical results from any article and recalculates *p*-values based on reported test statistics and their degrees of freedom. First, the program converted pdf or HTML files of articles into raw text files. Then, it searched for specific
patterns and identifies statistical results reported in articles from *t, F, r,* χ^2, and *Z* tests. Next, it used test statistics and degrees of freedom to re-calculate *p*-value. Finally, it compared reported and re-calculated *p*-values. Correct rounding and one-sided test were taken into account. It is important to note that statcheck assumes that the *p*-value is the inconsistent value, but it could just as well be the case that the test statistic or degrees of freedom contain a reporting error. statcheck merely detects whether a set of numbers is consistent with each other.

ANALYSIS

Journal Information. Researcher calculated the five-year impact factor for the journals, both overall and based on the field of research. For a few of the journals, the five-year impact factor score was either unavailable or pending, based on the official journal websites. The average 5-year impact factor of all journals in this sample was 1.535 (range=0.218 to 5.888). For the marketing journals, the average 5-year impact factor was 1.365 (range=1.350 to 5.888). For the advertising journals, it was 1.671 (range=0.218 to 3.385) and for the business research journals, it was 1.568 (range=1.258 to 2.509). *Figure 2* represents the average 5-year impact factor comparison across all journals.

Figure 2. Comparison of average 5-year impact factor scores across journals



Replication Ratings. The analysis showed that overall, 85% of replications were actually replication of others' previous studies, whereas 15% were self-replications. In addition, overall, 77% of replications were reported as successful replications, whereas others were either reported as mixed-success or failures. All of the self-replications of consumer behavioral intentions published within the selected marketing, advertising, consumer studies, and business journals were reported as successful replications. Contrarily, of the studies that included replications of the previous research on consumer behavioral intentions, 73% were reported as successful replications and 27% were reported as failures to replicate the original studies. Nearly 31% of the studied replications were published in the same journal as the original studies.

To understand the similarities (or differences) in replications, this study used a specific segment of Brandt and colleagues' (2014) replication recipe, in line with the proposed research questions and adapted to the context of the present study. For different parts of each article collected in the sample, the researcher rated whether the replication was exact (1), close (2), or conceptually different (3). If no information was provided for a particular criterion in the original or the later article, then it was coded as '0.' *Table 2* shows the results of the 'replication recipe check.'

RQ2 examined about the types of replications published in the consumer intentions research over the last thirty-five years. The results suggested that a majority of replications in consumer behavioral intentions across the three fields were close replications. The advertising journals published more exact replications, whereas marketing and business journals published more close replications. Also, there were more replications of others' work than self-replications. In addition to the observation that replications are rarely published in consumer intentions research studies, it is also pertinent to note that the available literature exploring replications in this area takes a selective view.

Overall, the findings suggested that around 41% of the studies (n=19) were close replications. About 21% (n=7) of them were reported as exact replications. Only 12.50% (n=4) of the studies used exact population replication, whereas 62.50% (n=20) of them used close population replication. These studies used some adapted version of the same purchase intention scale as the original studies for measuring consumer intentions in the replications. As the fields of marketing, advertising, and business research are very broad in nature, the phenomenon of consumer purchase intentions could be examined through several routes and using different theoretical frameworks. The studies varied in the use of guiding theoretical frameworks for assessing consumer intentions. While most studies 75% (n=24) aimed to examine the relationship between consumer attitudes and their purchase intentions using different theories, some other studies (12.50%, n=4) used word of mouth as a guiding framework for evaluating such relationships. Attitudes were defined as consumers' favorable or unfavorable evaluations of brands and their messages and offerings (MacKenzie et al. 1986). Purchase intentions were defined as consumer willingness to purchase a brand's offerings (Spears and Singh 2004). Other theoretical frameworks prevalent in these replications of consumer intentions research were regulatory fit theory (Higgins 2008), information integration theory (Anderson 1973), communication accommodation theory (Dregojevic et al. 2015), dual-process theory (Kahneman 2003), expectancy-disconfirmation theory (Oliver 1980), and choice theory (Glasser 1999). In terms of the research procedures, 25% (n=8) of the replication studies followed the exact procedures as used in the original studies. Most studies (59.38%, n=19) close replication of the procedures used in the original studies. Only one of the replication studies used a close replication of the research

facility used in the original research. Overall, the replication studies did not provide information about the location of the study or the remuneration offered to participants.

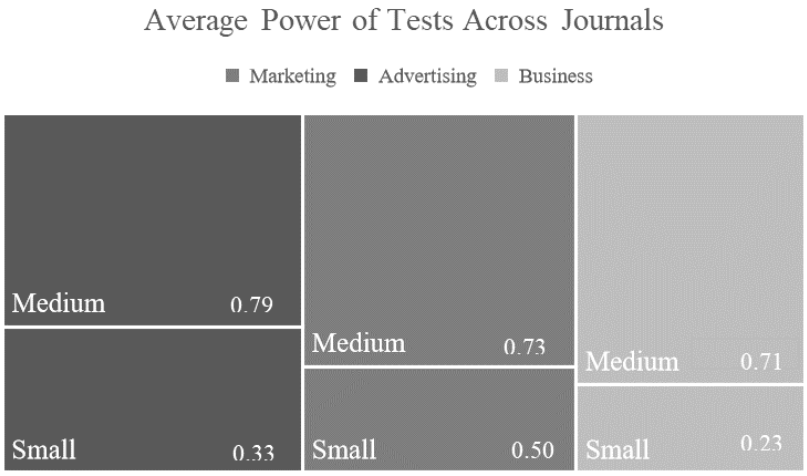
Further analysis suggested that 53.13% (*n*=17) of the replications studied were conducted with an aim of validating results of the original studies to improve their generalizability. For instance, Lim and colleagues (1988) attempted to replicate and extend the findings of the original research by Huber and McCann (1982) about the effects of inferences on product evaluations, and particularly on purchase intentions. Similarly, Homer (1990) replicated to test the generalizability of MacKenzie and colleagues' (1986) model to examine the relationship between consumer attitudes and purchase intentions. Other examples of studies that aimed to replicate the findings of their original studies included: Macdonald and Sharp (2000), Rodgers and colleagues (2007), Chitturi (2009), Wang and colleagues (2015), Gallo and colleagues (2017), Harms and colleagues (2018), and Aw and colleagues (2019). Four studies were self-replications, either in the form of internal replications (e.g., study 2 as a replication of study 1) or replications at different times (Beltramin 2000; Nath et al. 2018; Smarandescu and Shimp 2015; Taute et al. 2017). The goal of such studies is to improve the reliability and validity of measures as well as increase the generalizability of findings. Some studies aimed to replicate prior studies, but in field experiments (e.g., Kalyanam et al. 2018; MacKenzie et al. 1986). The similarities and differences among the original studies and replications are highlighted in *Table 2*.

Analysis of Significance of Tests. Results showed prevalence of null hypothesis significance testing in the articles examined. Overall, 75% of replication studies in the sample reported *p*-values in their results, and the remaining 25% either did not include them or did not provide much information about results in general.

Four replication studies did not include any statistics in the results section despite reporting the findings to be statistically significant. statcheck was able to detect NHST results in 42% (*n*=13) of the replications in the sample. For the articles wherein it could not detect NHST, either they did not have the data reported appropriately as per the APA format or they did not report the relevant statistics in results at all or the program was unable to read the format of the document uploaded for analysis (pdf or html). Overall, 31% (*n*=4) of studies detected by the program contained at least one inconsistent *p*-value (ranging from 1 to 3 inconsistencies per article). Across the entire sample of replications in consumer intentions research, the inconsistency rate was 12.50%, however it should be noted that the program was unable to read many articles due to format or reporting issues, as described above. At the journal level, of the studies that were detected with inconsistent *p*-values, 75% (*n*=3) were published in advertising journals and 25% (*n*=1) were published in business journals. In addition, the analysis of inconsistencies in *p*-values further suggested that the studies that were found to have issues were between 2015 and 2019. In the collected set of publication studies of consumer intentions, no study reported the exact *p*-values. For the studies wherein statcheck found inconsistencies, the degree of difference between reported and calculated *p*-values was not very large. The difference, at most places, was in rounding off to standard cutoff *p*-values, whereas statcheck did not round off the *p*-values. At a couple of places, the reported *p*-value was lower than the actual p-value (for example, reported p-value was 0.552, whereas the computed *p*-value was 0.83 in an advertising journal replication study). The analysis of the reported *p*-values also suggested that 21.88% of studies reported reaching significance at α=.05, 28.13% reported reaching significance at α=.01, and 21.88% of studies reported reaching significance at α=.001. At the journal level comparison, most of the replications in the business journals used α level of .05 for testing significance, whereas the marketing and advertising journals appeared to be using differing alpha levels at primary as well as secondary tests of significance.

Analysis of the Power of Tests. Using G*Power software, this study evaluated the power of the replications of consumer behavioral intentions in the marketing, advertising, consumer studies, and business journals based on the results they reported. Post hoc analysis was conducted to compute statistical power (1-β) as a function of significance level alpha, sample size reported in the replication studies and population effect size, if reported. If effect size was not reported in a study, then the power was calculated based on small and medium effects (Cohen, 1962). None of the articles reported statistical power in their results section. In terms of the effect size, only two studies reported population effect size when reporting the significance test results. Therefore, using the sample size, type of test, and effect size (small and medium), an evaluation of power was carried out. *Figure 3* shows the average power level of tests for small and medium effects across replications of consumer behavioral intentions published in marketing, advertising, consumer studies, and business journals.

Figure 3



The power analysis helped in understanding whether or not the replications were really able to detect the tests of significance reported in their results. In other words, if the null hypothesis is false, the replication study is not any better able to detect the effect than a 'test' based on tossing a coin. *Table 2* also shows the re-calculated power levels for all studies, at small (d=0.2) and medium (d=0.5) effect size estimates (Cohen, 1962).

DISCUSSION

The overarching aim of this review study was to explore the state of replications in the consumer intentions research over the last three and a half decades. In doing so, this study analyzed replication studies relating to consumer behavior intentions published in major marketing, advertising, consumer studies, and business publications.

RQ1 aimed to investigate how replications in consumer intentions research have been published across different journals. Overall, as described above, there were not many replication studies during the three and a half decades (1986 to 2022), based on the article search described above in the method section. As established previously, with the rapid advancements in marketing and advertising technologies, it is very important to study whether the effects found in consumers'

behavioral intentions still hold true over the years. However, as witnessed in results, not many researchers in these fields have conducted replications related to this phenomenon. Replications are a gold standard in assessing the integrity and reproducibility of research findings (Jasny et al. 2011). Despite its integral role in developing scientific knowledge, results of this study suggested that replications in the area of consumer behavioral intentions research are far and few. This was in line with the literature that argued that replications in general are viewed as lacking excitement and prestige (Lindsay and Ehrenberg 1993; Neuliep and Crandall 1993). Thus, replications are published less frequently and when they are published, they are less likely to support original studies, as highlighted by prior research (Bergh et al. 2017). This situation may, therefore, underline the credibility crisis in the consumer intentions research in different marketing, advertising, consumer studies, and business publications.

RQ2 examined about the types of replications published in the consumer intentions research over the last thirty-five years. The results suggested that a majority of replications in consumer behavioral intentions across the three fields were close replications. The advertising journals published more exact replications, whereas marketing and business journals published more close replications. Also, there were more replications of others' work than self-replications. In addition to the observation that replications are rarely published in consumer intentions research studies, it is also pertinent to note that the available literature exploring replications in this area takes a selective view.

RQ3(a) and *(b)* examined for any statistical inconsistencies in the results reported in the replications in consumer behavioral intentions studies from the three different research fields. Overall, the results seemed to be consistent in terms of the significant tests (*p*-values) as well as the power analysis. However, it was observed that the replication studies examined in this study did not include effect sizes and power related information in their results. Including these details would provide a better understanding of the reported results to reviewers as well as to readers at large. Although researchers may be conditioned to test null hypotheses, they should emphasize on effect size and power level, to find not only the direction of an effect, but also its size and the precision of that estimate, so that the importance and relevance of the effect can be judged. As highlighted in the results of this study, *p*-value occupies a dominant place among researchers conducting replications in consumers' behavioral intentions across the fields of marketing, advertising and business, unless statistical power is very high, the *p*-value should be interpreted tentatively at best. Data analysis and interpretation must incorporate the uncertainty embedded in a *p*-value. Overall, in terms of replications in consumer behavioral intentions, an emphasis on effect sizes and precision of estimates is preferable to the dichotomous thinking of null hypothesis significance testing. This approach encourages meta-analytic thinking.

RQ4 investigated whether replications in consumer intentions research included negative results or not. The answer to this question, based on the results, is a no. None of the replication studies analyzed in this study reported negative results. This relatively lesser importance on negative results in the published studies is not just the issue concerning the fields of marketing, advertising, consumer studies, and business. Literature suggested that among social psychology journals, in general, very few published studies mention negative results (Smart, 1964). However, when presenting replication results on consumer intentions, researchers should include every statistical test made in the study – regardless of the fate of the null hypothesis. It can well be the case that more might be learnt from the negative results in the replications than from the positive results. Negative results could provide useful information to the researchers conducting replications in consumer behavioral intentions. Consequently, this study argues that consumer

studies, marketing, advertising, and business journals need to explicitly mention in the aims and instructions to the author that the submissions of replications are accepted, and more importantly, replications are accepted which report negative results (Martin and Clarke 2017). This is in line with Begley and Ellis' (2012) argument that the investigators should be required to report all findings regardless of the outcome. This will ensure more opportunities to present negative results in the consumer intentions research.

RQ5 explored whether there exists a replication crisis in the consumer behavioral intentions research or not. As identified in this study, there were not many replication studies found over the last three and a half decades. However, it might not be enough to confidently say that there is a replication crisis in the consumer intentions research. Whether or not there exists replication crises in a field is often caused by the way people talk about them (Stroebe and Strack 2014). Replicating important and relevant findings pertaining to consumer behavioral intentions can provide researchers and scholars alike with important information, and more importantly the confidence, needed to creative effective messaging strategies to render more favorable behaviors, in terms of purchasing actions. As established earlier, when there is a constant advancement in the marketing and advertising industries, replications help in understanding whether or not the previously established effects on behavioral intentions or relationships between consumers' attitudes and perceptions with their intentions still hold true. There is no right or wrong answer to how many replications should be published in the consumer behavioral intentions research across these fields, as it is an arbitrary selection. But, the leading journals in these fields should look to revise their guidelines for authors, if not already, to encourage researchers to conduct and publish more replications in the consumer behavioral intentions research to establish more confidence in the results related to the phenomenon. At the same time, failure to replicate does not mean that the original findings or the procedures used are incorrect. Replications in the consumer intentions should be seen as a path to better understanding how consumers interact with brands, and as a result, form decisions related to purchasing or engaging with brands in other ways.

This study argues that there is a need to ensure that space is available for replications, which underscores that journals focusing on consumer intentions research highly value this type of work (van Witteloostuijn 2016). As explained earlier, one major barrier to exact replications of consumer intentions research is the dynamism of this field of study because of the continuous penetration of marcomm technologies and evolving consumer behavior due to global events such as the COVID-19 pandemic, climate change, and domestic events such as racial and social unrest and elections (Foxall 1993; Easley et al. 2000). Additionally, Easely and colleagues (2000) argued that many consumer research, marketing, and advertising journals view replications as lacking creativity. In other words, the findings of replications are not seen as exciting, but often as boring (Easley et al. 2000). Yet, it is very difficult to establish theoretical generalizations and concrete effects on consumer intentions based on one-shot research studies. To show the explicit support of publications to replication studies in the area of consumer intentions research, it is recommended to have a separate section for replication and extension research. Replication policies need to clearly delineate which types of replications are accepted by the journals. In this regard, a wide range of different types of replications needs to be mentioned in this section with clear definitions. Journals need to equally focus on these types to further develop the knowledge. The policy related to publishing negative results also needs to be clear. The role of meta-analyzes is also pertinent in guiding replication research in consumer intentions research. Replications are the possible data source of meta-analysis and a large number of high-quality replications enrich meta-analyzes, enhancing the possibility of scientific generalization (Eden 2002). It can also be argued that for

effectively addressing the replication crisis in this area, the role of all stakeholders including editors, publishers, researchers, and reviewers is crucial. All the key stakeholders need to work together to tackle the replication crisis. It is also important to consider the potential drawbacks of encouraging replications while outlining the recommendations for guiding future research in this area. Conducting replications without clear policy and guidelines might create various issues for original studies and replications. Consequently, stakeholders need to strike a balance between novel and replicative research (Zwaan et al. 2018).

Some commonly cited reasons why replications are published less in this area are: editorial bias (Neuliep and Crandall 1990), a lack of novelty (Madden et al. 1995), a lack of scholarly respect (Monroe 1992), and non-support of prior findings (Rosenthal 1991). Neuliep and Crandall (1990) reported that editors in consumer research rarely publish special calls to invite researchers to submit replication studies. Madden and colleagues (1995) noted that out of sight, out of mind might well be a reason for the lack of replications in this field. Monroe (1992) argued that scholars, especially young and early-career researchers are discouraged from replications due to a lack of scholarly respect for this type of work from the promotion and tenure point of view. Rosenthal (1991) highlighted the 'file drawer' problem, meaning that unsuccessful replications often discourage researchers to conduct more replication studies in the future. However, Kwon and colleagues (2017) identified an encouraging trend in intra-study replications, which are better than single-shot studies and provide greater reliability.

The consumer intentions paradigm examined appears capable of encompassing more concrete and recent replication studies in a manner that is consistent with the rapid digital penetrations in the field of consumer behavior and decision making. Similarly, the constructs of consumer dissatisfaction and complaining also warrant additional investigation in terms of reproducibility of recent findings. The development of a replication tradition would enhance our understanding of consumer intentions, satisfaction, and behavior, and ultimately help enhance the field's scientific status. With this study, it is hoped to have contributed a small step in the right direction.

The findings and discussion thereof echo Monroe's (1992) sentiments that pioneering research findings should be examined and re-examined for the reproducibility. In other words, well-cited theoretical frameworks that predict and assess consumer behavioral intentions should be replicated as they hold a great potential for perpetuating a stream of unverified findings otherwise. It is especially true as the foundational marketing, advertising, and consumer research theories were originally introduced more than five decades ago (Kerr et al. 2016; Kitchen et al. 2014). Brands and consumers have come a long way as their relationships have evolved manyfold with the increasingly intertwined social and digital aspects of their everyday lives (Diwanji and Cortese, 2020; 2021). Replications with extensions appeared to be the most published kind of studies, based on this extensive review of consumer intentions research. However, as Rosenthal (1991) and Tsang and Kwan (1999) noted, researchers should also use exact replications, when possible, to test theories. Similarly, more intra-study replications should be encouraged, particularly for relatively newer areas of the field such as artificial intelligence and Big Data to provide more stringent assessment of the phenomenon of consumer intentions. Pre-registered replications can help save time and efforts of the researchers and also help improve the relevance to journals. The journal editors should, rather than indulging into the rat race to high impact factor, should pause and advise readers, reviewers, and authors of the importance of replications and meta-analyses in terms of research and theory development.

LIMITATIONS AND FUTURE RESEARCH

Although the findings of this study are relevant and suggestive, their generalizability might be restricted by certain limitations. First, this study included a limited dataset of publications on replications in consumer behavioral intentions in marketing, advertising, consumer studies, and business journals, based on specific search criteria. Also, this study only looked for replication studies that included the term "replicat*" somewhere in the published article (both title and main body text). It could be possible that researchers who conducted replications related to consumers behavioral intentions might not have really used the term "replication" in their published studies. That makes them fall outside of the context of this study. Therefore, future studies should deploy an even more longitudinal approach to include more publications to more closely appropriate the replications in consumer intentions research across different fields. Second, the results might be biased based on the tools used to evaluate the results reported in these replications. The limitations specific to these programs might provide an incomplete perspective on replication in consumer behavioral intentions. Future research should be conducted with other tools that could help assess the reported results in a different manner to determine the accuracy of the success or failure of the replications. Future research may also examine how journals with lower impact factors might differ from journals with higher impact factors in terms of their relative openness toward replications. Future research could also examine journals' publication policy in terms of replications against original studies.

Overall, this study showed that replications are key for moving toward a better understanding of consumer intentions. Therefore, our research community should be more proactive in raising awareness of the importance of replications. Journals in the areas of marketing, advertising, consumer studies, and business should take explicit steps for tackling the replication crisis in the consumer intentions research. It is hoped that in another thirty years, another longitudinal review of replications of consumer intentions research reports significantly greater frequency as well as applicability of replication studies in this field.

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The author has no conflict of interest to declare.

Submitted: 15 December, 2021
Revised: 27 May, 2022

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