

# Online Reviews Affecting Purchase Intention of Consumers: A Meta-Analytical Literature Review

"Sumit Kumar", " Dr. Saurabh Mishra", "Dr. Shashikant Rai"

## ABSTRACT

Many research have looked at elements impacting consumers' purchase intention due to online reviews. The amount of study that has been done in the past and the discrepancy in some of the outcomes make it beneficial to create an all-encompassing model that combines the findings. To examine the consistency of the variables from earlier studies, a meta-analysis and random effect model were used in this paper to synthesize research findings on the effects of online review elements like perceived risk, trust, and credibility on consumers' purchase intentions. Comprehensive meta-analysis software was used to perform meta analysis of 23 studies. Results from above discussed method exhibits significant effects of perceived risk of online reviews ( $r=0.272$ ,  $Z=1.430$ ) on purchase intention, trust towards online reviews ( $r=0.610$ ,  $Z=9.621$ ) on purchase intention and credibility of online reviews ( $r=0.437$ ,  $Z=4.713$ ) on purchase intention. Random effects meta-analysis method allows for variations in the treatment among studies. The effect of perceived risk on purchase intention is having the lowest correlation value among all the variables and trust is having the highest correlational value among the following. Result of the study shows trust is going to have the highest impact on consumers purchase intention.

Primary disadvantage of the study is that there aren't many studies accessible for meta-analysis because they were only collected in electronic form from databases like Web of Science, Scopus, and Google Scholar. Future study should utilize a larger variety of datasets. Additionally, only quantitative research were taken into account in this analysis; qualitative studies were not. Therefore, future research might perform a meta-analysis using both types of studies.

Managers may employ those variables in their marketing plan to draw customers by concentrating on the aspects that have a significant impact on purchase intention. Marketers may impact customer purchasing intentions, which in turn affects consumer purchase decisions, loyalty, and commitment, by better understanding how perceived intention, trust, and credibility are used. The use of meta-analysis enabled us to quantify the strength of the association between several characteristics, including

perceived risk, trust, and credibility, on purchase intention, and helped to reconcile earlier findings".

**Keywords:** Purchase intention, Perceived Risk, Trust, Credibility, Online review, Random effect model, Meta-analysis

## 1. INTRODUCTION

Within the previous 20 years a significant increase in internet usage and online purchasing has been seen. Identifying the factors that ultimately lead a customer to purchase online and find happiness is quite important. In this study, internet product or service reviews are taken into account as one of the reasons encouraging customers to purchase a product. Although online buying and internet usage are increasing globally, some consumers are still hesitant to do so owing to issues with trust, perceived risk, and credibility (Stouthuysen et al., 2018; Pelaez et al., 2019; Dwivedi et al., 2021). A study that gathers, synthesises, and summarises prior studies on the elements that affect a person's desire to purchase things based on online reviews is referred to as a meta-analysis of effect on the purchase intention impacted by online review.

Online reviews played a important role in for customer in decision making in the modern day. Because they offer a wealth of information about the product's quality, dependability, and utility, consumers rely on internet reviews to make wise purchasing decisions. However, a number of variables affect how internet reviews affect buyers' buying intentions. Some of the most important elements influencing consumers' buying intentions include perceived risk, trust, and credibility. A study that gathers, synthesises, and summarises prior studies on the elements that affect a person's desire to purchase things based on online reviews is referred to as a meta-analysis of the effect on the purchase intention impacted by online review.

Online reviews offer a wealth of information about the product's quality, dependability, and utility, consumers rely on internet reviews to make wise purchasing decisions. However, a number of variables affect how internet reviews affect buyers' buying intentions. Some of the most

important elements influencing consumers' buying intentions include perceived risk, trust, and credibility. (Belanche et al. (2012) examined how perceived risk affected users' intentions to utilise a website and how users' perceptions of the website's usability, customer happiness, and other factors.

Credibility is the endogenous construct in our research paradigm. As was previously mentioned, e-commerce and social media research typically uses online review credibility as a dependent variable (Chih et al., 2013). The term "online review credibility" describes "the extent to which one perceives online reviews as believable, true, or factual." It is significant in the context of consumer behaviour (Fang, 2014, p. 72; Cheung et al., 2012). We include credibility as the primary endogenous component in the study model because of its significance and the dearth of evidence on its origins and consequences on consumers' purchase intentions. We also look into how it affects the intention of customers to make purchases in light of this.

A handful of studies have examined review credibility as an antecedent element, despite the fact that several in the fields of social media and e-commerce have examined customers' buy intent in connection to online reviews as a dependant variable (e.g., Chih et al., 2013; Hsiao et al., 2010; Obiedat, 2013; Park and Lee, 2009; Reimer and Benkenstein, 2016).

Trust is crucial in business relationships because it allows for the successful conclusion of crucial agreements and transactions. Trust in the context of online commerce refers to the conviction that e-businesses won't engage in opportunistic behaviour and won't take advantage of clients (Hong & Cha, 2013). Customers who have more faith in internet businesses are more certain that they won't be duped or taken advantage of. Trust is increasingly important in online transactions due to the nature of the internet business. Studies have shown how trust affects a customer's intention to buy. Additionally, it has been discovered that consumer trust affects a customer's inclination to buy. A customer is more likely to participate in buy intention if they have a higher level of trust built up in the online vendor. This is due to the fact that trust has a huge impact on online buying decisions. The predictive nature of trust for purchase intentions as mentioned in several research is supported by the body of literature currently available.

The expression "a consumer's conscious plan or intention to make an effort to purchase a product or service" refers to a specific type of consumer behaviour called "purchase intention." In the current study, the term "purchase intention" refers to online reviewers who plan to buy a product or service that has previously been reviewed.

According to past studies (Chih et al., 2013, Fan and Miao, 2012, Lee et al., 2011), a brand's trustworthiness may positively affect consumers' inclinations to make purchases.

Online customer reviews, also known as "user generated content," have become increasingly popular because to the growth of online communities (Bae & Lee 2011). According to Mudambi and Schuff (2010), ORCs are descriptions of customer evaluations that are published on business or outside websites. 61% of consumers consulted blogs, online reviews, and other consumer feedback sources before making a purchase, according to an e-Marketer research from 2008. Consumers who check an online recommendation are twice as likely to choose items than those who do not, according to Senecal and Nantel's (2004) research.

Meta-analysis used to summarise the results from chosen studies and to measure the strength of the link between the factors influencing purchase intention and the result. A meta-analysis looks for trends and patterns in the data to provide a comprehensive assessment of the body of literature that has already been written about the topic at hand. The influence of many factors on purchase intention would be examined, including perceived risk, trust, and credibility.

A meta-analysis's conclusions might guide marketing and regulatory actions meant to encourage sustainable consumption patterns. This study aims to provide a comprehensive overview of the literature that is currently accessible on the subject and to identify trends, patterns, and future research subjects. A thorough examination of the existing literature, including scholarly journals, conference proceedings, and other sources, would normally be part of the meta-analysis. The studies that satisfy the inclusion requirements would be chosen for analysis once the literature has been assessed for relevance and quality .

## 2. Objectives

- To identify and analyze the previous literature on purchase intention for facilitating a meta-analysis review.
- To identify variables from the existing literature and define the various determinants affecting purchase intention.
- To test and validate the relationship between the identified variables with that of behavioral intention.

## 3. Literature Review

### 3.1 Online reviews and Purchase Intention

Online reviews are defined as user-generated content that

customers post on websites about a product and that is connected to their experiences, assessments, and opinions (Bae & Lee, 2011). There are several venues that enable users to read and post online reviews. In order to decide bigger impact on a person's purchasing intentions. Purchase intention in an online setting refers to a customer's desire to make a purchase through a website (Chen & Barnes, 2007). The purchase intentions of a buyer are influenced by a variety of variables, including familiarity with the e-commerce platform and the nature of the goods being purchased. Abou Ali, et al. (2020) and other research reveal that trust, perceived risk, and credibility are some of the elements that influence online purchase intention and determine the features of online reviews.

### 3.2 Perceived Risk

Additionally, perceived risk was found to be crucial for purchase intention, suggesting that buyers may be concerned about their safety, the potential for financial and time loss, and societal issues. This might be as a result of the fact that most respondents wish to engage in online buying, which is now the newest trend in the nation (Qalati, et al., 2021). According to this result, perceived risk influences purchase intent while shopping online favourably. The effect of perceived risk in relation to a website's perceived usability, user happiness, and intention to use was examined (Belanche et al., 2012). Consequently, the following hypotheses are proposed:

**H1:** "Perceived risk affects purchase intention in online shopping".

### 3.3 Trust

Online reviews and customer relationships provide the foundation of the mediating character of consumer trust, which in turn influences purchase intention. Therefore, if a prospective consumer encounters several favourable testimonials about a specific seller or product, he or she is likely to grow a greater level of faith in that seller or product, increasing the likelihood that they will engage in the purchasing process. While adverse reviews can reduce a potential customer's faith in an online merchant and their likelihood of making a transaction online. Elwalda, Lü, and Ali (2016); Sparks, So and Bradley (2016); Güngör and zgen (2020); Stouthuysen, Teunis, Reusen, & Slabbinck (2018); and Customer reviews affect Customer trust levels.

whether or not to make an online purchase, customers rely heavily on these online evaluations (Kostyra, Reiner, Natter, & Klapper, 2016). According to this field's research (Cui, Lui, & Guo, 2012), negative reviews have a Additionally, it has been discovered that consumer trust affects a customer's inclination to buy. A customer is more likely to participate in buy intention if they have a higher level of trust built up in the online vendor. This is due to research by Oghazi et al. (2018), Think et al. (2019), Chen and Wang (2016), and others showing that trust is a strong predictor of purchase choices in the online environment. Accordingly, we propose the following hypotheses:

**H2:** "Trust has a significant effect on customer purchase intention".

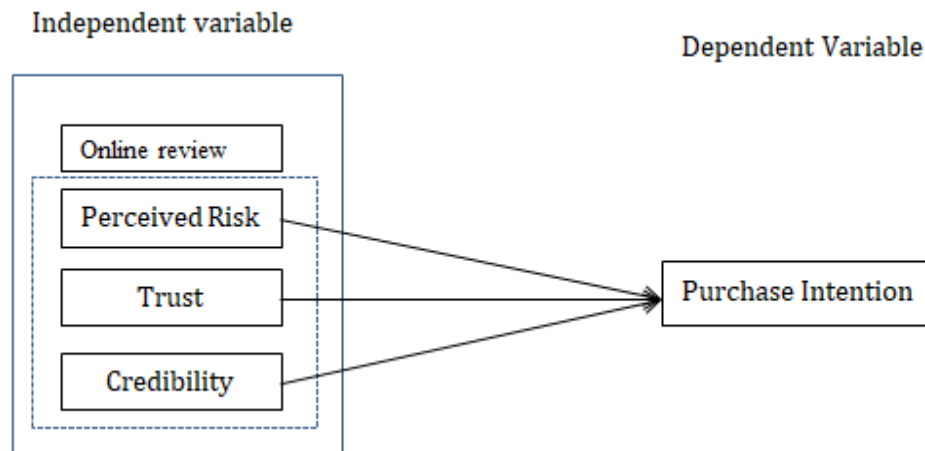
### 3.4 Credibility

According to Visentin et al. (2019), a credible source is a communication channel that offers correct information. Numerous online evaluations may be found throughout social media platforms. The consumers find it difficult to choose the reliable review. According to Shareef et al. (2019), online product reviews are a common and reliable source of information about products. According to Cheung and Thadani (2012) and Shan (2016), consumers frequently investigate the reliability of the source of reliable reviews. Credibility specifically refers to how much a recipient depends on the opinions of a certain source (Visentin et al., 2019). The current study examines the veracity of internet reviews by using theory. According to Wikipedia, "message source's perceived ability (expertise) or motivation to provide accurate and truthful information (trustworthiness)" is what is meant by credibility (Cheung and Thadani, 2012, p. 466). Credibility "is a perceived quality; it doesn't reside in an object, a person, or a piece of information," according to Freeman and Spyridakis (2004, p. 240). In other words, credibility may be thought of as people's perceptions of the review's actuality (Erkan and Evans, 2016) .

If the source of the reviews is one they trust, customers are more inclined to believe them.

Accordingly, we propose the following hypotheses:

**H3:** "Credibility has a significant effect on customer purchase intention".



**Figure 1:** Conceptual model

**Outcomes extracted from each included article were:**

- (1) Relationship between purchase intention and its factors
- (2) sample size
- (3) Correlation between factors
- (4) Correlation Table

## 4. METHODOLOGY

### 4.1 Literature search method

Peer-reviewed research publications on the relationship between factors influencing online reviews and purchase intent in a marketing setting were gathered in order to conduct a meta-analysis. To avoid publication bias, this study used a multi-channel literature search that included Scopus, Google Scholar, and Web of Science. Among the terms used were purchase intention, online reviews, perceived risk, trust, and trustworthiness. With this method, more than 559 items were located. After accounting for the study objective, a variety of selection criteria were applied to the first 559 articles that the search returned. For the article to be included for the final sample, it must be an active or published academic work that concentrated on online reviews and purchase intention. Due to these criteria, 86 pieces from the collection were kept. Since the articles also required to have the appropriate statistical data for meta-analysis, 63 papers had to be excluded. Therefore, based on the listed criteria (Appendix), a total of 21 items were still present. Kirca et al. (2005) contend that at least three studies are required for a meta-analysis to be valid. However, a thorough study of these publications revealed that just three characteristics had been looked at three or more times, had been correlated with purchase intention and online reviews, and could thus be used in the analysis.

### 4.2 Meta-analysis

To enable more generalizable findings compared to those offered in any one main study, it is crucial to assess and debate the insights from the study (Geyskens et al., 2009; Schmidt and Hunter, 2014). In place of a qualitative and descriptive literature review, meta-analysis offers the chance to analyse and statistically integrate the findings of earlier investigations (Chang and Huang, 2020; Jeyaraj, 2020; Fagard, 1996). The "combining p values" approach developed by Fisher provides the basis for meta-analysis (Glass, 1976). In order to statistically integrate study findings from several studies, researchers have developed the popular and useful method known as meta-analysis (Floyd et al., 2014). According to Hong et al. (2017), this method enables the mathematical combining of correlations between two or more variables to resolve discrepant results. A trial version of comprehensive meta-analysis software was utilised to conduct the meta-analysis. Researchers frequently use this programme to do meta-analyses (Hong et al., 2017). Effect sizes were collected from the included studies and used in the meta-analysis. The phrase "the degree to which the phenomenon is present in the population or the degree to which the null hypothesis is false" can be used to describe the affected size (Cohen, 1988, p. 9). The following stages make up the meta-analysis. The Fisher's Z and combination of effect sizes are calculated in the first phase.

The second step examines the relevance of the aggregate effect sizes. The combined effect size's statistical significance is shown by the combined effect size's p-value (Hong et al., 2017). Based on the Q-statistics result, which defies the homogeneity assumption across trials, this study used a random effect model for the meta-analysis (Martin,

2008). Utilising correlation coefficients between each set of variables and sample size, comprehensive meta-analysis software generates a cumulative correlation coefficient [effect sizes [p(ES)], Z-value, Avg (r), and 95% lower and higher confidence interval levels. According to earlier meta-analysis research (Dwivedi et al., 2019; Jeyaraj et al., 2006), variables were only chosen for the current study if

the relationships between the independent and dependent constructs had been examined by at least three prior studies using various data sets (Kirca et al., 2005). To guarantee the accuracy of the correlation coefficients, this restriction was put in place .

Below model describes the method as described above.

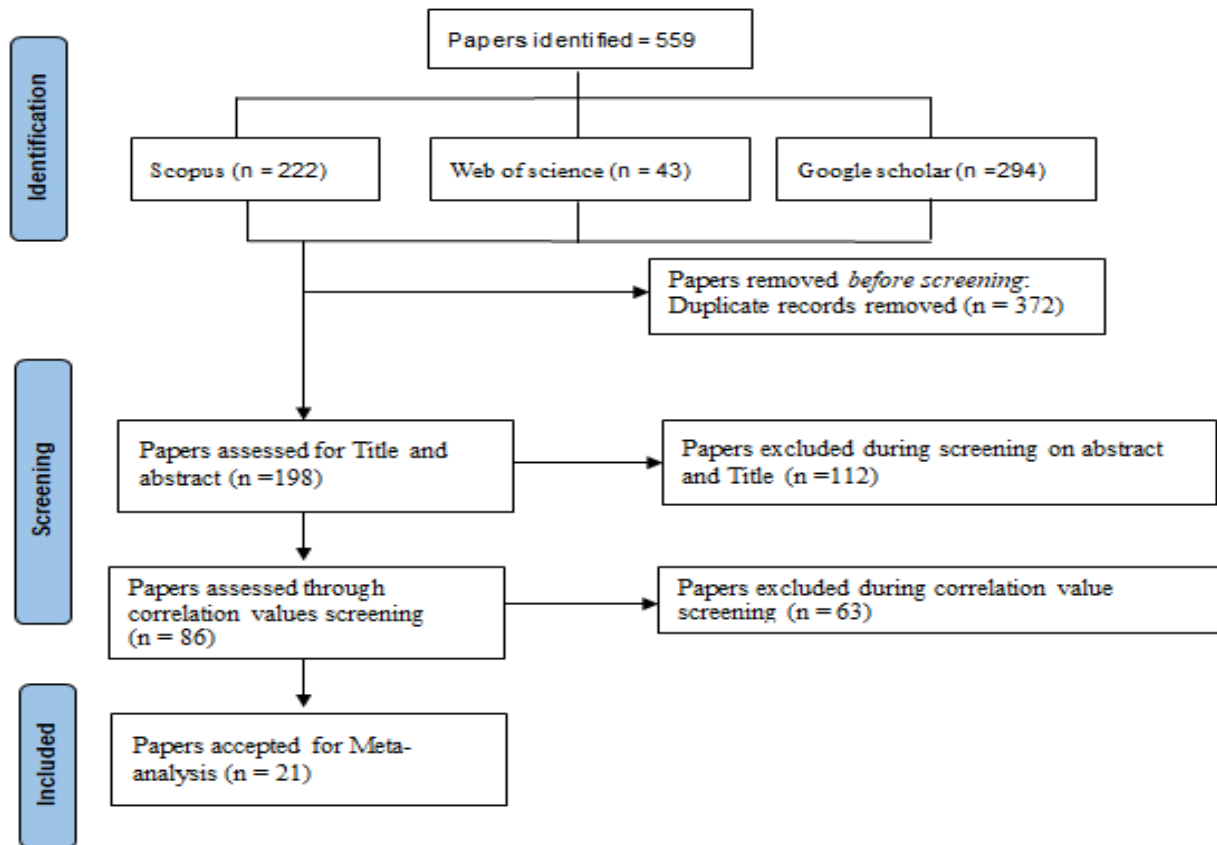


Figure 2: PRISMA for meta-analysis

## 5. Results and Analysis

### 5.1 Meta-Analysis Table for Variable.1: (H1: Perceived risk – Purchase intention)

Six studies form the basis of the analysis. The correlation is the effect size index

#### Mean effect value

With a 95% confidence range of 0.302 to 0.672, the mean impact size is 0.510. Anywhere within this range might be the mean impact size across all similar trials.

The Z-value evaluates whether the mean effect size is zero, which is the null hypothesis. With p 0.001, the Z-value is 4.390.

#### Q-test statistics for heterogeneity

With five degrees of freedom, the Q-value is 146.754 and the p-value is 0.001.

#### I-squared calculation

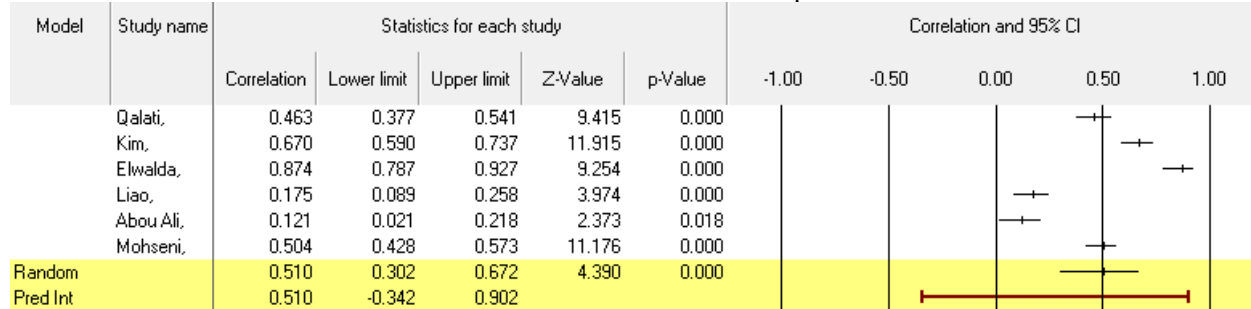
The reported impact variance really represents variation in true effects rather than sampling error, according to the I-squared statistic of 97%, which shows that a part (about 97%) of the reported impact variance.

#### Tau and tau-square

The variation of actual effect sizes, tau-squared, is 0.093 in Fisher's Z units. Tau, the genuine effect size standard deviation, has a Fisher's Z value of 0.305.

**Prediction Window**

If we assume that the true effects have a normal distribution



**Figure 3 Meta analysis of Hypothesis 1**

**5.2 Meta-Analysis Table for Variable.2: (H2: Trust – Purchase intention)**

Nine studies form the basis of the analysis. The correlation is the effect size index.

**Typical impact size**

With a 95% confidence range of 0.512 to 0.693, the mean impact size is 0.610. Anywhere within this range might be the mean impact size across all similar trials.

The Z-value evaluates whether the mean effect size is zero, which is the null hypothesis. With p 0.001, the Z-value is 9.621.

**Statistics for the Q-test of Heterogeneity**

With 8 degrees of freedom, the Q-value is 135.363 and the p-value is 0.001.

(in Fisher's Z units), we may estimate that the prediction range is between -0.342 and 0.902. The true effect size falls within this range in 95% of all populations that are comparable

**I-squared calculation**

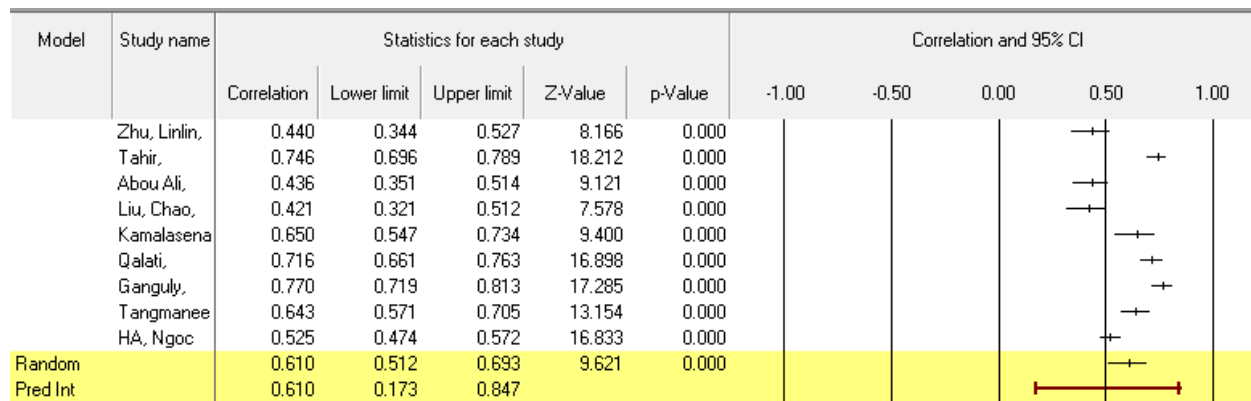
The observed effects' volatility (up to a specific percentage) may, in part (based on the I-squared value of 94%), be due to variation in genuine effects rather than sampling error.

**Tau and tau-square**

Tau-squared, a measure of genuine effect size variance, is 0.046 in Fisher's Z units. The real effect size standard deviation, tau, has a Fisher's Z value of 0.214.

**Prediction window**

If we assume that the actual effects (in Fisher's Z units) are normally distributed, we can compute that the prediction interval is between 0.173 and 0.847. The true effect size is within this range in 95% of all populations that are comparable.



**Figure 4 Meta analysis of Hypothesis 2**

5.3 Meta-Analysis Table for Variable.3: (H3: Credibility – Purchase intention)

Six studies form the basis of the analysis. The correlation is the impact size index.

Model	Study name	Statistics for each study					Correlation and 95% CI				
		Correlation	Lower limit	Upper limit	Z-Value	p-Value	-1.00	-0.50	0.00	0.50	1.00
	Ong, Wei	0.489	0.410	0.561	10.533	0.000					
	Tahir,	0.422	0.333	0.503	8.505	0.000					
	Thomas,	0.587	0.505	0.659	11.243	0.000					
	Chakraborty	0.258	0.200	0.314	8.492	0.000					
	Sudheer,	0.133	-0.034	0.293	1.560	0.119					
	Al-Abbadi,	0.625	0.588	0.660	24.305	0.000					
Random		0.437	0.267	0.581	4.713	0.000					
Pred Int		0.437	-0.241	0.829							

Figure 5 Meta analysis of Hypothesis 3

How much of a mean impact exists?

The mean effect size is 0.437, with a 95% confidence interval of 0.267 to 0.581. This range might be the range of the average impact magnitude across all comparable studies.

The Z-value is used to evaluate whether the mean effect size is zero, which is the null hypothesis. Z-value: 4.713; p-value: 0.001.

Statistics for the Q-test of Heterogeneity

With five possible outcomes, the Q-value is 145.354 and the p-value is 0.001.

I-squared calculation

The stated impact variance really reflects variation in true

impacts, not sampling error, according to the I-squared statistic of 97%, which shows that a part of the variance (about 97%).

Tau and tau-square

Tau-squared, which measures real effect size variation, has a Fisher's Z value of 0.056. The real effect size standard deviation, tau, has a Fisher's Z value of 0.237.

Prediction window

If we assume that the actual effects (in Fisher's Z units) are normally distributed, we can compute that the prediction interval is between -0.241 and 0.829. The true effect size is within this range for 95% of all populations that are comparable.

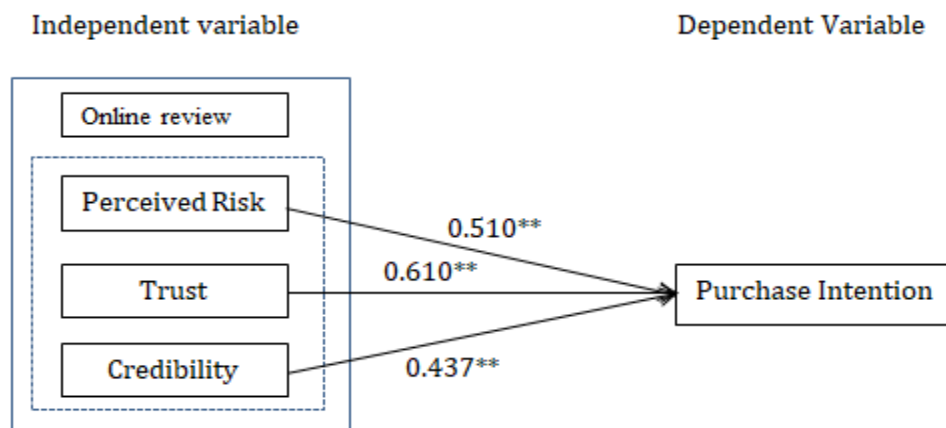


Figure 6 : Correlational Research Model

<i>Independent Variables</i>	<i>Dependent variables</i>	<i>Number of studies</i>	<i>Z-value</i>	<i>P-value</i>	<i>Lower limit</i>	<i>Upper limit</i>	<i>Correlation</i>
<b>Perceived Risk</b>	<b>Purchase Intention</b>	<b>6</b>	<b>4.390</b>	<b>0.000</b>	<b>0.302</b>	<b>0.672</b>	<b>0.510</b>
<b>Trust</b>		<b>9</b>	<b>9.621</b>	<b>0.000</b>	<b>0.512</b>	<b>0.693</b>	<b>0.610</b>
<b>Credibility</b>		<b>6</b>	<b>4.713</b>	<b>0.000</b>	<b>0.267</b>	<b>0.581</b>	<b>0.437</b>

**Table 1:** Meta Analysis result

Table 1 displays the findings of the meta-analysis. The table includes the independent and dependent variables, the number of analyses performed on a given connection, the p-value, the standard normal deviation (Z-value), the 95% lower confidence interval, and the upper limit.

The correlations between the constructs are all significant and exhibit positive correlation coefficients with a stronger positive correlation, according to the p-values for all connections.

The three suggestions have all been given the go-ahead. According to the correlation values, there is a stronger connection between purchase intention and perceived risk, trust, and credibility.

The correlation values are further supported by the 95% confidence interval, as is the likelihood that these values will fall within the specified range.

All three of the anticipated correlations were significant, according to the meta-analysis's findings. Significant correlations were found between trust and purchase intention ( $r = 0.610$ ), credibility and purchase intention ( $r = 0.563$ ), and perceived risk and purchase intention ( $r = 0.510$ ).

## 6. Conclusion And Discussion

### 6.1 Conclusion

This research synthesizes data from past studies on the factors influencing customers' purchasing intentions using meta-analysis. This study concentrated on how variables including perceived risk, credibility, and trust influence purchasing intention. In the meta-analysis, each association was adequately completed.

This meta-analysis explains these inconsistencies in the earlier studies and provides some fascinating new

information about the many components of purchase intention.

The findings of the relationships between the purchase intention attribute relationships (see Table.1) show the importance of the relationships between the constructs.

These findings support the study's posited hypothesis. Consumers' intentions to make green purchases were most influenced by their attitudes towards green business, while environmental concern had the least of an effect.

In H.1, the connection between purchase intent and perceived risk was investigated. According to the hypothesis and certain previous studies, there is a significant and positive relationship between perceived risk concern and purchase intention. For instance, (Qalati, et al. (2021) found that Perceived risk influences customers' purchasing intentions in a favourable way. Similar to other studies, perceived risk was found to significantly influence the propensity to make green purchases.

For instance, internet surveys have been utilised to gather information from consumers and staff working in businesses when the population is sizable (Qalati, et al., 2021). A total of 356 valid replies were received from the 600 questionnaires that were circulated via social media platforms (emails, WhatsApp, Facebook, LinkedIn, etc.) for the current study (Qalati, et al., 2021).

The influence of trust on the intention to buy was suggested by H.2. There is a stronger substantial relationship or positive link between trust and purchase intention, according to the hypothesis and several past studies. For instance, (Tangmanee, C. and Rawsena, C., 2016) found that trust has a significant impact on how customers perceive their intention to make a purchase. This study



reinforces past studies' findings that trust has a positive and substantial influence on purchase intention.

The target subjects are people who have engaged in online purchasing activities or have at least once successfully completed an online transaction, according to (Tangmanee, C. and Rawsena, 2016), who indicate that the data is collected from 300 participants using a web-based survey. It is discovered that people have trust towards the good intentions of consumers. Thus, we may conclude that customer purchasing intentions are favourably impacted by trust.

The effect of believability on purchasing intention was suggested by H.3. There is a stronger substantial relationship or positive link between believability and purchase intention, according to the hypothesis and several past studies. For instance, (Chakraborty, U. (2019) observed that consumers' purchasing intentions are influenced by trustworthiness. This study supports past studies by finding that green perceived value significantly and favourably influences plans to buy green products (Chakraborty, U. 2019).

The information gathered from 1038 respondents was taken into consideration. The study used the SEM bootstrapping approach to evaluate how brand equity factors mediated the relationship between purchase intention and reliable online source reviews. It has been shown that those who give online product evaluations more weight tend to be more inclined to buy the item in question. Thus, we may conclude that customer purchasing intentions are influenced by credibility .

## 6.2 Discussion

### *Statistical framework*

The study was conducted using the random-effects model. The analysis will be used to draw conclusions about a universe of prospective investigations from a sample of studies that were chosen at random.

### *Mean effect size*

In a statistical analysis, the phrase "mean effect size" describes the strength or size of the relationship between two variables. The "effect size," a standardised metric that measures the difference or link between two variables, is used to assess the applicability of the findings. The total of all impact sizes discovered in a certain research study or meta-analysis is known as the mean effect size..

### **The Q-test for heterogeneity**

Most often used among statistical tests for heterogeneity is the Cochran's Q test. A null hypothesis and an alternative hypothesis are used to conduct the test, which is carried out similarly to conventional statistical hypothesis testing. Hypothesis testing begins at the point of statistical homogeneity. The Q-statistic evaluates the null hypothesis, which states that the effect sizes of all studies included in the analysis are equal. If each study had the same actual effect size, the expected value of Q would be equal to the degrees of freedom (the number of studies minus 1).

**The I<sup>2</sup> statistic** gauges how much of the trial-to-trial volatility may be attributable to heterogeneity as opposed to randomness. I<sup>2</sup> is a straightforward method for demonstrating how unpredictable study results may be. In contrast to Q, it is not necessarily impacted by the amount of research taken into account.

**Tau square and Tau value:** In a contingency table, tau-squared is used to determine the degree of correlation between two variables. It measures the difference between the frequency of agreement that is actually seen and the frequency that would be anticipated if the two variables were independent.

The tau-squared correlation coefficient has a range from 0 to 1, with values closer to 1 suggesting a greater connection between the variables. If the value is 0, then there is no correlation between the variables. In contingency tables, tau-squared is connected with other measures of association such the Cramer's V and t Pearson's chi-squared test.

### ***Hypotheses.1: Perceived risk - Purchase intention***

The correlation value for this hypothesis is 0.510, indicating a substantial and positive link between the two variables. With five degrees of freedom, the Q-value is 146.754 and the p-value is 0.001. It demonstrates that the observed data and predicted values under the null hypothesis differ significantly. This indicates that the supplied variables have a meaningful relationship. The variation of actual effect sizes, tau-squared, is 0.093 in Fisher's Z units. Tau, the genuine effect size standard deviation, has a Fisher's Z value of 0.305. It demonstrates that the genuine impact magnitude across the research exhibits significant variation. The genuine effect size distribution's standard deviation is represented by the value of tau, which is 0.305. The fact that the value exceeds the usual effect size demonstrates the substantial variation in effect sizes between research.

**Hypotheses.2: Trust - Purchase intention**

The correlation value for this hypothesis is 0.610, indicating a substantial and positive link between the two variables. With 8 degrees of freedom, the Q-value is 135.363 and the p-value is 0.001. It demonstrates that the observed data and predicted values under the null hypothesis differ significantly. Therefore, we have accepted the alternative hypotheses that there is a substantial link and rejected the null hypothesis that there is no relationship between the variables. The variation of real effect sizes, tau-squared, is 0.046 in Fisher's Z units. Tau, the genuine effect size standard deviation, is 0.214 in Fisher's Z units. The genuine effect size distribution's standard deviation is represented by the value of tau, which is 0.214. The fact that the value exceeds the usual effect size demonstrates the substantial variation in effect sizes between research.

**Hypotheses.3: Credibility - Purchase intention**

The correlation value for this hypothesis is 0.563, indicating a substantial and positive correlation between the two variables. Q-value of 21.858, 4 degrees of freedom, and p 0.001 are all present. It demonstrates that the observed data and predicted values under the null hypothesis differ significantly. Therefore, we have accepted the alternative hypotheses that there is a substantial link and the null hypothesis, according to which there is no association between the variables, was rejected. Tau-squared, a measure of real effect size variation, is 0.056 in Fisher's Z units. Fisher's Z value for tau, the real effect size standard deviation, is 0.237. The genuine effect size distribution's standard deviation is represented by tau's value of 0.237. The fact that the value exceeds the usual effect size demonstrates the substantial variation in effect sizes between research.

Hypothesis	Result
Perceived risk has a significant effect on purchase intention in online shopping.	Supported
Trust has a significant effect on customer purchase intention.	Supported
Credibility has a significant effect on purchase intention of consumers.	Supported

**Table 2: Hypothesis result**

**6.3 Contribution to theory**

The study's conclusions provide various new theoretical perspectives. Our knowledge of how several factors, such as OR, PR, TR, and CR, impact purchase intention (PI) is improved by this meta-analysis. Academics can draw conclusions about the kind of variables to be utilised for researching how different factors affect PI from this study. The outcomes can be applied to new structures and their performance evaluated. The research's conclusions may also be utilised to illustrate the areas of convergence and divergence, which will aid in the creation of follow-up questions that can be examined from a wider angle. The study provided a thorough summary of how Online Review, Perceived Risk, Trust, and Credibility affected Purchase intention

**6.4 Limitations and Future scope of the study**

This study, like other meta-analysis studies, is subject to a variety of limitations. The primary drawback of this meta-analysis is the dearth of data and the quality of the initial studies. Second, the research confirmed the hypotheses that revealed a connection between variables influencing intentions to make green purchases. However, each variable in the model was evaluated separately. Future research should analyse these qualities simultaneously using a regression-based meta-analysis structural equation

modelling method. Third, there is not enough data on moderating effects to do a meta-analysis, hence the study does not take moderating variables into account. Finally, the number of papers available for meta-analysis may have been lowered because only Google scholar, Web of Science, and Scopus were employed to collect research for this inquiry. Future research can benefit from a wider range of datasets. Third, there is not enough data on moderating effects to do a meta-analysis, hence the study does not take moderating variables into account.

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**8. Appendix:**

Studies of the relationship between variable of purchase intention

Title	Year	Author	r	N
Effects of perceived service quality, website quality, and reputation on purchase intention: The mediating and moderating roles of trust and perceived risk in online shopping	2021	Qalati, Sikandar Ali, Esthela Galvan Vela, Wenyuan Li, Sarfraz Ahmed Dakhan, Truong Thi Hong Thuy, and Sajid Hussain Merani.	0.463	356
Effects of reputation and website quality on online consumers' emotion, perceived risk and purchase intention: Based on the stimulus-organism-response model	2013	Kim, Jiyoung, and Sharron J. Lennon	0.670	219
The influence of online customer reviews on purchase intention: the role of non-numerical factors	2014	Elwalda, Abd, and Kevin Lu.	0.874	50
Risk and opportunity for online purchase intention—A moderated mediation model investigation	2021	Liao, Shu-Hsien, Da-Chian Hu, Yu-Chun Chung, and An-Pu Huang	0.175	508
Factors influencing customers' purchase intention in social commerce	2020	Abou Ali, Ali, Alaa Abbass, and Nihal Farid	0.121	384
Attracting tourists to travel companies' websites: the structural relationship between website brand, personal value, shopping experience, perceived risk and purchase intention	2018	Mohseni, Shahriar, Sreenivasan Jayashree, Sajad Rezaei, Azilah Kasim, and Fevzi Okumus	0.504	409
How online reviews affect purchase intention: a new model based on the stimulus-organism-response (SOR) framework	2020	Zhu, Linlin, He Li, Feng-Kwei Wang, Wu He, and Zejin Tian	0.44	302
Online Review and Customer Purchase Intention in Social E-Commerce Context; Role of Trust as a Mediator and Source Credibility as Moderator	2020	Tahir, Muhammad, and Waqas Khan	0.746	360
Factors influencing customers' purchase intention in social commerce	2020	Abou Ali, Ali, Alaa Abbass, and Nihal Farid	0.436	384
Exploring consumers' purchase intention in social commerce: An empirical study based on trust, argument quality, and social presence	2019	Liu, Chao, Zheshi Bao, and Chuiyong Zheng	0.421	288
The Impact of Online Communities and E Word of mouth on Purchase Intention of Generation Y: The Mediating Role of Brand Trust	2021	Kamalasena, B. D. T. M., and A. B. Sirisena	0.650	150
Effects of perceived service quality, website quality, and reputation on purchase intention: The mediating and	2021	Qalati, Sikandar Ali, Esthela Galvan Vela, Wenyuan Li, Sarfraz Ahmed Dakhan,	0.716	356

moderating roles of trust and perceived risk in online shopping		Truong Thi Hong Thuy, and Sajid Hussain Merani.		
Website characteristics, Trust and purchase intention in online stores: - An Empirical study in the Indian context	2009	Ganguly, Boudhayan, Satya Bhusan Dash, and Dianne Cyr.	0.77	290
Direct and indirect effects of perceived risk and website reputation on purchase intention: The mediating role of online trust	2016	Tangmanee, Chatpong, and Chayanin Rawsena.	0.643	300
Factors Influencing Online Shopping Intention: An Empirical Study in Vietnam	2021	HA, Ngoc Thang, Thi Lien Huong NGUYEN, Thanh Van PHAM, and Thi Hong Tham NGUYEN	0.525	836
An empirical investigation on the influence of online reviews affects the individual's purchase intention in Malaysia	2022	Ong, Wei Chi.	0.489	391
Online Review and Customer Purchase Intention in Social E-Commerce Context; Role of Trust as a Mediator and Source Credibility as Moderator	2020	Tahir, Muhammad, and Waqas Khan	0.422	360
Determinants of online review credibility and its impact on consumers' purchase intention	2019	Thomas, Marc-Julian, Bernd W. Wirtz, and Jan C. Weyerer	0.587	282
The impact of source credible online reviews on purchase intention: The mediating roles of brand equity dimensions	2019	Chakraborty, Uttam.	0.258	1038
The Influence of Source Credibility, Endorser Credibility and Message Appeal on Consumers' Purchase Intention: An Empirical Analysis	2019	Sudheer, S., M. Siva Koti Reddy, and A. Sai Manideep.	0.133	139
The effect of online consumer reviews on purchasing intention through product mental image	2022	Al-Abbadi, L., D. Bader, A. Mohammad, A. Al-Quran, F. Aldaihani, S. Al-Hawary, and F. Alathamneh	0.625	1102