

The Impact of Label Informativeness on Consumer's Intention to Read Product Labels

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Keywords

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Abstract

This study investigates the impact of label informativeness on consumers' intention to read product labels in South Africa. Product labels have evolved significantly from basic markings to comprehensive information sources, driven by consumer demand and regulatory standards. Despite their critical role, there is a research gap regarding their impact in the South African context. This study aims to address this gap by examining the influence of label informativeness and related factors on consumers' intention to read product labels. Guided by the Theory of Reasoned Action (TRA), the study proposes a conceptual model hypothesizing that consumer attitudes toward reading product labels and subjective norms influence their intention. A quantitative research approach with a descriptive research design was employed, using a questionnaire-based measurement instrument. The study sampled 418 consumers from Gauteng Province through a non-probability snowballing technique. The findings, analysed using partial least squares structural equation modelling (PLS-SEM), indicate a significant positive relationship between label informativeness and both subjective norms and intention. However, the relationship between informativeness and attitude was not significant. This research contributes to the literature by providing insights into the role of label informativeness in consumer behaviour, offering practical implications for marketers aiming to design effective product labels that engage consumers and promote informed purchase decisions.

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1. Introduction

1.1. Background

The evolution of product labels dates back to the early days of the trade when merchants utilised basic markings to distinguish goods and convey fundamental information (Bastounis, Buckell, Hartmann-Boyce, Cook, King, Potter & Jebb, 2021). Significant progress in product labelling occurred during the Industrial Revolution, driven by mass production and burgeoning consumerism (Bhakta, Phadikar & Majumder, 2019). This era saw the emergence of more sophisticated labels incorporating logos, slogans, and detailed product descriptions (Shangguan, Afshin, Shulkin, Ma, Marsden, Smith, Saheb-Kashaf, Shi, Micha, Imamura & Mozaffarian, 2019). The advancements in labelling during this period were a strategic response to evolving consumer demand and market competition (King, Marteau, Prevost, Bignardi, Roberts, Stubbs & Jebb, 2018).

In the latter half of the 20th century, product labels evolved further, spurred by advancements in printing technology, stricter regulatory standards, and increasing consumer demand for transparency and accountability (Choi, Bedale, Chetty & Yu, 2024; Blanc, Zanchini, Di Vita & Brun, 2021)). Labels transitioned from simple branding tools to comprehensive information sources, including nutritional content, ingredient lists, allergen warnings, and usage instructions (Choi et al., 2024; Blanc et al., 2021). This shift mirrored broader societal trends towards health consciousness, environmental awareness, and consumer rights (Choi et al., 2024; Blanc et al., 2021).

Product labels are essential in meeting consumer needs and complying with regulatory requirements (Norris & Cranfield, 2019; Tseng, Yang, Chen & Chen, 2021). They provide crucial information that empowers consumers to make informed choices regarding the products they purchase (Tseng et al., 2021). Labels help consumers identify allergens, evaluate nutritional content, and assess environmental impacts, thereby aligning their purchases with their values and preferences (Norris & Cranfield 2019; Tseng et al., 2021).

Additionally, product labels serve as pivotal tools for brand communication and differentiation, enabling manufacturers to effectively convey their brand identity and unique selling propositions (Setyawan & Rahardja, 2020). Well-crafted labels establish trust, foster brand loyalty, and distinguish offerings in crowded markets (Setyawan & Rahardja, 2020). Labels also ensure product safety and compliance with regulatory standards, providing consumers with assurance regarding product quality and safety (Setyawan & Rahardja, 2020).

1.2. Problem Statement

Despite the critical role of product labels in informing consumers and facilitating informed purchase decisions, a significant research gap exists regarding the impact of label informativeness, particularly

in the South African context (Valaskova, Kliestikova & Krizanova, 2018). This gap is concerning given the unique cultural, social, and economic factors influencing consumer behaviour in South Africa, which may differ from those in other regions where similar studies have been conducted (Canavari & Coderoni, 2020).

While numerous studies have explored various aspects of product labelling, such as the effectiveness of different Front of Package (FOP) labels (Temple, 2020) and the impact of fun elements on wine labels (Lunardo & Rickard, 2020), there is limited research on how label informativeness affects consumers' intention to read product labels. This research void highlights the need for a focused investigation into the impact of label informativeness on consumer behaviour in South Africa.

1.3. Research aims and objectives

1.3.1. Research aim

The aim of the study is to examine the impact of label informativeness and related factors on consumers' intention to read product labels in South Africa.

1.3.2. Research objectives

This study seeks to address the following objectives:

- To investigate the factors that influence consumers' intention to read product labels.
- To analyse how product label informativeness impacts consumer's attitude and subjective norm.

The findings of this study will provide a crucial understanding for marketers on how to design effective product labels that engage consumers and promote informed purchase decisions.

2. Literature Review

The theoretical background of this study is rooted in the Theory of Reasoned Action (TRA) model (Fishbein & Ajzen, 1980). This model suggests that attitude toward the behaviour and subjective norms, both influence that person's intention to perform that behaviour. According to the model, the intention strongly predicts whether the person will actually engage in the behaviour. Based on this theory, we proposed a conceptual model (Figure 1) which posits that consumer attitudes toward reading product labels and subjective norms will influence the intention to read the product label. The model further posits that the informativeness of the product label will influence consumer attitudes, subjective norms and intention to read product labels. This expansion of the model is further motivated by the observation that there is a lack of research in the literature on examining the connection between informativeness and subjective norm.

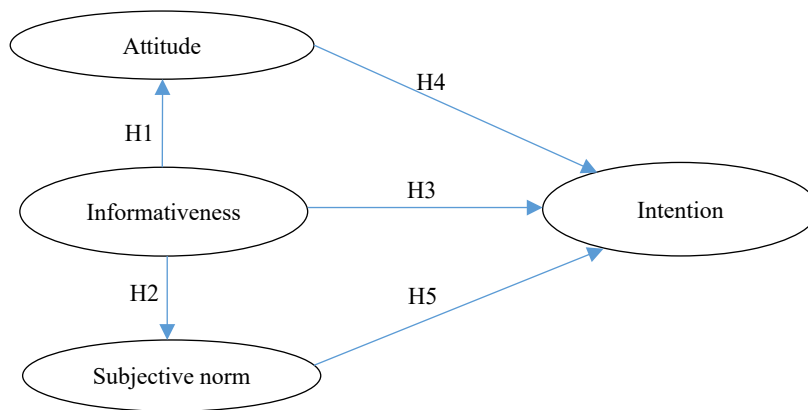


Figure 1: Proposed research model

The relationships between these constructs are discussed below.

2.1. Informativeness and attitude

Informativeness refers to the degree to which helpful information is provided to the buyer (Polyorat & Buaprommee, 2016). Various studies have consistently shown that helpful information promotes a favourable attitude (Demirci, Ling, Lee & Chen, 2024; Chen, Ling & Chen, 2023; Cahyani & Artanti, 2020). In the advertising industry, Gaber, Wright and Kooli (2019) further found that informative advertisements have a positive impact on customer attitudes toward advertisements. More studies (Ho Nguyen, Nguyen-Viet, Hoang Nguyen & Hoang Le, 2022; Nguyen, Nguyen & Vo, 2022; Eid, Nusairat, Alkailani & Al-Ghadeer, 2020; Falcao & Isaias, 2020) observed a significant and positive relationship between informativeness and attitude. A study by Disastra, Hanifa, Wulandari and Sastika (2019) among Indonesian consumers on mobile advertising found informativeness to be significant and positively related to consumers' attitudes. Hence the following hypothesis is proposed:

H1: There will be a significant positive relationship between informativeness and attitude.

2.2. Informativeness and subjective norm

In their study, Sousa, Mucinhato, Prates, Zanin, da Cunha, Capriles, and Stedefeldt (2023) identified informativeness as a significant determinant of subjective norms. They contended that imparting meaningful information to customers via product labels had a substantial and beneficial impact on subjective norms. The results of this study indicate that those who possess the capacity to acquire, analyse, comprehend, and utilise fundamental knowledge regarding food and nutrition have greater intentions to use food labels. In another study, Farooq, Salam, Rehman, Fayolle, Jaafar and Ayupp (2018) found that informativeness, as a dimension of social support, has a significant and positive relationship with subjective norm. The findings posit that a valuable piece of information

(informativeness) is an important dimension of social support, that in turn, positively and significantly influences subjective norms. In a study about the acceptance of mobile advertising among Nigerian consumers, Nwagwu and Famiyesin (2016) found informativeness (as one of the characteristics of advertisement) to be significant and positively related to subjective norm. Although the aforementioned studies have only examined specific aspects of informativeness, this research concludes that there is an opportunity to assess the overall relationship between informativeness and subjective norm. The Theory of Reasoned Action (TRA) by Fishbein and Ajzen (1980) proposes that social pressure, or "subjective norm," significantly influences one's behaviour intention. This pressure stems from the belief that important social circles (family, friends) approve or disapprove of our actions. Building on this, Petty and Cacioppo (1986) suggest that informative messages trigger deeper cognitive processing, where individuals analyse arguments more critically. This deeper processing, they argue, strengthens the connection between the message's arguments and the perceived social pressure (subjective norm). Therefore, informative product labels could trigger deeper processing, allowing consumers to connect the label's arguments to their perception of social pressure. Therefore, the following hypothesis is proposed:

H2: There will be a significant positive relationship between informativeness and subjective norm.

2.3. Informativeness and intention

Kaushik, Jain and Singh (2018) suggest that the user is more likely to see value in using a system if its available information is dependable, accurate, relevant, and complete. This will so raise the intention to use that system. Supporting this argument, is the study of Cahyani and Artanti (2020), analysing how well email marketing raises consumer online buying intention. Their findings maintain that informativeness is an important determinant of intention. Accordingly, various studies have established a significant positive relationship between informativeness and intention (Zadeh, Farhang, Zolfagharian & Hofacker, 2023; Khabibah, Pradekso & Manalu, 2022; Kapri, Bhatt, Raj, Sharma & Dani, 2021; Smink, Frowijn, van Reijmesdal, van Noort & Neijens, 2019). Consequently, Hosain and Mamun (2023) established that the informativeness of social media advertising will significantly influence customers' purchase intention. A study by Kang, Shin and Ponto (2020) among customers of 3D Virtual Reality (VR) stores found informativeness to be significant and positively related to intention. Hence the following hypothesis is proposed:

H3: There will be a significant positive relationship between informativeness and intention.

2.4. Attitude and intention

Attitude is described as a person's positive or negative emotions about reacting in a specific manner towards a circumstance (Kasilingam, 2020). Numerous studies have consistently shown that customers' attitude influences their purchase intention (Chen, Ling & Chen, 2023; Tran & Nguyen,

2022; Wang, Cao & Park, 2019; Zarei, Asgarnezhad Nuri & Noroozi, 2019). The theory of planned behaviour (Ajzen, 1991) established a significant positive relationship between attitude and intention. Follow-up studies (Al Rousan, Khasawneh & Bano, 2023; Nazir & Tian, 2022; Roh, Seok & Kim, 2022; Vizano, Khamaludin & Fahlevi, 2021) further observed a significant positive relationship between attitude and intention. A study by Chawla & Joshi (2019) among Indian consumers on their attitude and intention to adopt the mobile wallet found attitude to be significant and positively related to intention. Therefore, the following hypothesis is proposed:

H4: There will be a significant positive relationship between attitude and intention.

2.5. Subjective norm and intention

Subjective norm refers to the extent to which a person might believe and engage in a particular activity depending on what important others do (Aji, Berakon & Riza, 2021). Researchers have consistently demonstrated that behavioural intention is influenced by subjective norm (Roh, *et al.*, 2022; Al Kurdi, Alshurideh, Nuseir, Aburayya & Salloum, 2021; Jin, Zhao & Santibanez-Gonzalez, 2020; Hasan & Suciarto, 2020; Ajzen, 1991). According to Wan, Shen and Choi (2018), subjective norm positively influences people's intention to use urban green areas in Hong Kong. Later studies (Kobylińska, 2022; Zhuang, Hou, Feng, Lin & Li, 2021; Kumar, Bervell, Annamalai & Osman, 2020; Li, Long, Laubayeva, Cai & Zhu, 2020) documented a significant positive relationship between subjective norm and intention. A study by Jain (2020) on Generation Y consumers in India, found subjective norm to be significant and positively related to intention. Hence the following hypothesis is proposed:

H5: There will be a significant positive relationship between subjective norm and intention.

3. Research Methodology

Measurement

The quantitative research approach and descriptive research design were employed to achieve the study's objectives. For the purpose of the study, the constructs were measured using a scale with multiple items. These items were adapted from earlier works in this area. The items for the TRA constructs (four items of attitude, three items of intention, and three items of subjective norm) are derived from the study of Ajzen and Sheikh (2013). The three items of informativeness are derived from the study of Wolfenbarger and Gilly (2003). All items were evaluated using a Likert scale with five points ranging from 1 (strongly disagree) to 5 (strongly agree).

The researcher shared a questionnaire-based measurement instrument in the form of a Google Form with acquaintances such as friends, family members, and coworkers. They were then asked to share

the link with other people in their social media circles. During the process, the researcher successfully restricted the number to 60, which was deemed suitable for the pilot study. In addition, the researcher monitored the IP addresses of the respondents in Google Forms to verify if there were no duplicates of participants. The main aim of the pilot study was to ascertain the suitability of the questionnaire's content, instructions, and format. The feedback was generally favourable, with only minor revisions required, such as correcting spelling errors and rephrasing some sentences, to improve the effectiveness of the final survey for data collection.

Sampling and data collection

The target population for this study comprises consumers over the age of 18 residing in Gauteng Province, South Africa, who regularly purchase and use labelled products. Due to the unavailability of a comprehensive sampling frame, the study employs a non-probability snowballing sampling technique to gather participants. This approach is particularly suitable given the exploratory nature of the research on consumer behaviour concerning label informativeness. Initially, a core group of participants was identified through various social media platforms and online consumer forums dedicated to product reviews and discussions. These platforms include Facebook groups, Reddit threads, and specialized consumer advocacy websites. The participants were invited to partake in the study and were informed about the purpose of the research, ensuring transparency and voluntary participation. Those who expressed interest were asked to provide their email addresses for further communication.

The primary method of data collection was an online survey distributed via Google Forms. The survey link was emailed to the initial participants, who were also requested to read and consent to a form outlining the study's objectives, their rights as participants, and the confidentiality of their responses. The consent form was prominently placed at the beginning of the survey to ensure informed participation. Upon completing the survey, participants were encouraged to share the survey link with their acquaintances who fit the study's criteria, thus employing the snowballing technique. This method leverages the existing networks of participants to reach a broader audience, ensuring a more diverse sample without the need for a predefined sampling frame. Over three months, this technique yielded a total of 418 usable responses. The data collected provides valuable insights into the impact of label informativeness on consumers' intention to read product labels, contributing to a better understanding of consumer behaviour in this context.

4. Results and Findings

The data in this study were analysed using the partial least squares structural equation modelling (SEM) technique with the SmartPLS 3 software. This technique was considered appropriate because

the main objective of the research was to examine the influence of the informativeness of product labels on consumers' intention to read them. Prior to testing the hypotheses using the structural model, the measurement model was assessed in accordance with the guidelines provided by Anderson and Gerbing (1988) to ensure its reliability.

Measurement model analysis

The validity of the measurement model was assessed to determine its convergent validity and discriminant validity. In assessing the former, the standardised factor loadings, Cronbach's alpha, composite reliability and the average variants extracted (AVE) were observed. According to Hair et.al. (2020) to achieve convergent validity, the recommended range for factor loadings should exceed 0.50, the Cronbach's alpha and the composite reliability should be greater than 0.7 and the AVE should exceed 0.5.

The results of the convergent validity of the scale are presented in Table 1 below. The factor loadings ranged from a minimum of 0.686 to a maximum of 0.957. These values were greater than the acceptable range of 0.5 thresholds. Similarly, the minimum estimated value for Cronbach's alpha and the composite reliability were 0.740 and 0.817, respectively. These estimates were equally above the 0.7 cut-off points. Lastly, the AVEs ranged from a minimum of 0.576 to a maximum of 0.889. These values were also above the recommended threshold of 0.5. The results thus generally confirmed the convergent validity of the measurement model.

Table 1: Results of the convergent validity of the measurement model

	Factor loading	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Attitude		0.788	0.807	0.864	0.617
AT1r	0.747				
AT2r	0.897				
AT3r	0.814				
AT4r	0.666				
Informativeness		0.847	0.854	0.907	0.765
IN1	0.880				
IN2	0.884				
IN3	0.859				
Intention		0.901	0.905	0.939	0.836
BI1	0.925				
BI2	0.942				

	BI3	0.874			
Subjective norm			0.876	0.901	0.924
	SN1	0.934			
	SN2	0.932			
	SN3	0.817			

Following the confirmation of the convergent validity of the measurement model, its discriminant validity was assessed using the Fornell-Larcker (1981) technique. According to this technique, discriminant validity is attained when the square root of the AVEs is greater than the inter-construct correlations. The results of the discriminant validity analysis are presented in Table 2 below.

Table 2: Results of the discriminant validity of the measurement model
HTMT Criteria

	Attitude	Informativeness	Intention	Subjective norm
Attitude				
Informativeness	0.123			
Intention	0.290	0.256		
Subjective norm	0.147	0.298	0.278	

Fornell and Larcker Criteria

	Attitude	Informativeness	Intention	Subjective norm
Attitude	0.786			
Informativeness	0.083	0.874		
Intention	0.248	0.223	0.914	
Subjective norm	0.115	0.260	0.250	0.896

* Bold diagonal values are square roots of the AVEs; the values beneath them are the inter-construct correlations.

The results in Table 2 show that the lowest square root of the AVE estimate is 0.786. This estimate is higher than the highest inter-factor correlation, which is 0.260, thus confirming the discriminant validity of the measurement model. Given that the measurement model is confirmed for its validity, the structural model is subsequently assessed to test the hypotheses.

Structural model analysis and hypothesis testing

A structural model was constructed to test the hypotheses after confirmation of measurement validity. The results of the structural model analysis are presented in Figure 2 and Table 3.

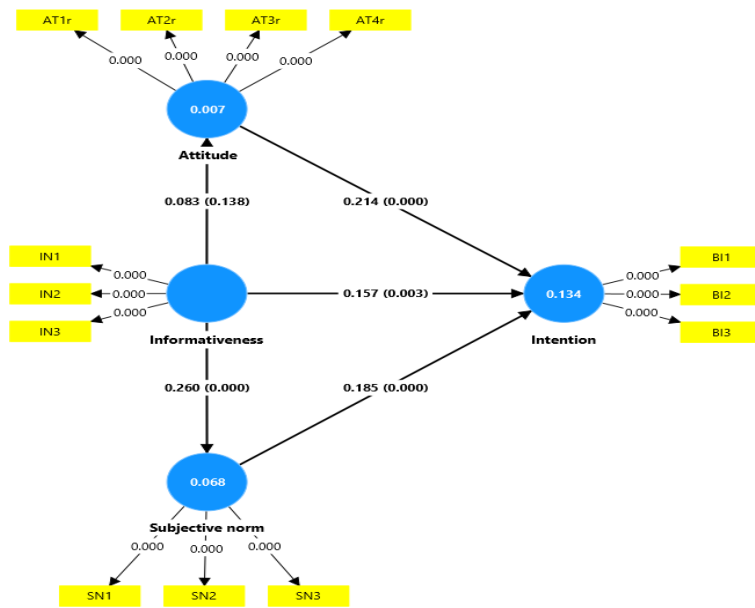


Figure 2: Structural model analysis

Table 3: Results of the hypothesis testing

		Path Coefficients	P-values	t-values	97.5% Bias-Corrected CI	
					2.5%	97.5%
H1	Informativeness -> Attitude	0.083	0.138	1.484	-0.038	0.185
H2	Informativeness -> Subjective norm	0.260	0.000	5.410	0.161	0.349
H3	Informativeness -> Intention	0.157	0.003	2.953	0.051	0.259
H4	Attitude -> Intention	0.214	0.000	4.544	0.112	0.300
H5	Subjective norm -> Intention	0.185	0.000	3.484	0.078	0.287

The results show that informativeness has no significant relationship with attitude ($\beta = 0.083$, $p > 0.05$, $t = 1.484$), therefore Hypothesis 1 is not supported. Regarding Hypothesis 2, the results show that informativeness has a significant positive relationship with subjective norm ($\beta = 0.260$, $p < 0.001$), therefore Hypothesis 2 is supported. Similarly, the results further suggest that informativeness has a significant positive relationship with intention ($\beta = 0.157$, $p < 0.01$), and as a result, statistical support is provided for Hypothesis 3. Furthermore, the results suggest that attitude has a significant positive relationship with intention ($\beta = 0.214$, $p < 0.001$), therefore Hypothesis 4 is supported. Lastly, the results show that subjective norm is statistically significant and positively associated with intention ($\beta = 0.185$, $p < 0.001$), thus providing support for Hypothesis 5.

5. Managerial Implications

The study aimed to examine the impact of label informativeness and related factors on consumers' intention to read product labels. The findings of the study showed that label informativeness has no

significant relationship with consumers' attitudes towards reading product labels. This contradicts the results of prior studies that confirmed a significant positive relationship between these two constructs (Demirci, *et al.*, 2024; Chen, *et al.*, 2023; Cahyani & Artanti, 2020). In light of these results, managers should realise that improving consumer attitudes towards reading product labels may not always depend on just providing more information on labels. Rather, efforts should be focused on other aspects such as design, accessibility, and ease of understanding. It would be more effective to emphasise the relevance and context of the information rather than just the quantity. Interactive and visually appealing labels that connect emotionally with consumers might also play a crucial role in shaping positive attitudes.

Despite the paucity of research delving into the relationship between informativeness and subjective norm, the findings of this study further show that label informativeness has a significant positive influence on subjective norms. This outcome emphasizes the significance of social influence in consumer behaviour. Managers should utilize social norms by encouraging the social acceptability and community endorsement of reading product labels. Possible tactics may involve forming alliances with influencers, encouraging users to create content, and launching social media initiatives that portray reading and comprehending product labels as socially desirable actions. Positive evaluations and testimonials that emphasize the importance of reading labels might further strengthen the social expectation that label reading is advantageous and customary across consumer groups.

Similarly, the study's findings show that label informativeness positively predicts consumer's intention to read the product label. This finding corroborates those of earlier studies (Zadeh, *et al.*, 2023; Khabibah, *et al.*, 2022; Kapri, *et al.*, 2021; Smink, *et al.*, 2019), which found a significant positive relationship between informativeness and intention. Given the favourable effect of informativeness on intention, managers should give top priority to providing relevant, succinct, unambiguous information on product labels. This implies making research investments to ascertain what particular material consumers find most valuable and making sure it is clearly displayed. Consumer intentions can be raised even more by educational campaigns explaining how to read labels and the advantages of doing such. Transparency about product ingredients, sourcing, and manufacturing processes can also build trust and encourage label reading.

The findings further indicate that consumers' attitude has a significant positive relationship with their intention to read product labels. This finding is supported by previous studies (Chen, *et al.*, 2023; Tran & Nguyen, 2022; Wang, *et al.*, 2019; Zarei, *et al.*, 2019), which found a significant positive association between attitude and intention. This important correlation between attitude and intention implies that improving consumer attitudes towards label reading can immediately enhance their intention to read labels. Managers should concentrate on creating positive experiences connected to label usage. This can entail designing labels that are aesthetically pleasing, easily navigable, and pertinent to the demands of the consumers. Marketing initiatives stressing favourable results from

label reading—such as choosing better products or avoiding allergens—can help to build a positive attitude. Furthermore, depending on consumer preferences, customer feedback systems can help label design and content to be always improved.

Lastly, the findings reveal that subjective norm has a significant positive relationship with the intention to read product labels. This finding concurs with those of earlier studies which established a significant positive relationship between subjective norm and attitude (Kobylińska, 2022; Zhuang, *et al.*, 2021; Kumar, *et al.*, 2020; Li, *et al.*, 2020). This influential impact of subjective norms on intention shows that social elements are very important for promoting label reading. Marketing strategies should be developed by managers emphasizing community and peer influence. The message can be strengthened by cooperative campaigns including consumer advocates, social media influencers, and endorsements of reputable people. Establishing online forums or communities where customers may share and talk about product labels can also help to support the practice. Emphasizing stories of people or groups that gain from reading labels will help to make the practice more desirable and socially approved.

6. Conclusions, Limitations and Future Research

This study examined the impact of label informativeness on consumers' intention to read product labels in South Africa, leveraging the Theory of Reasoned Action (TRA) model. The primary findings indicate that informativeness has no significant relationship with consumers' attitudes towards reading product labels. This finding contradicts the results of prior studies that confirmed a significant positive relationship between these two constructs (Demirci, *et al.*, 2024; Chen, *et al.*, 2023; Cahyani & Artanti, 2020). Furthermore, the study found that informativeness significantly influences consumers' intention to read product labels, with a notable impact on subjective norms. These results are consistent with previous research which has established the importance of informativeness in shaping consumer behaviour (Demirci *et al.*, 2024; Kaushik *et al.*, 2018).

By adding informativeness as a fundamental element, the study expands the TRA model and shows its important influence in determining both attitude and subjective norms, hence influencing consumers' intention to read labels. The study further addressed the dearth of research by analysing the influence of informativeness on subjective norm. This offers a sophisticated knowledge of how customer behaviour can be shaped by product label informativeness outside the conventional TRA model's recognized factors. From a managerial perspective, marketers and manufacturers can enhance consumer engagement by ensuring that product labels are informative, clear, and easy to understand. This can include detailed ingredient lists, usage instructions, health benefits, and other relevant information. Furthermore, educational campaigns can be designed to emphasize the importance of reading product labels, thereby reinforcing positive attitudes and subjective norms.

The study has several limitations which create avenues for future research. First, the use of non-probability snowball sampling may limit the generalizability of the findings. The sample may not be fully representative of the broader South African consumer population. Second, the study is confined to consumers in Gauteng Province, which may not capture regional variations in consumer behaviour across South Africa. Also, the cross-sectional nature of the study prevents the assessment of changes in consumer behaviour over time, limiting the ability to infer causality. Future research could expand by applying a probabilistic sampling method across different regions in South Africa could enhance the accuracy and applicability of the findings. Furthermore, conducting longitudinal studies would allow for the examination of changes in consumer behaviour over time, providing insights into the causal relationships between label informativeness and consumer intentions. Lastly, expanding the research to include a variety of product categories could determine if the impact of informativeness varies across different types of products.

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