



E-ISSN: 2708-4469
P-ISSN: 2708-4450
IJAMCJ 2025; 6(1): 49-56
© 2025 IJAMCJ
www.masscomjournal.com
Received: 14-11-2024
Accepted: 19-12-2024

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Aliterate consumers and product warnings in advertisements: The role of time

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DOI: <https://www.doi.org/10.22271/27084450.2025.v6.i1a.98>

Abstract

This research investigates the phenomenon of consumer aliteracy, where individuals can read but choose not to in consumer contexts. Through three studies, we have identified a consistent pattern of consumer aliteracy behavior associated with understanding product warnings. The first study establishes the construct of consumer aliteracy and introduces a five-item measure for its assessment. Subsequent studies explore the implications of consumer aliteracy on comprehension of product warnings. The second study reveals that consumers exhibiting high levels of consumer aliteracy tend to spend less time reading product warnings, leading to reduced comprehension. The third study indicates that while time constraints negatively impact comprehension for non-aliterate consumers, they do not affect aliterate consumers similarly. These findings hold significant implications for marketing practitioners, public policymakers, and researchers in the marketing field, potentially reshaping marketing strategies and public policy to better cater to the needs of aliterate consumers.

Keywords: Aliterate consumers, product warnings, consumer aliteracy, time constraints

Introduction

Aliteracy refers to the lack of reading habits despite being able to do so (Mikulecky, 1978) [25]. The National Endowment Survey of 2022 indicates that 10.83% of American adults have not read a book in more than a decade, while 22.01% haven't read one in over three years (Afficient Academy Inc., 2022) [2]. Additionally, a YouGov survey reveals that 46% of American adults did not read a single book in 2023 (Fleck, 2024) [12]. Given the widespread availability of consumer electronics such as televisions, video game consoles, and smartphones, people's reading habits seem unlikely to revert to previous patterns. Consequently, the trend of aliteracy is expected to continue rising (Afficient Academy Inc., 2022) [2].

Despite the widespread nature of the aliteracy phenomenon and the growing emphasis on consumer illiteracy (Adkins & Ozanne, 2005; Jae, DelVecchio, & Childers, 2011; Jae Viswanathan, 2012) [1, 18, 19], researchers have not thoroughly investigated the concept of consumer aliteracy. Examining consumer aliteracy is particularly important for several reasons. First, consumers are bombarded with myriad written information, such as advertisements, product reviews, packaging, ingredient lists, and instructions. Second, the broader phenomenon of aliteracy suggests a failure to cultivate a reading habit, which, when considered alongside consumers' general inclination toward cognitive minimalism (Simon, 1978; Wright, 1975) [33, 41], likely extends into the realm of consumer behavior. Aliterate consumers may avoid much of the available information; for example, they rely on trial and error instead of reading the instructions for using products (Wallendorf, 2001) [37]. Third, echoing Mark Twain's insight, consumers who choose not to engage with marketing information do not gain any advantages over those who can. As a result, similar to their low-literate counterparts, aliterate consumers are likely to make suboptimal product choices (Jae & DelVecchio, 2004) [17], misuse products, or purchase incorrect items altogether (Adkins & Ozanne, 2005). [1]

This research introduces a tool for measuring consumer aliteracy and illustrates its relevance in the context of product warnings in advertisements. It aims to benefit both public policymakers and marketing researchers, who are particularly concerned with the effectiveness of written product information, including warnings, due to the potentially

harmful consequences of misunderstanding such warnings (Argo & Main, 2004) ^[3]. Consequently, gaining a deeper understanding of alliterate consumers can enable policymakers and marketers to develop improved guidelines for effective marketing communications. Previous literature on consumers' information processing strategies often examines their engagement with written text by artificially manipulating involvement levels, classifying them as either high or low (Lowrey, 1998; Chebat *et al.*, 2003) ^[24, 6].

This research shifts the focus from viewing consumers' lack of reading behavior as merely a situational variable to recognizing it as a chronic trait. More broadly, this study contributes to the marketing field by extending consumer involvement research into the emerging area of consumer aliteracy, offering a framework for its measurement in future studies. The concept of consumer aliteracy is developed through a series of subsequent investigations, which include a five-item measure for assessing it. Furthermore, this research examines the relationships between consumer aliteracy and related constructs of consumer behavior. Two additional studies investigate the effects of aliteracy on the understanding of product warnings, which represent critical yet frequently overlooked information.

Study 1: Scale Development

The domain of Construct and Sample Items Generation

To effectively capture the realm of consumer aliteracy, we explored various definitions of "aliteracy" along with associated behaviors as documented in the literature on reading. The existing definitions include "Capable readers who regularly choose not to read" (Mikulecky, 1978, p. 3) ^[26], "A condition of possessing reading skills but failing to utilize them" (Joyce, 1992, p. 79) ^[20], and "The absence of reading among those who can read" (Gerstern, 1996) ^[14]. Behaviors linked with aliteracy encompass a reluctance to read and a tendency to avoid reading whenever possible (Ciani, 1981; Holbrook, 1982; Klesius & Gaier, 1998) ^[7, 16, 23]. Aliterates often prefer to receive information in concise segments, such as bullet points, rather than in lengthy blocks of text (Duchain & Mealy, 1993) ^[10].

To define "consumer aliteracy" as a construct, we asked seven marketing researchers, who are experts in literacy and text processing, to review existing definitions of "aliteracy" and suggest a definition of consumer aliteracy. Based on their responses and suggestions, as well as our literature review on reading, we define consumer aliteracy as "the lack of a reading habit in a capable reader participating in consumer behavior activities." Although some definitions of aliteracy emphasize reading attitude, the definition of consumer aliteracy centers on reading habits rather than reading attitude. This focus on reading habits is important because a) positive reading attitudes may not lead to a consistent reading habit, and b) consumers' reading behaviors will dictate their interpretation of written marketing communications and their subsequent market behavior.

Next, we aimed to develop a set of scale items that reflect the newly defined domain of consumer aliteracy. To achieve this, we initially conducted a focus group with twelve consumers and eight in-depth interviews to better understand how consumer aliteracy manifests in marketplaces. The focus group examined consumer behavior across the various stages of the shopping cycle,

including information search, comparison, and usage of instructions. In-depth interviews concentrated on identifying reading domains (what consumers read in the marketplace) and general reading habits (when, how, and where they read relevant consumer information, including duration). We produced an initial pool of 67 scale items derived from the focus group and in-depth interviews.

Purification of Measure and Reliability

Fifteen expert judges, including the marketing faculty and doctoral students at a Southeastern university, were consulted to critique the items. Items deemed lacking in face or content validity were removed, resulting in a refined set of 34 scale items. The 34 items were then presented in a survey to 301 consumers, where exploratory factor analysis indicated that these items loaded onto various factors. Due to this lack of parsimony, the expert judges were invited again to evaluate the scale items. These consultations led to a) reducing the scale to ten by eliminating 24 context-specific items unrelated to consumer behaviors and b) modifying some of the remaining items to reflect the domain of interest better.

One hundred eleven consumers completed a second survey that included the ten-item scale. Exploratory factor analysis indicated two factors ($\Lambda_1=4.01$ and $\Lambda_2=2.39$); however, after further review, one factor was considered situation-specific (e.g., reading nutritional information on packaging and taking products off shelves to read). Once the situation-specific items were removed, the remaining five items accounted for 66.36% of the explained variance and demonstrated inter-item correlations ranging from .399 to .676, with a Cronbach's alpha of .870. A third survey of 33 consumers confirmed the convergence of the five items (Cronbach's alpha = .822).

The final five items to measure consumer aliteracy, each of which is reverse coded, are: (1) I carefully read a document before I sign it, (2) I read the terms and conditions of a sale before I buy a product, (3) I am the kind of person who reads fine print in shopping, (4) When making a purchase, I read details word for word, and (5) I carefully read all transaction information before purchasing.

Construct Validity

A survey of 111 respondents (54% female, 62% white/Caucasian) at a Southeastern university was conducted to evaluate the validity of the consumer aliteracy measure. Since no alternative measures of consumer aliteracy exist, accurately determining convergent validity is challenging. Nevertheless, respondents were assessed on various traits and behaviors that should either differ from the consumer aliteracy measure, indicating discriminant validity, or generally correlate with consumer aliteracy, suggesting convergent validity. Specifically, respondents provided data on their need for cognition, consumer assertiveness, subscriptions to newspapers and informational periodicals (e.g., economic, and political periodicals), and subscriptions to leisure periodicals (e.g., sports and entertainment magazines).

Since consumer aliteracy reflects a lack of reading for information in a consumer context, and subscriptions to informational periodicals and newspapers suggest a habit of information-acquisition reading behaviors, these traits should be negatively correlated. However, the domain specificity of consumer aliteracy indicates that the negative

correlation is modest. The correlation between consumer aliteracy and subscription to entertainment-focused periodicals should be even more modest, as these are likely to be “read” by scanning headlines and focusing on pictures (Week, 2001) ^[38]. Similarly, aliteracy should be distinct from the need for cognition (Wood & Swait 2002) ^[40]; avoiding reading does not equate to avoiding thinking. Consumer aliteracy should show the strongest positive correlation with consumer assertiveness, which reflects an individual's tendency to request information or assistance (Richins, 1983) ^[31]. Assuming that consumer aliteracy is not a state of chronically low involvement in consumer tasks, people who are high in consumer aliteracy are likely to compensate via consumer assertiveness.

Consistent with the above expectations, consumer aliteracy was most strongly correlated with consumer assertiveness ($r = -.227, p < .05$), subscriptions to informational magazines ($r = -.231, p < .05$), and subscriptions to newspapers ($r = -.210, p < .05$). Thus, rather than reading for information, individuals with high consumer aliteracy tend to request information verbally. Consumer aliteracy was not significantly correlated with a subscription to leisure magazines ($r = -.128, p > .10$), which lend themselves to scanning and looking at pictures. Additionally, consumer aliteracy was not correlated with the need for cognition ($r = -.135, p = .163$). Therefore, consumer aliteracy is a choice to avoid reading, not to avoid thinking.

Discussion

The scale development process reveals essential characteristics of consumer aliteracy in the marketplace and, in doing so, suggests the validity of the consumer aliteracy measure. The relationships between consumer aliteracy and potentially related constructs indicate that aliteracy does not reflect a dislike of thinking nor predict subscription to leisure magazines. Conversely, consumer aliteracy correlates significantly with two indicators of reading for information (newspaper and information magazine subscriptions) and a likely coping behavior in response to consumer aliteracy (consumer assertiveness). Consumer aliteracy aims to measure reading behavior in the consumer domain. Differences in consumer aliteracy can lead to harmful consequences in the marketplace. The two studies demonstrate the application of the consumer aliteracy scale and one type of adverse outcome (lack of comprehension) that may occur from consumer aliteracy when exposed to written product warnings.

3. Study 2: Consumer Aliteracy and Product Warnings

An increasing number of products require warning labels due to public safety concerns, liability lawsuits, and evolving government regulations (Argo & Main, 2004) ^[4]. Consequently, public policymakers and marketers have focused on the effectiveness of product warnings. Researchers have evaluated the efficacy of warnings using various measures, including attention (Kahneman, 1973) ^[21], reading and comprehension (Mick, 1992) ^[28], recall (McQuire, 1980) ^[27], assessments of product risks or hazards (Mazis, Morris, & Swasy, 1991) ^[25], and adherence to product usage (Wogalter, Kalsher, & Racicot, 1993) ^[39]. Studies on written product warnings have revealed several factors that may enhance their effectiveness. For instance, the efficacy of warnings improves with characteristics that increase vividness, such as font size, color, and images

(Young & Wogalter, 1990) ^[42]. Although various potential moderators of warning effectiveness have been identified, limited research exists on the individual elements influencing the interpretation of these warnings (Argo & Main, 2004; see Dywan & Jacoby, 1990 for exceptions) ^[3, 11]. Therefore, this study investigates the impact of consumer aliteracy on the comprehension of product warnings.

Conceptual Background and Hypotheses

Aliterate consumers can read. However, while they possess reading skills, their comprehension outcomes (i.e., poor understanding) may resemble those of illiterate or low-literate consumers (i.e., incapable readers). We examine the underlying reading processes of aliterate consumers from a level of processing perspective (Craik & Lockhart, 1972; Greenwald & Leavitt, 1984) ^[8, 15]. The level of processing varies from shallow to deep. Shallow processing focuses on phonetic and orthographic components, whereas deeper processing incorporates semantic understanding (Craik & Lockhart, 1972) ^[8]. Greater depth of processing entails a higher degree of cognitive engagement for comprehension—deeper semantic task-level processing leads to longer processing times and improved memory performance (Gardiner, 1974) ^[13]. In contrast, memory performance for readers declines with shallow processing (Treisman, 1979) ^[35]. For example, in an advertising context, Saegert (1979) ^[32] found that deeper processing of advertisements resulted in better recall and recognition.

As noted, reading literature indicates that aliterate processors do not engage with written texts at a deep level, preferring to skim and scan (Weeks, 2001) ^[38]. In consumer behavior, specifically regarding product warnings, consumer aliteracy suggests shallow processing of written marketing materials, as evident from both process and outcome perspectives. In terms of process, aliterate consumers' lower level of processing is reflected in less time spent on product warnings. As an outcome, comprehension of written product warnings should decline as consumer aliteracy increases and time spent processing decreases. These baseline differences between more- and less-aliterate consumers are formalized as Hypotheses 1-3.

- **H₁**: Consumers with higher consumer aliteracy levels will spend less time processing written product warnings.
- **H₂**: Consumers with higher consumer aliteracy levels will have lower comprehension of written product warnings.
- **H₃**: Time spent processing written product warnings will mediate the relationship between consumer aliteracy and comprehension of product warnings.

Method

We recruited 161 students from a large university in the Southeast for this online survey. The sample included 51% female and 57% white/Caucasian participants. They were asked to review an advertisement for fabric softener and then respond to ten comprehension questions about the prominent product warning in the ad. Respondents were also asked to rate their level of agreement (on a seven-point scale) with each of the five items on the literacy scale. Finally, participants completed a reading ability assessment (Reading Level Indicator, 2000) ^[30] and provided demographic information.

The experimental stimuli include two versions of

advertisements for a fictitious laundry softener product called “Visatia.” Participants were randomly assigned to one of the ad conditions. Both ads included a picture of the product package (see Figure 1), a message about the product’s performance, and product warning information. The two ads are different by the amount and complexity of the information provided regarding product performance. A more detailed and complex version of the product claims and a shorter, simpler version were utilized to ensure that differences between more and less literate consumers did not arise solely from ads of a particular length or complexity.

Ten comprehension questions were created to evaluate how

well participants understood the product warning statements in the advertisements. Each question provided four answer choices. To gauge overall comprehension, each question received a score of 1 for a correct answer and 0 for an incorrect answer. The five-item aliteracy scale was evaluated using a seven-point Likert scale (ranging from strongly disagree to strongly agree). Participants’ reading ability was evaluated through a test of twenty vocabulary questions and twenty sentence completion questions (Reading Level Indicator, 2000) [30]. Participants’ time spent reviewing the ads containing the product warnings was also measured electronically.

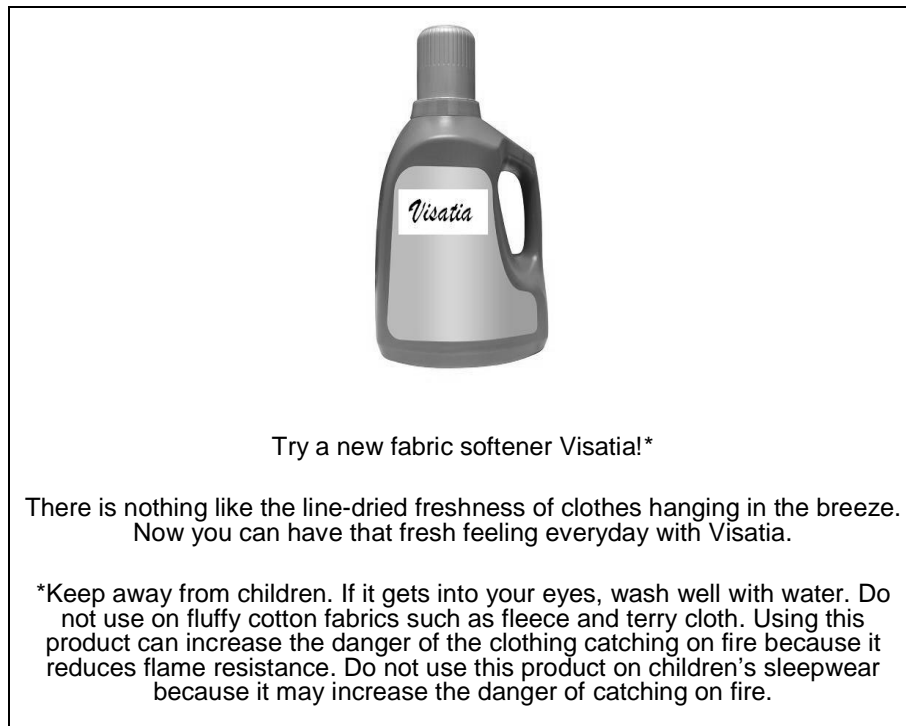


Fig 1: Sample Stimuli

Results

The participants spent an average of 30.29 seconds reviewing the stimuli (e.g., product warnings), achieved 35 out of 40 on the reading level indicator index (a proxy for reading ability) [30], and scored 7 out of 10 in product warning comprehension. Data were combined across ad length and complexity conditions after observing no differences in processing between the two ads. Path analysis was employed to test Hypotheses 1-3, allowing us to examine multiple consecutive and mediating relationships. Based on indirect and direct paths in its estimation, we find all fit statistics acceptable (i.e., $\chi^2 = 10.65$, $df = 13$, $p = 0.64$, $CFI = 1.00$, $RMSEA = 0.00$, $SRMR = 0.03$).

To test Hypotheses 1-3 while considering the mediating effect of time on the relationship between aliteracy (Cronbach’s $\alpha = .832$) and product warning comprehension, we examined the direct effects of consumer aliteracy on product warning comprehension and the indirect effects of aliteracy on time, as well as the effects of time on product warning comprehension. Hypothesis two is

supported, as consumer aliteracy negatively affects product warning comprehension ($\gamma_{21} = -0.245$, $p < .01$). We found that the indirect path from aliteracy to time and from time to product warning comprehension was significant. Specifically, Hypothesis three is supported because consumers who reported higher levels of aliteracy spent less time viewing the product warnings ($\gamma_{11} = -0.191$, $p < .05$), and those who spent less time viewing the warnings scored lower on product warning comprehension ($\beta_{21} = 0.294$, $p < .01$).

With significant indirect paths, a notable direct path, and a significant Sobel z (i.e., $z = 2.013$, $p < .05$), we conclude that the time spent viewing product warnings partially mediates the relationship between aliteracy and product warning comprehension. Hypothesis four is supported. Correlation analysis shows that aliteracy level does not correlate with reading ability level (i.e., $r = -.03$, $p = .70$). This provides evidence that aliteracy is not a function of reading ability. Figure 2 depicts this path model.

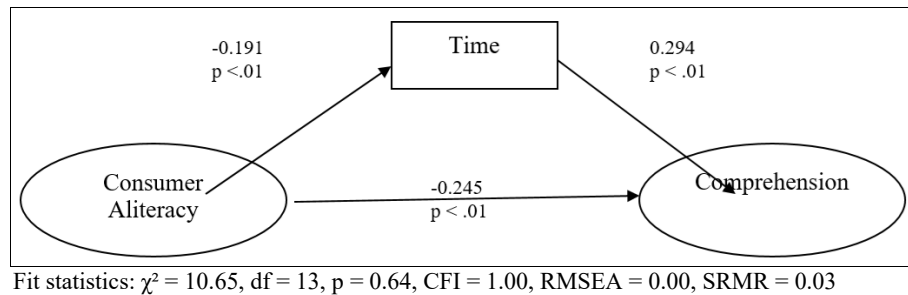


Fig 2: Path Model

Discussion

Study two demonstrates that aliterate consumers exhibit significantly different reading outcomes compared to non-aliterate consumers, and these differences are not influenced by reading ability. Aliterate consumers spend less time reading and, consequently, have a lower level of comprehension of written product warnings than non-aliterate consumers. Thus, study two reveals that aliterate consumers may resemble the reading outcomes of low-literate consumers, who show poor comprehension compared to literate consumers when interpreting product warnings. Study three further investigates consumer aliteracy by examining their ongoing lack of reading habits from a time-constraint perspective.

Study 3: Consumer Aliteracy and Time Constraints

In study two, the processing time is a critical mediator between consumer aliteracy and reading outcomes. If aliteracy is chronic behavior, comprehension of written product warnings should not significantly for aliterate consumers as a function of time constraints (i.e., time constraint versus no time constraint). Conversely, non-aliterate consumers should demonstrate different levels of comprehension of written product warnings when a time constraint is imposed because their reading behavior should have impeded.

Conceptual Background and Hypothesis

Time constraints or time pressures influence consumer decision-making (Bettman, Luce, & Payne, 1998; Suri & Monroe, 2003)^[4, 34]. Under time constraints, consumers are more likely to use heuristics to aid their decision-making (Kaplan, Wanshula, & Zanna 1993)^[22]. Dhar and Nowlis (1999)^[9] find that under time pressure, consumers are more likely to rely on unique features of products rather than standard features in making choices. Consumers also use brand-name or price-quality heuristics in their choice behavior (Nowlis, 1995)^[29]. Suria and Monroe (2003)^[34] report that time constraints result in varying levels of consumer product evaluations over different price information. Prior studies on time constraints on consumer decision-making support the premise of the Heuristic-Systematic Dual-Processing Model (Chaiken, 1980)^[5]. The model suggests that when motivation and the ability to process information are present, people are more likely to process the information systematically with scrutiny of information. However, when people lack the motivation or ability to process information, they rely on heuristic cues with less effort. Time constraint is an environmental factor that affects the ability of consumers to engage in systematic information processing.

Similarly, in reading literature, severe time pressure has

been accounted for by a lack of engagement in motivational, attitudinal, and cognitive processing. When research participants were under severe time pressure versus no time pressure, participants displayed less comprehension (Walczyk *et al.*, 1999)^[36]. Walczyk *et al.* (1999)^[36] suggest that under no time pressure, readers can use multiple reading strategies such as rereading, reading slowly, or using other compensatory strategies. However, under time pressure, readers cannot read slowly or reread the text materials. Thus, they may follow reading strategies similar to aliterate or low-literate consumers, such as skimming and scanning or relying on headlines, pictures, or other heuristic cues to make sense of the product warnings. For aliterate consumers, the chronic lack of reading causes only the most severe time pressure to reduce comprehension. Hence, we propose the following hypothesis.

H4: Consumers with low aliteracy levels will display a decreased comprehension of written product warnings under a time constraint. In contrast, consumers with high literacy levels will not significantly change their comprehension of written product warnings under a time constraint.

Method

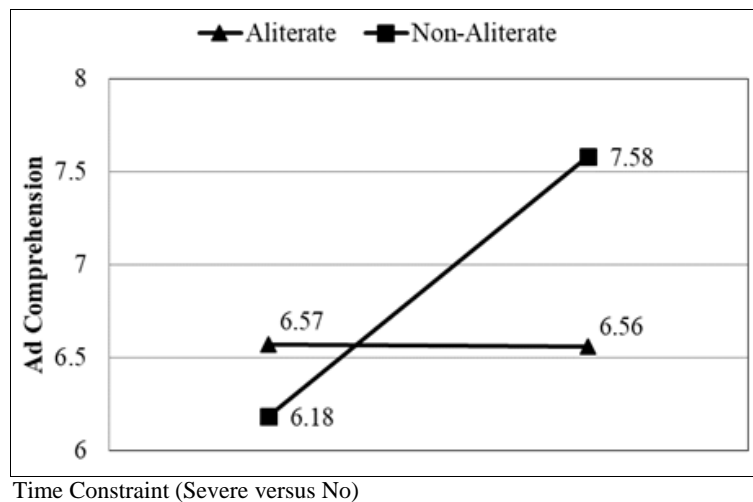
A total of 436 students from a large Southeastern university participated in an online survey. The sample was 51% female and 55% white/Caucasian. The same stimuli from the study two were used in this study. The procedure was identical to study two except that half of the participants were randomly assigned to a time-constraint condition. Thus, Study Three employed a 2 x 2 between-subject design, with the first factor being ad complexity (Low, high) and the second factor being time constraint (Time constraint versus no time constraint). Time pressure was operationalized as 66% of the average time spent reading the ads in (19 seconds) in Study 2 (Walczyk *et al.*, 1999)^[36]. Participants in the time constraint condition could see the time left in the top right corner of the online stimuli.

Results

A 2 (aliteracy level: aliteracy versus non-aliteracy) by 2 (time constraint: severe versus no) GLM ANOVA was conducted for comprehension. Based on the frequency data, we labeled the participants in the lower 30% of the aliteracy scale (below 3.4 out of 7, $n = 141$) as non-aliterate and the participants in the higher 30% of the aliteracy scale (above 4.60 out of 7, $n = 134$) as aliterate. A main effect of time constraint on comprehension was found ($F(1, 271) = 4.606$, $p < .05$). As predicted by H4, a two-way interaction was also found between aliteracy (Cronbach's $\alpha = .843$) and time constraint on comprehension ($F(3, 271) = 4.854$, $p < .05$). Non-aliterate participants displayed significantly lower

comprehension when they evaluated written product warnings under time pressure versus no time pressure (M pressure = 6.18 versus M no = 7.58, $t = 3.04$, $p < .01$). However, no decrease in comprehension was not found among aliterate consumers (M severe = 6.57 versus M no = 6.56, $t = .24$, $p < .9$). Viewed from another perspective, aliterate consumers and non-aliterate participants displayed

no significant difference in comprehension under severe time constraint condition (M aliterate = 6.57 versus M non-aliterate = 6.18, $t = .70$, $p > .4$) while a significant difference was found in the no time constraint condition (M aliterate = 6.56 versus M non-aliterate = 7.58, $t = 3.02$, $p < .01$). Figure 3 depicts the relationship between aliteracy and time constraint on comprehension of written product warning.



Time Constraint (Severe versus No)

Fig 3: Aliteracy and Time Constraints

Discussion

Study three finds that a time constraint affects non-aliterate consumers but not aliterate consumers as they process written ads. Aliterate consumers consistently displayed poor reading comprehension of product warnings regardless of the amount of time available to process the written message. Conversely, non-aliterate consumers significantly decreased reading comprehension of product warnings when evaluating written product warnings under a time constraint. The results indicate that consumer aliteracy is a chronic state that tends to lead aliterate consumers to have poor comprehension despite having them process written messages from an individual and environmental standpoint. Non-aliterate consumers' reading outcomes mirror aliterate consumers only when they are under time constraints. Implications of the research, study limitations, and future research directions will be discussed next.

Conclusion

Aliteracy may be an increasing phenomenon, yet the existing consumer research on the topic is scarce. From the consumers' perspective, aliteracy can result in poor product choices, unsafe misuse of products, product dissatisfaction, and wasted time and money. Although capable readers, aliterate consumers' reading comprehension is significantly lower than that of non-aliterate consumers; a similar outcome pattern is observed among low-literate consumers compared to high-literate consumers (Jae, DelVecchio, & Childers, 2011)^[18].

Due to their lack of reading habits, aliterate consumers cannot fully utilize the information available in the marketplace. Consequently, they must rely on visual information, verbal cues, and heuristics to make product decisions. Thus, just as "the man who does not read good books has no advantage over the man who can't read them," the consumer who does not read marketplace information seems to have a slight advantage over the consumer who

cannot read such information. A better understanding of consumer aliteracy can be fostered using the consumer aliteracy scale, and the findings detailed here will help managers and public policymakers. Studying consumer aliteracy may enable managers to influence consumer aliteracy tendencies or use non-verbal message strategies to communicate more effectively with highly aliterate consumers. Managers would benefit from understanding the effects of aliteracy by working to influence these tendencies or adjusting product messages accordingly, such as adopting non-verbal message strategies. Consumer advocates might seek to protect aliterate consumers from poor product selections, product dissatisfaction, and wasted time and money. The study of consumer aliteracy could also be advantageous for public policymakers. Policymakers may want to take consumer aliteracy into account when proposing guidelines for companies creating product warnings. While the chronic nature of aliterate consumers' reading habits may prevent them from recognizing the benefits of well-designed product warnings, companies can certainly avoid misleading or complicated warnings by adhering to policy guidelines.

Several limitations should be addressed. While we had multiple conditions that varied the product description complexity and the pictorial conditions (graphical warnings versus no graphical warnings), we did not find any significant statistical significance. In this study, we have not found any significant effects on the complexity of the presence of graphical warnings or interactions among aliteracy, complexity, and graphical warnings. The result could be attributed to multiple factors. To our original concerns, aliteracy is chronic behavior rather than situational behavior. Thus, text complexity may not have altered their reading behavior. The lack of simplicity in graphical warnings (Too many icons for the ads) could also lead aliterate or non-aliterate participants to ignore the warnings, resulting in no statistical impact on aliteracy.

Future studies should investigate the conditions that can help increase consumers' comprehension levels. Such additional comprehension can be gained by overcoming the habit of not reading. For instance, ads may employ headlines or graphics that alert aliterate consumers of the need to attend to the text. Alternatively, if their reading behavior is chronic, changes in situational factors may not significantly help aliterate consumers' reading outcomes. Instead, the intervention should include changes in aliterate consumers' fundamental reading behaviors (e.g., an increase in reading motivation via training and consumer education). Longitudinal studies for consumer aliteracy are necessary to examine the effectiveness of varying intervention techniques.

While we claim the similarity of aliterate consumers to low-literate consumers, we did not directly compare them regarding their comprehension. Instead, we made the claims based on reading outcome patterns. Future studies can examine the reading strategies employed by both aliterate and low-literate consumers to see whether both groups have similarities and differences. Heuristic-Systematic Dual-Processing Model (Chaiken, 1980) ^[5] supports aliterate consumers' reading behavior. Yet, we did not specifically test to see which heuristic cues aliterate consumers rely on for their comprehension. More studies can investigate the Dual-Processing Model (Chaiken, 1980) ^[5], focusing on heuristic cues and other marketing outcomes (e.g., purchase intention, choice).

Aliterate consumers are able readers who choose not to read product-relevant information. Similar to aliteracy, consumer aliteracy may not be able to be remedied by simple situational changes such as more time to read or more straightforward messages. Instead, more fundamental problems with reading habits should be carefully examined. Marketing researchers can seek out more long-term solutions for consumer aliteracy problems. Bad reading habits could cause serious negative consequences in misusing product warnings. Especially when it comes to medical products, not reading medication instructions or consent forms could be fatal. Therefore, we warrant more research to explore how aliteracy impacts consumer behavior in the marketplace.

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