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Testing the Comprehensibility: Designing a Simplified Philippine Consumer Product Warnings

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Abstract

Processing marketplace information sometimes placed the consumers at risk because this situated them in decoding the product warnings using string of mental strategies which delayed their acts in emergency response discourse. This research adheres to the legal compliance of Consumer Act of the Philippines or Republic Act 7394 which simplification of the language used in product safety information is designed to make it more comprehensible, readable, and consumer friendly. Conducting experimental study, 50 mother-consumers served as respondents who took the pre-testing of the present product warnings. Similarly, they were the same respondents who were given the post-examination based on the simplified warning messages of medicines, household chemicals, and beauty products through cloze-test. The results disclosed that all items from the three categories of simplified texts incurred 100 percent amplification of comprehensibility scores among mothers. Importantly, data determined that mothers' repetitive reading did not consume much of their time in comprehending the texts. It is an indication that simplified cautionary texts can help the consumers in becoming independent readers who can autonomously respond correctly to the text at hand, specifically in times of emergency or urgent situations.
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1.Introduction

Product warnings are pronounced as vital information sources conceived to shield consumers against any harm brought by product misuse. Cautionary texts appeared on the surface of millions of consumer products, however, the structure of 'what should be' in the product warnings have been a global concern not only for lawyers and warning researchers but far more to the manufacturers and daily consumers. A body of literature pointed out that warning effectiveness involves a complex set of issues (Wogalter et.al, 2002) because the choice of product makers whether to warn or not is persuaded by their liability for customers.

Explicit warnings aim to influence user behaviour through an increase in the perceived severity associated with the hazard, on one hand, severity of injury has been shown to influence people's perception of the risk associated with a hazardous situation (e.g., Wogalter, Desaulniers & Brelsford, 1987; Young, Wogalter & Brelsford, 1990, 1992). Warning researchers printed various influential content-factors to assure the influence of risks particularly if products are professed to be perilous. This includes:

(a) the nature of the hazard itself (e.g., asbestos, methane gas, etc.)
(b) the nature of the consequences (e.g., impaired vision, coughing, headache, etc.
(c) duration of exposure to the hazard (e.g., brief vs. prolonged exposure to .)
(d) the quantity or amount of the hazard to which one is exposed (e.g., exposure to "small/large quantities of .")
(e) the likelihood of injury (e.g., "may/will result in.. .")
(f) the severity of potential injury (e.g., mild/severe.. .)
(g) the duration of potential injury (e.g., temporary/permanent...)

(Adapted from Young and Wogalter, 1998)

This paper aims to develop the standard representation of manufacturers' liability on ensuring safety in the mainstream of the Philippine market. Adhering to the legal compliance of Consumer Act of the Philippines, otherwise known as Republic Act 7394, simplification of the language used in safety information is designed to make it more comprehensible, readable, and consumer friendly.

1.1. Product Warnings in the Philippines

In the Philippines, the trouble with warnings is that they often fail to be noticed and eventually disappoint the users when an emergency situation takes place because of limited information printed on the product. To be effective, the product warning should not only overpower the opacity of its message but also its comprehensibility.

It is in this context that Philippine Senators Franklin Drilon and Pia Cayetano have revived their proposals on requiring the inclusion of graphic health warnings on the packaging of cigarettes and other tobacco products through Senate Bill 499 (www.philippinestar.com, 2013). After years of debate and careful analysis, Senate Bill 499 was finally placed into law as it was approved by President Noynoy Aquino last July 15, 2014, and labeled as Republic Act 10643, *an act known as 'The Graphic Health Warnings Law'.*

RA 10643 takes aim of dissuading people from cigarette smoking. The mandate seeks picture-based health warnings on tobacco products, which they claim should be alongside the recently enacted sin tax amendments law. Drilon believes that it would boost the government's campaign against smoking (2013).
Although failing to specify the exact name of the research associated with this proposal, Drilon (2013) articulates that studies indicate that textual health warnings are not effective. While present smokers understand that tobacco use is harmful, research shows that most are not completely aware of its true risk.
On one hand, Sen. Pia Cayetano co-author of RA 10643, her version of the picture-based health warning complements the Sin Tax Reform Act which discloses that higher tax does not discourage the smokers from quitting smoking; instead they shift to lower-priced brands to sustain their smoking habits. Because of this, RA 10643 requires that the graphic is printed on at least 60 percent of the main display surfaces of any tobacco package and shall be positioned at the upper portion of the cigarette pack.

Failure to comply with the said Republic Act obliged the manufacturers to pay the fine of P100,000- P2 million and will suffer revocation of the business permit and license to operate (www.manilatimes.net, 2014). The proposed bill takes into account that anyone within the chain of product distribution process can be legally accountable.
It is, therefore, evident that specificity of warning content is visible among tobacco products like cigarettes while there are no officially recognized policies in terms of everyday consumer products. These underpin that recent issues on product warnings in the country are widely focused on the tobacco industry and very little information is available for consumer warning literature.

1.2. Plain English

Linguistic concerns come in diverse legal perspectives. Determining the peculiarities of lawful text is a common set-up in the legal field, product warning as a fraction of product liability cases do not escape from the incomprehensible verbiage and arcane jargons.

Tracing back the history of Plain Language, Stuart Chase (1953) is the original plain language proponent in the United States, however, Australia started it in 1976, and Canada founded it in 1988 (Schriver 1997; Berry 1995). Likewise, countries like Sweden, South Africa, and New Zealand (Baldwin, 1999) followed the trail.

Various definition is given to the term Plain Language, however, the common strand of their definition is revealed by Steinberg (1991) that it is the language that mirrors the pursuits and needs of the reader and consumer rather than the 'legal, bureaucratic, or technological interests of the writer or of the organization that the writer represents' (p.7) Ioannou and Drake (1997) discuss that Plain Language provides people with information that they can easily understand. It gives value to the usage of simple, common terminologies, but definitely, does not 'talk down' intended readers of documents. Likewise, it submits clear and systematic informative material in a design which makes up the text content easily accessible and comprehensible.

On another story, Cutts (1998) utilizes his own guidelines in revising a document based on the preference of the readers, he aims to increase the text comprehension. The results disclose that 87 percent of the law students opted to use the revised document, and significantly, students who employed the revised data performed better as they scored 9 out of 12 questions.

Indeed, the past decades documented essential points on the usage of Plain English. Added to the list is Stableford's (2007) study on health literacy skill among adults worldwide. Based on the findings American, Canadian, and European health policy makers adopt the promotion of plain language standards to effectively convey their message to the target audience, hence an important aspect in people's access to justice.

Recognizing the need for plain language is a silent threshold for product warnings in the Philippines since local consumers are second language users of English. According to National Institute of Health (2015) Clear communication or Plain English is grammatically correct language that includes complete sentence structure and accurate word usage. It shuns from the language barriers that split the consumers from the warning texts,

hence improving their behavior in responding to the given message.

As Plain English aims to simplify the information contents, it intends to provide the L2 users with text that is more accessible and more comprehensible. Filipinos as second language users occupied a 93.5 population percentage which can speak and understand English well (Department of Tourism, 2009). According to Young (1999), it is commonly viewed that simplified L2 reading texts are either adapted from authentic texts or written explicitly for the L2 reader. Based on the authentic texts such as product warnings, the existing warning messages in the Philippine market are revised.

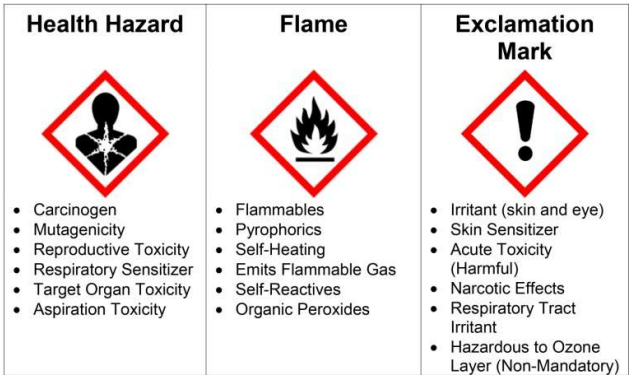
1.3. Product Warning Design

Product warnings are methods for communicating important safety information. According to Wogalter (2006), its purpose is to provide the consumers adequate information about the hazards to avoid harm, injury, or damage. To fulfill such function, warning further needs consideration on some of its salient features like the design, font style, and text color.

The warning design literature consistently recorded that properly designed and pre-tested visual aids, such as a photo of the product and/or a pictorial that demonstrates the hazard, can help enhance comprehension. Meingast (2001) found that pictorials and safety icons (along with other physical enhancements) increased warning salience and the recollection of warning information. Several studies have shown that symbols facilitate the comprehension of pharmaceutical warnings (Ndhlovu and Morton, 1986; Wolff and Wogalter, 1993; Magurno, Wogalter, Kohake, and Wolff, 1994).

Undeniably, pictographs or symbols can attract attention to the safety message, however, pre-testing of these images is enviable to detect and avoid misinterpretation. Akerboom and Trommelen (1998) found that test subjects were able to determine that pictographs of a tree and a fish were related to the environmental hazards associated with product use.

Global Harmonization Standards (UN, 2013) come up with various pictograms which serve as consumers' alternative reference in understanding the message of product warnings. Below are the samples of pictograms required by GHS.



On one hand, readability is a vital element of warning design. It is the quality of written language that makes the warning message easy to read and understand. Wogalter et al. (1991) highlighted that product familiarity is strongly related to willingness to read warnings (e.g., Godfrey and Laughery, 1984; Wogalter et al., 1986), although the relationship is not as strong as with injury severity (Wogalter et al., 1991). Prior awareness of hazards is also related to product familiarity because people are generally aware of the hazards of familiar products.

The lay-out of message information, pictures or images is essential factors which facilitate the comprehension and recalling process of warning texts. The study of Viscusi and Magat (1987) exhibited that presenting hazard information in a hierarchical mode (i.e., with a one or two sentence summary at the top of the label) outperformed other label designs. However, Friedmann (1988) in his investigation revealed that readability is perhaps somewhat counter-intuitive. There are plausible advantages in inserting proactive information (i.e., what you should do to reduce the risk of exposure) before the information relating to the nature of the hazard (the "reactive" information).

Moreover, Wright (1981) suggests the use of sign posts (e.g., headings and typographical distinctions) will aid the readers in finding specific data within the text. The issue of warning's readability specifically the lack of thematic

organization holds back the consumer's comprehension on the product texts (Kieras, 1978).

1.4. Objectives of Research

As established in the study of Dacumos and Madrunio (2015; 2017; 2018), the problem with warnings is that they often fail to work. To be useful and helpful, the consumer must decode the warning in a series of mental operations (Green, 2009). With the aim of determining the comprehensibility of the simplified product warnings, the present research seeks to know the answer to the following questions:

1. How do consumer respondents evaluate the simplified warning message using the cloze-test?
2. What are the indices of difficulty found in the simplified product warnings?
3. What are the significant reading practices that consumers experience in the course of reading the simplified product warnings? What implication can be drawn as regards how consumers respond to emergency situations?

2.Methodology

2.1 Subjects

Since there is an extremely large number of a Filipino consumer, this study applied purposive sampling in selecting the research participants selecting eight mother-participants who are high school graduates, ten who are still studying in college, 25 working professionals, and four senior citizens as the main subjects of the study. With 50 mother-respondents, only 47 of them engaged and responded to the distributed post cloze-test, hence they were the same respondents who took part in the pre cloze-test activities conducted by the researcher in the previous part of this research (Dacumos and Madrunio, 2015; 2017; 2018)

2.2 Data Collection Procedure

Standard multiple-choice cloze-test was applied in the study as it aimed to provide an objective scoring (Ajideh and Mozaffarzadeh, 2012) in determining the comprehensibility of the simplified product warnings.

Considering the product warnings, the commonly purchased and used products in the market are considered in the corpus. Taken from the existing product warnings in the market and based on the results of previous analysis of this paper, each product warning was simplified and validated by using plain language software. The simplification is in accordance with the standards set by American National Standard Institute (2002), Global Harmonization Standard (2013), and Consumer Act of the Philippines (1992). Finally, the results were triangulated after the episodic checking and integration of suggestions through the input of business experts, legal professionals, and language specialists, hence simplified product warnings were developed. Each product category yielded 20 items, thus, a total of 60 items in the list.

The prepared post cloze-tests were pretested to the former first-year college students who previously answered the pre-cloze tests. They were the previous students who piloted the pre cloze-test activities conducted the earlier part of this study. The common incorrect responses during the post-pilot testing were utilized in constructing the distracters of the multiple-choice cloze, hence, focusing on content words required in understanding the product warning texts.

2.2.1 Test Administration

During the administration of cloze-test, 10 minutes was allocated to answer the posited questions for medicines, another 10 minutes for household chemicals, and one more 10 minutes for beauty products. The time frame necessitates the consumer's immediate ability in responding to the emergency situation. Such time technique is applied to verify some organizational constrains in filling the blanks and inferring meaning (Mousavi, 1999) once the product warnings are no longer available to the consumer's reference in case emergency situation arises.

However, during the administration of tests which lasted for two weeks, the first reading and second reading time of the respondents were recorded and given appropriate implication in case emergency situation occurs. The correct number of items were tallied and summed up to get the individual total score.

2.2.2. Assessment Formula

To facilitate the assessment procedure, cloze-test was applied. In terms of assessing the comprehension and reading materials, a cloze score ranging from 0-34% correct score equivalent is parallel to 'frustration' level. Meanwhile, 35-49% correct score equivalent is equated to 'instructional' level and 50% above correct score equivalent corresponds to 'independent' level.

2.2.3. Item Analysis

For the purpose of this research, only the difficulty index is included and discussed as this study includes important statistical data on the proportion of answering each item correctly (difficulty index) which indicates the proportion of examinees who got the item right. A high percentage manifests an easy item/question and a low percentage designate a difficult item. In general, items should have values of difficulty no less than 20% correct and no greater than 80%. Very difficult or very easy items contribute little to the discriminating power of a test.

3. Findings and Discussion

To be able to determine the comprehensibility of the simplified warning message, mother- respondents' scores during cloze-tests were calculated and summarized.

3.1. Descriptive Statistics

Table 1. Cloze-test results before and after Simplification of Product Warnings

For easy comparison of the test results, all scores have been converted to percentages.

Product Warning Category	**Pre-test Percentage**	**Verbal Interpretation**	**Post-test Percentage**	**Verbal Interpretation**
Medicines	74.46 10.64 14.89	Independent Instructional Frustration	100	Independent Instructional Frustration
Household Chemicals	89.36 4.26 4	Independent Instructional Frustration	100	Independent Instructional Frustration
Beauty Products	95.74 4	Independent Instructional	100	Independent Instructional

The above data disclosed that the simplified product warnings gained 100 percent of independent percentages for medicines, household chemicals, and beauty products. These implied that revised warning messages were easy for consumers and uphold a higher degree of comprehensibility. From a usual statement format of texts to its graphical representation and simplified language, the outcomes displayed amplified product warnings' comprehensibility. Rhodes (1979) suggested that when chunks of text are repeated, when the statements and concepts are familiar, the material will be more predictable and become easier to read.

The attainment of 100 percent independency in comprehension continuum makes an undivided outcome. The simplified product warnings give product users the access to clear safety instructions and prevent the consumers in any reading comprehension dilemma. In the end, the modified cautionary texts may help the consumers in creating an intelligent consumption decision (Milgrom, 2004) and it is safe to note that homogeneous consumer behavior (Mooij, 2003) on safety could take effect.

3.2.Item Analysis

To immediately noticed the comparison of results, all scores were framed from frequency counts, to percentages and mean difficulty index as shown below.

Table 2. Frequency, Percentage, and Mean Difficulty Index of Philippine Product Warnings' Item Analysis

Product Warnings	**Frequency**	**Difficulty Percentage**	**Mean Difficulty Index**	**Verbal Interpretation**
Medicines	2 5 33	5 12.5 82.5	.43 .31 .09	Difficult Average Easy
Household Chemicals	4 2 34	10 5 85	.23 .29 .05	Difficult Average Easy
Beauty Products	0 6 34	0 15 85	.00 .21 .16	Difficult Average Easy

3.2.1. Medicines

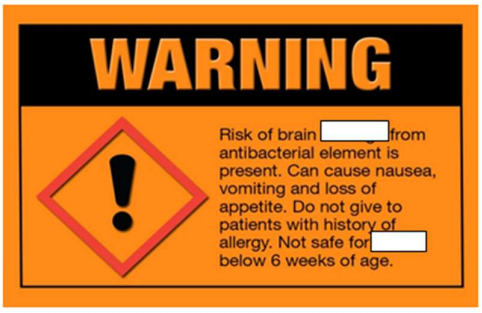
The results specified that the total mean difficulty index of .43 for medicines stands for the very minimal number of responders who committed errors in the simplified cautionary texts. Equally, a frequency of two or five percent conveyed the highest quantity of errors which signified the smallest number of complexity found in the provided modified product warnings. Below is the test extract which responders committed the highest number of errors.

36. a. broken *b. wounded*
c. cut *d. discoloured*

In comparison with the previous analysis of the study, the highest difficulty index incurred for medicine was .34 or 44.62 percentage. It could be noted that a hefty difficulty index of .09 or 39.62 percent became the difficulty difference of the simplified warnings from the existing cautionary messages.

The data further uncovered that the simplified warning messages can be directly understood by the consumers since it recognized the need for clarity of expression (Zakaluk, 1996). Moreover, the study demonstrated that consumer's comprehension ability is no longer at risk and it is safe to assume that the intended goal or message of the health-related information text is accomplished.

On the other hand, the mean difficulty index of .31 characterized the mother-respondents who obtained the average performance in the given post cloze-test. Consider the given extract.

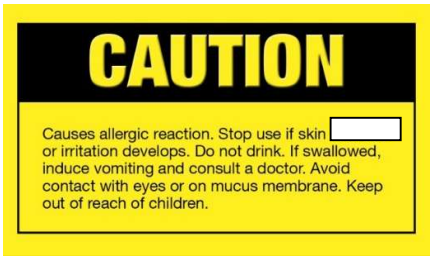


13. a. damage *b. security*
c. malfunction *d. disorder*

14. a. teenager *b. infants*
c. mother *d. children*

Items 13 and 14 of the simplified cautionary message both acquired .71 difficulty index which contributed to the 5 or 12.5 percentage of average group level which is considered to be higher than the previous 24 or 36.92 of total test items classified under the average category. The result echoed the average score difference of 24.42 percentage from the result of the previous cloze-test given to mother-respondents which denoted that consumers' experienced substantial pattern of depicting important information.

Meanwhile, the easy index is amplified as the highest number of correct items incurred by the mother-respondents is presented below.



1. a. redness *b. wound*
c. avoidance *d. discoloration*

The correct response for item number one was *redness* where none among the respondents executed erroneous answer. The previous difficulty index of medicine product warnings recorded 12 percent or 18.46 difficulty index, however, the simplified cautionary texts attained the difficulty index of .09 or 82.5 percentage which denoted that the simplified product warnings were more engaging for consumers as their comprehension performance was enhanced. It was further noted that the reworked warnings for medicines seized a higher fraction of comprehensible texts which consumers found to be easy, hence a trouble-free experience for product users in understanding the safety communication message since guided and explicit instructions were provided.

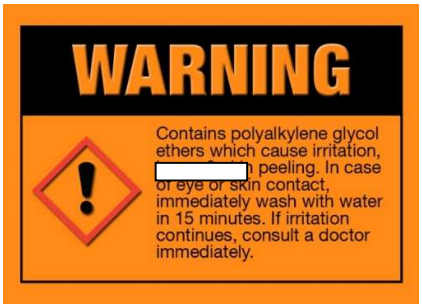
3.2.2. Household chemicals

Aside from pharmaceutical products, household chemicals' safety texts were also improved utilizing the same guidelines and further measured the comprehensibility level.

17. a. enough *b. thoroughly*
c. carefully *d. bravely*

Item 17's correct response was *thoroughly* which obtained the difficulty index of .42 and contributed to the total .23 or 10 percent of difficulty index on the simplified cautionary texts. Tracing back the former result, a total of 26.67 difficulty percentage or .22 difficulty index of household chemical warning texts was recorded, however, the improved communication message quantified a decline of 16.67 percentage which instituted a higher 'fix-up' (Wagoner, 1983) of comprehending the modified cautionary message as a detailed and interactive information about risks that assured consumer's ability to respond safely in emergency situation.

Then again, household chemicals' modified warning texts also considered essential percentages on an average level, see the extract below.



8. a. thoroughly *b. immediately*
c. shampoo *d. juice*

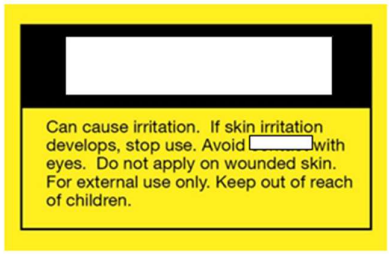
Item 8 attained the difficulty index of .60 which contributed to the total difficult percentage of 5 or .29 difficulty index which created an interval of 32.33 difficult percentage or .37 difficulty index from the existing product warnings. The data uncovered that the simplified household chemical warnings were clearer and logical among common consumers as they 'transform knowledge' (Scardamalia and Bereiter, 1984) into the type of mental representation that promoted safe behavior. Accordingly, the observed average effect will lead the consumers to purchase safe products in the market.
Meanwhile, the simplified product warnings of household chemicals manifested an effortless reading among consumers, below is the result.

5. a. humans *b. kept*
c. field *d. eaten*

Item number 5's correct response is *kept* which attained the difficulty index of .98 and contributed to the total difficult percentage of 85 and a total difficulty index of .05 which signaled that the simplified household chemicals' product warnings were easier than the existing cautionary texts in the market. Since the previous warnings attained .82 difficult index or 36 percent of difficulty, it is evident that majority of the modified safety communication messages created an instantiated comprehensible text.

3.2.3. Beauty Products

It was spotted that the modified beauty product warnings attained no difficult level, and the outcome was to the contrary of the existing product warnings' comprehensibility examination since existing warnings were documented to acquire 20 percent difficult items.



3. a. Warning *b. Caution*
c. Danger *d. Notice*

4. a. call *b. contact*
c. consult *d. wound*

Compare to the previous cloze test conducted for the existing beauty product warnings, an average difficulty index of .66 or 32 percent of difficulty percentage was identified. The simplified warnings attained its average altitude with .21 difficulty index or 15 percent of text intricateness which implied that consumers share a higher percentage of commonness in understanding the modified product warnings. Below is the extract.

37. a. consult *b. concept*
c. contest *d. contact*

38. a. alcohol *b. water*
c. mineral *d. soda*

Balancing the results with the previous cloze-test conducted for the existing warnings, outcome disclosed that the former attained the mean difficulty index of .69 or 48 percent of difficulty, however, the simplified warnings acquired the difficulty index of .16 or 85 percent of difficult percentage which resulted in a 37 percent amplification of comprehensibility. Results implied that the simplified cautionary messages were decoded easily by mother-respondents, thus formulating an effortless reading among product users.

3.2.4 Reading Technique

With the same question posited during the conduct of pre cloze-test for existing product warnings, the 47 mother-respondents were asked to answer the inquiries intended for the revised cautionary messages, thus questions were: "Do you find it easy to understand the existing product warnings?" and "How did you respond from the questions?" below are some considerable answers:

Table 3. Consumer-Respondents' General Comments on the Simplified Product Warnings

Respondents 1, 5, 6, 11, 18, 30, 31, 35, 38, 44, 46, 47	*Oo.Mas madali ito kumpara sa dati. Hindi na rin kailangang ulit-ulitin pang basahin. Simple lang ang words.* This is easier compare to the previous test. Simple words are used.
Respondents 2,3,4,9 and 21	*Tahimik lang naming binabasa tapos okay na, naintindihan na namin.* (We read it silently, then we understood) *Yung may isa don nahirapan ako, pero ng binasa ko ulet naintindihan ko na rin again.* (There was one item which I found difficult. But when I read it again, I immediately understood)
Respondents2,3,15,16,17,18,21,23,33,34, 35,37,40,41,42	*Mas madali ito, kaya mas mabilis kaming natapos pagsasagot. Malaking tulong yung mga kulay at drawings.* This is easier so we finished answering the test immediately. Colors and drawings were a big help.

It was documented that the higher scores obtained by the respondents in the earlier part of the study were products of their repetitive reading. After the post cloze-test, the outcome's interview indicated the consumers' progress as proficient comprehenders as simplified safety communication information provided the product users with a repertoire of strategies that promote and foster comprehension (Larson, 2005), thus their testimonials after the comprehension test were articulated.

Based on the pronouncement of the respondents, the study further realized that silent reading allowed the consumers to improve warning comprehension, and this is in contrary to the study conducted through sustained silent reading which merely encouraged the readers to read extensively, yet, in the end, it did not result in improved reading (NRP, 2000).

Reading is an active process that requires critical thought before, during, and after engaging the text. The study proved that reading with (their) mind as opposed to just reading with (their) mouth (Schoenbach, 1999) is a better technique in realizing the sense of the text. As second reading took place, conventional support such as a color template, signal word, legal content adequacy, and graphical representation enabled the consumers to focus their reading, monitor understanding and quickly retrieved the product warning information for safety purposes.

At some point, consumers may not comprehend a product safety message when they have low motivation and limited opportunity to process it, or when the message is complex, or when the message is viewed only once or twice, however, according to Koolen (2014) these product users are motivated to act in ways that avoid negative outcomes; they focus on responsibilities, safety and guarding against risks.

Like the method utilized in the previous chapter of this research, the second/minute spent by mother-respondents in answering the test questions were recorded. Below is the capsulated result.

Table 4. *Summary of time spent by mother-respondents in answering the cloze-test*

Product Warnings	Total Number of Words	Average Initial Reading Time	Average Second Reading Time
Medicines	680	2.66	2.0
Household Chemicals	988	3.34	2.07
Beauty Products	616	2.18	1.23
Average Testing Time	2284	8.18	5.3

The outcome of the post cloze-test marked an escalation during the initial reading time. As average adults read 250 to 300 words per minute (Ziefle, 1998), the simplified medicine product warnings were read within 2.66 minutes, a difference of 9.086 minutes from the existing warnings which recorded 11.746 in the pre cloze-test.
Likewise, the same reading amplification occurred for the revised household chemicals' cautionary messages. The reading time incurred for the revised safety message was 3.34, it recorded a variance of 6.3865 minutes from the previous 9.7295 experienced during the pre cloze-test. With the recorded reading time of 10.23 during a pre-cloze test of beauty products, the present conduct for simplified warnings marked 2.18 minutes and marked the time difference of 8.05 from the earlier examination.

In the end, the revised medicine product warnings should be read within 2.72 minutes, 3.952 for household chemicals, and 2.464 for beauty products which results displayed that the simplified cautionary information was comprehended by average adult readers.

From a prolonged minute incurred in the previous study, the current results created a noteworthy progress for consumers as their recorded minutes of reading manifested an upgrade on their comprehension level. This finding promotes that product warning that is designed to combine content and graphical illustration facilitates the attainment of comprehension goals. As there might be an overarching strategy in revising the cautionary message, according to Carson (2005) careful and slow fading of the scaffolding heightens the reading comprehension of the readers as clear and procedural texts generate an independent comprehender.

The outcome also draws attention to the inclusion of a graphic representation—whether a picture, a model, a graphic organizer, or a mental image (Carson, 2005). Marzano (2001) cited that different researchers have realized that the creation of these "non-linguistic representations" fuels activity in the brain and enhances comprehension, this is because humans store data in two different ways: words and images. Rather than only relying on traditional written or oral forms of communicating facts and concepts, the graphical representation allows the consumers to immediately decode the text and create an accurate inference. This provides the product users to have multiple avenues for accessing the information they need, hence developing comprehension as they read and learn (Marzano, 2001) about the product safety communication message.

The improved results likewise testified that the simplified product warnings brought ease with which the information is processed, thus Hoyer and colleagues (1992) call it perceptual fluency. Consumers infer that although the dominant brand is good on observable attributes it has a disadvantage on some unobservable elements (Chernev and Carpenter, 2001). The research outcome grasped that warning writers or marketers may (knowingly or unknowingly) create inferences that do not actually characterize an offering, which resulted in consumer's comprehension (Mayvis et.al, 2002) of the texts.

Evidently, decoding and comprehending the simplified product warnings is no longer a bottleneck (Therrien, 2004) for consumers. As information processing did not consume much of product user's time, it did not create a delay of thoughts, hence did not to generate a delay of actions in an emergency situation. In such way, the manufacturers did not endanger a percentage of their 'market share liability' (Klarkson,1998) and at the same time, they promote

consumer safety among product users.

Moreover, the results substantiated the necessary time allotment in responding to emergency situation, as cited in the previous part of this research, Canadian Center for Occupational Health and Safety (2014) and OSHA (2014) vitalized that postponing or delaying of treatment, even for a few seconds, may cause serious injury and the first 10-15 seconds after exposure to hazardous substance, especially a corrosive substance is critical. Hence, results disclosed that consumers exhibited effortless reading and demonstrated automatic understanding in reading the simplified cautionary texts that will lead the product users to the appropriateness of actions, particularly during an emergency situation.

4. Conclusion

The results of the cloze-test revealed that all items from the three categories of simplified product warnings incurred 100 percent amplification of scores as all consumers were categorized as independent readers.
The consumers' repetitive reading did not consume much of the mother-respondents' time in comprehending the simplified messages. It is an indication that simplified cautionary texts can help the consumers in becoming independent readers who can autonomously respond correctly to the text at hand, specifically in times of emergency or urgent situations.

The study's attainment for optimal fit (Groeben et.al, 1996) between product users and product warning texts were achieved, thus promoting and supporting the consumer's right to safety. Considering the simplicity of language and graphical representation of texts, the Philippine government can further improve the product warning mandates in the country, substantiating the comprehensibility elements necessary for product warnings. In the end, a future study on determining the readability of simplified texts should be taken into account.

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