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# A STUDY ON THE PICTURE VALIDITY FOR DEVELOPMENT OF COMPREHENSION TEST OF KOREAN ABSTRACT WORDS

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### **A Study on the Picture Validity for Development of Comprehension Test of Korean Abstract Words**

#### **Synopsis:**

Although Korean language has a very high percentage of abstract words, there is no test battery to measure the ability to understand abstract words. Therefore, the purpose of this study was to select the abstract words to be used for the Comprehension test of Korean Abstract Words(CTKAW) which can be used from school-age children to adults and to evaluate the appropriateness of the pictures representing the abstract words.

# **A Study on the Picture Validity for Development of Comprehension Test of Korean Abstract Words**

## **Abstract**

The purpose of this study was to identify the validity of pictures or drawings that showed the target abstract words for the development of Comprehension Test of Korean Abstract Words(CTKAW). A total of 31 target abstract words were examined, and the study was conducted using a survey on Google among 392 respondents who voluntarily participated in the validity evaluation. The participants were shown the picture of each abstract word and evaluated the appropriateness of the picture for the abstract word based on a 5-point Likert scale. The results of the study showed an average value between 3.05 and 4.60, which proved that the drawings were appropriate to represent the abstract words. The present study suggests that more abstract words can be added so that it can be used as a standardized testing tool.

Key Words: Korean Abstract Words, Receptive Vocabulary, Picture Validity

## **I.INTRODUCTION**

As concrete words have visual images that represent the words, the corresponding objects can easily be recalled. However, abstract words were related to thoughts or concepts and have no particular visual image, thus requiring extensive mental efforts to understand them (Lee & Heo, 2013). Adolescents and adults have greater use of abstract words (Ravid, 2006), and children with difficulties in language acquisition have less abilities in using abstract words than normal children (Scott & Nail, 2009).

Even though there are standardized evaluation tools to identify the vocabulary skills of children and adults, there are no tools to evaluate the understanding level of abstract words in Korea. Therefore, the authors of this study selected 31 target abstract words under the content validity of abstract words to be added in the Comprehension Test of Korean Abstract Words (CTKAW) from previous studies, and selected the phonetically similar words and semantically related words that are to be provided with the target abstract words (Park et al., 2017). Based on the findings of these prior studies, the purpose of this study is to identify the picture validity on the appropriateness of the target abstract words with drawings.

## II . METHOD

### 1. Participants

The characteristics of the 392 participants who have answered the surveys on the picture validity of the abstract words are shown in Table 1. The participants for the study were selected by random sampling among individuals in middle school or older.

<Table 1> Characteristics of the participants

Characteristics		N	%	Characteristics		N	%
Gender	Female	206	52.6	Occupation	Students	243	61.8
	Male	187	46.4		Professionals	61	15.5
Ages	Teenagers	35	8.9		Office workers	36	9.2
	20's	239	60.8		Housewives	18	4.6
	30's	47	12.0		Self-employed	13	3.3
	40's	34	8.7		Others	21	5.4
	50's	36	9.2				
	Others	2	0.5				

### 2. Materials

#### 2.1. Abstract words and word pair of the CTKAW

To select the target abstract words to be included in the CTKAW, 173 Korean abstract words were found by referring to study on the frequency of Korean language (Kim, 2005) in National Institute of Korean Language. Five professors in the department of Speech-Language Pathology were consulted to select the words with high frequency of use among 173 abstract words. Among these abstract words, homonyms that are difficult to distinguish semantically were excluded and we selected the words that can be presented as a picture as well as a two-syllable abstract noun. 20 professors in the department of Speech-Language Pathology evaluated the word validity by the five-point rating scale for the selected words and 31 abstract words were selected. After selecting 31 abstract words (target words) included in the CTAW, preliminary tests for selection of phonological similar words(PSW) and semantic similar words(SSW) were conducted for judgment of the types of errors of word-meaning

comprehension problems. Questionnaire surveys for 248 word pairs-124 (31 x 4) words pairs with PSW and 124 (31 x 4) words pairs with SSW-were conducted with 110 university students. Based on the results, PSW and SSW for judgment of error types of 31 abstract words could be selected. One set was comprised of six words-two words that received the highest score as PSW, two words that received the highest score as SSW, one meaningless word, and one target word-.

## 2.2. Developing the Picture of CTKAW

Out of the 31 abstract nouns selected from the study by Park et al. (2017), 50 university students majoring in speech-language therapy were given subjective surveys to describe how they will portray the abstract nouns in drawings, and the core keywords of the surveys were analyzed. Then, the core keywords were given to a professional illustrator to provide drawings that match the keywords. The authors went through a preliminary review of the drawings, and the 31 pairs of the drawings and abstract words were finally selected after editing and supplementation. The examples of the pictures are shown below (Fig. 1).

We used 31 abstract words for this study and plan to develop the CTKAW that are with one target abstract word, two phonological similar words(PSW), two semantically similar words(SSW) and one non-related word for each item of the test in the future (Fig. 2).

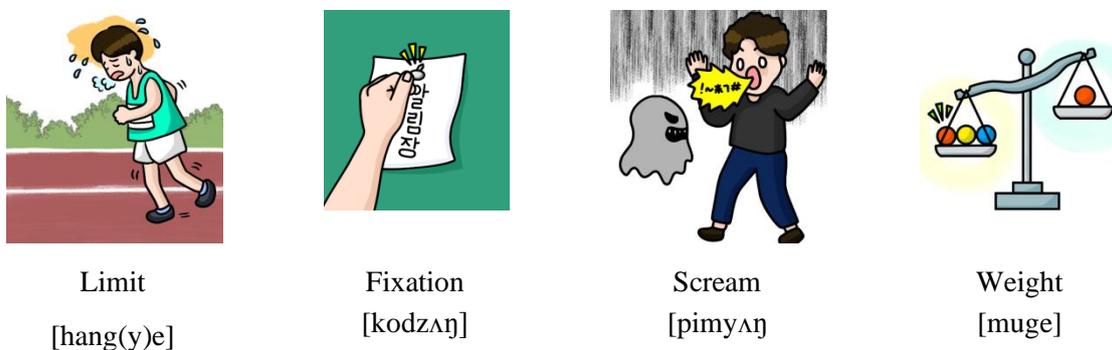


Fig. 1 Example of the drawings that represent the abstract words



Fig. 2 Example of the test

### 3. Procedure

The participants were given the drawings that represent the abstract nouns on Google surveys, and they answered how appropriate the drawings were to recall the abstract nouns. The frequency analysis of the responses was performed through SPSS ver.25.

## IV. RESULTS

Out of the 31 words, 50% of the respondents evaluated the 27 words as ‘appropriate.’ For the words ‘conflict, absorption, limit, and failure,’ 48.7%, 45.7%, 41.8%, and 32.1% of the respondents, respectively, evaluated them as ‘appropriate.’ All the 31 terms had ‘average’ or higher from at least 70% of the respondents.

## V. DISCUSSION

This study was preliminary research for developing the Comprehensive Test of Korean Abstract Words(CTKAW), and aimed to identify the appropriateness of the drawings of abstract words. The results and suggestions of this study are as follows. Out of the 31 abstract words, most of the words were evaluated as ‘appropriate’ for over 50% excluding four words

(conflict, absorption, limit, failure). Excluding the six terms at the bottom of the list, more than 70% of the drawings were evaluated as ‘appropriate’ or above.

Nonetheless, there should be improvements for items that scored low, and there should be additional validity and reliability tests for the development of a possible evaluation tool. In addition, additional selection reviews of abstract nouns as well as preliminary tests for children should be performed.

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