

## RELIABILITY AND VALIDITY OF A KOREAN EMPATHY CONSTRUCT RATING SCALE\*\*

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### Introduction

Being human means being in relation to others. Humanization means to build relations and to make contact between people. The primary goal of nurses is to provide service that helps patients to solve their problems. This goal involves a helping relationship between human(-nurse) and human(patient). Humanizing professional nursing is communicating and relating interpersonally to patients in such a manner that the patients sense warmth and acceptance and can report feeling good about their care.

The patient's sense of well being and the nurse's understanding of patient response to treatment results from interpersonal care. The interpersonal skill demonstrated by the nurse affect the quality of care delivered to the patient(Hills & Knowles, 1983). However, there seems to be a lack of concern for people as humans(Pluckman, 1978 ; Kim, 1984).

Nursing is a facilitative interpersonal process in order to help the patient(Travelbee, 1971 ; Kim, 1984, La Monica, 1981).

The nurse as a helper must know and be able to assess how nursing action facilitates or inhibits the patient's private growth(Orlando, 1961). The basic assumption of a comprehensive helping model is that all effective interpersonal processes share a common core of conditions conducive to facilitative human experience. (Rogers, 1959) Core conditions resulting from research are empathy, respect, warmth, genuineness, self-disclosure, concreteness, confrontation, and immediacy of relationships(Berenson & Mitchell, 1968 ; Truax & Carkhuff,

1976 ; Truax & Wittmer, 1971 ; Carkhuff, Kratochvil & Friely, 1968 ; Collingwood, 1969). They also found that empathy is the key ingredient.

Lopez(1983) and Smith(1982) indicate that the subject of interpersonal skills is included in the nursing curricula and the nursing students have intellectual understanding of interpersonal skill, but they are not sure how to apply it to the clinical setting. Eggert(1975) and Kahn (1979) emphasize that application of these skills to the clinical situation must be taught, even if teaching the counselor role is difficult for the professor.

Some nursing researchers suggest that empathy is a necessary or key component in the nurse's helping behavior (La Monica, 1981 ; Kim, 1984 ; Travelbee, 1971 ; Stetler, 1977 ; Kalish, 1971). Also, La Monica(1981) suggests that developing of an instrument to measure empathy is a precedent condition to the methods of assessing and teaching of empathy.

Following Theodore Lipps' use of "Einfühlung" in German in 1908, Rogers(1959) first defined empathy as the ability of the helper to perceive the internal frame of reference of another with accuracy, and with the emotional components and meanings which pertain thereto, as if one were the other person, but without ever losing the "as if" condition. Since then, a basic problem underlying empathy research has been varying definitions and measures of the phenomenon. Some emphasize the affective nature of empathy(Mehrabian & Epstein, 1972), others emphasize the cognitive nature(Mead, 1934), or multicomponents(Goldstein & Michael, 1985).

Concerning nursing phenomena, the nurse has the role as an initiator to solve the patient's problem. Nurses need

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to know how to perceive the patient's feeling and to reflect to the patient so that the patient will be sure that the nurse understands the patient's situation. So empathizing to the nurse is more than only affective or cognitive. It's more rational to emphasize multi-component phenomena.

La Monica(1983) defines empathy as a central focus and feeling with and in the patient's world. It involves accurate perception of the patient's world by the helper, communication of this understanding to the patient, and the patient's perception of the helper's understanding.

Because of the need for further research on empathy and for nurse empathy training programs, the decision was made to translate La Monica's Empathy Construct Rating Scale into the Korean language. The use of a tool for research in a population different from that on which it was originally developed requires new proof of its validity and reliability(Nunnally, 1978). This is especially important when translation to another language occurs, because the process requires more than just changing words. It requires inspecting the cultural norms and values that underlie the meanings of the concepts the words represent.

#### Purpose

This study had one major purpose. This was to determine if an American constructed empathy questionnaire had been meaningfully translated into Korean. As a part of this process, how Korean people perceive empathy was explored, also.

#### Methods

The methods used in establishing the reliability and validity of the Korean Empathy Construct Rating Scale (KECRS) were a combination of concept analysis, tool development, and cross cultural procedures. The steps taken in the development and testing of the KECRS are discussed in the order in which they were performed. Sometimes, a specific step was useful in accomplishing more than one of the procedures named above.

Step 1. Concept Analysis. An essential part of any tool development study is careful attention to the concept, or construct, the scale is said to measure. In this

situation, empathy was the concept to be measured. A first step was study of selected literature on empathy between nurses and patients. Because a translation of an existing empathy scale into Korean was planned, an important part of this study was attention to the question of whether empathy defined from the American perspective is similar to empathy defined from the Korean perspective. After careful consideration, empathy was accepted as a cross cultural phenomenon. Validation of this decision was made through a two-stage discovery process about Korean empathy.

First, 3 Koreans fluent in Korean and English were asked to describe "empathy." They were given a paper with four questions about empathy. The instructions were in Korean, but they included both the English word "empathy" and a Korean expression "Kamjang e ip." Question one was, "What is the meaning of empathy to a Korean?" All three said that empathy is the "same way of thinking and feeling" and "understanding my situation." The second question, "What is a commonly used expression for empathy?" was answered by all, saying, "I think so, too." The third question asked them to describe an incident that shows empathy. They said "when people agree with my opinion with show of non-verbal expression. The final request was to describe an incident that showed lack of empathy or nonempathy. The response was "when people are not responding to what I am saying" or "insisting on their own opinion." All the responses to these questions validated that empathy is an existing concept in Korean culture, and that its general meaning is much the same as in the United States. However, it was decided that "Kamjang e ip" was an abstract expression used mostly by highly educated persons.

In the second stage of the discovery process on the meaning of Korean empathy, 8 Koreans were asked the same four questions in Korean, with the English "empathy" removed from the instructions. The reason for asking entirely in Korean was to discover methods of expression and differences in thought that would not have been evident when the English equivalent was used to discuss "Kamjang e ip." The answers to the first question about the meaning of empathy included "It is same way of

thinking", "understanding of one's deep feeling", and "communicating with telepathy." The question about commonly used expressions of empathy resulted in "I think so, too," "from mind to mind," and "telepathy." The request for an example of empathy was answered with "telling the same experience that I had", and "same feeling about my value of life." Examples of lack of empathy were "insisting on one's opinion", "not an open-minded person", and "ego-centric person."

From this two-stage exploration, the conclusion was made that the meaning of empathy to Koreans is similar to the meaning of empathy to Americans. However, the way of expression of the meaning is different. "Mind to mind" and "telepathy" both express Korean meaning when the American meaning is better expressed as "heart to heart." It was decided that translation of an existing American scale was acceptable. If done carefully. The La Monica Empathy Construct Rating Scale(1983) was chosen for translation because it had demonstrated reliability, discriminant validity, and a unidimensional factor structure. The single factor structure was believed to be an important aspect of the scale, because this means that it measures a simple concept. Translation of scale items conveying a single concept was believed to be a more valid approach for a tool representing the abstract phenomenon of empathy.

Step 2. Tool Translation. Confidence and clarity in interpretation of cross-cultural study results can be strengthened if the research goal and translation strategy correspond(Jones, 1987). In the development of the KE CRS, the goal was to develop a translated scale that had the same connotative, or suggested, meaning as the American version. A series of steps were taken to assure that the translation consisted of comparable meanings, rather than translated words alone. The original wording in Korean and revision of the original translation were based on input and feedback from native Koreans who were fluent in both Korean and English and who resided in Austin, Texas, at the time of the study.

The actual translation and its initial verification was performed in a two step process. First, a Korean clinical psychologist who is a doctoral candidate was asked to translate La Monica's tool into Korean. The second step

was taken to judge the accuracy of this translation. Nine Korean professionals who were graduate students at the University of Texas at Austin in nursing(4), sociology (1), journalism(1), advertising(1), and psychology(1) were used in this step. They were given a copy of the La Monica tool with a corresponding Korean translation beside each of the 84 scale items. They were asked to compare the meaning for each scale item between La Monica's tool and its Korean translation and to respond on a three point scale. They were asked to check Response 3 when they believed the translation was "appropriate", Response 2 when the translation was "just so", and Response 1 when the translation was "not appropriate." They were also asked to write any comments beside items or to modify items, if they wished.

The numerical value of the response(1, 2, or 3) given to each item by the nine Korean respondents was totaled. It was possible for each item to have a minimum score of 9 or a maximum score of 27. A high score indicates agreement about the appropriateness of the translation by most respondents. Twenty items that had less than 22 points or had comments about the meaning in the comment column were discussed by this investigator and an American nursing colleague.

Discussion of the American and Korean meanings of these items was necessary to increase the validity of the translation. Because of this discussion process, the Korean translation of 13 items was corrected. In addition, 7 items were accepted as translating the appropriate meaning. Two examples of translation corrections explain how carefully the translation must be done to show the original meaning. The American version of "Treats other people as if they were objects" was not understood by the 9 Koreans. Discussion about Western view of differences between subject(humans) and object(things) resulted in the decision to express the meaning as "treating others as not human."

The meaning of the American concept of "individual" affected translation decisions on two items. In the American culture, much emphasis is given to a person as a being separate from family, friends, and work. The traditional life and culture of the Korean people originates from village community. The roles and behavior of Ko-

re in village people were interrelated as a complex unity, The individual is seen as an actual or potential part of a group and not as an autonomous unit (Han, 1982) For the American version "attempts to communicate with each person on an individual basis", the Korean translation emphasized the individual as separate from others by using "independent individual." Another item, "Does not respect the identity of others" was translated to "Does not respect individual differences of others" because the Western perspective of identity being separate from one's societal roles was not understandable.

A last step was to ask 5 Korean persons who had at least a baccalaureate degree to review the corrected translation. They were given questionnaire that listed the 84 items in Korean and English and asked whether each item had the same meaning in the English and Korean languages, and whether each item was understandable to the Korean lay (nonprofessional) person. All five agreed that the translated items had the same meaning in Korean and English and that they were understandable to the Korean lay person. Finally, the Korean ECRS was ready for reliability testing.

The Korean ECRS has 84 items : 49 items are intended to measure well-developed empathy, and 35 measure lack of empathy. The instructions ask the subjects to respond to each item according to the degree to which they perceive themselves to be like or unlike the statement. Possible responses cover 6 intervals, ranging from "extremely like" to "extremely unlike." The instrument is scored by first reversing the scaling of the scores on the negative items and then adding all of the item scores to yield an overall empathy score. The highest possible score (504) indicates complete lack of empathy, and the lowest possible score (84) indicates well-developed empathy. Step 3. Reliability Testing. The subjects for the reliability testing were adult native Koreans (Korean is their primary language) who had been residing outside South Korea less than three years. Since the purpose of this study was to determine if the American-constructed questionnaire had been meaningfully translated into the Korean language, persons with a primary identification with Korean, rather than American or other cultures, were deemed necessary subjects. The primary

source of such subjects were Korean students and those student's families at The University of Texas at Austin.

Forty-five subjects were recruited through groups in the Korean community, such as Korean church groups, the Korean student's association, and informal networking. The investigator, who is a native Korean, explained to the subjects that the accuracy of the Korean translation of a questionnaire on empathy must be determined and that their participation in this process would be of great assistance. A written consent form (in English) to participate was verbally explained in Korean before subjects were requested to sign it.

Once written consent was obtained, each subject was assigned an individual code number and asked to complete the questionnaire and demographic profile. Approximately three to four weeks after the first questionnaire was completed, the same subjects were asked to complete the questionnaire again. Five subjects out of the 45 failed to complete the questionnaire a second time.

Of the 40 subjects who completed the questionnaire both time, 90% of them were between the ages of 24 to 33 : the mean age was 28.9 years. All subjects were married, and 24 were female. The average length of stay outside South Korea was 18.3 months. The lowest educational level was a baccalaureate degree (47.5%), and the rest had graduate degrees or were graduate or doctoral students. Twenty-one were housewives, and the others were students with majors in engineering (22.5%), business (7.5%), natural science (7.5%), and education (5%). The majority (67.5%) said they felt "just so and so" about living outside Korea, and they seemed to like being outside Korea only for educational study. Most (75%) were Christian, and 97.5% were from Seoul.

The completed questionnaires were computer coded, frequencies were computed, and reliability coefficients for internal consistency (Cronbach's alpha) and test-retest stability (Pearson's r) were calculated using SPSS-X, a computer package of statistical programs (SPSS-X). In addition, the intercorrelation matrix of all items was inspected.

### Results

Two kinds of results are presented. The first results

are about the reliability and validity of the Korean ECRS. The second results are the findings about empathy perceived by the Korean subjects.

**Reliability and Validity.** The 84 item Korean ECRS was found to have high internal consistency and stability. Cronbach's alpha was .9553 at the first administration and .9666 at the second administration. These indicate an overall homogeneity of the scale items. Test-retest reliability at 3 to 4 weeks was .7619 ( $p=.000$ ). Because the first and second administrations had similar results, the first administration results were used for purposes of further scale assessment. Although these reliabilities were good, the intercorrelation matrix showed many negative or zero correlations between the scale items. Also, the item-to-total correlation values of 26 items were at or below .35; 16 of these were at or below .30. These correlational values indicate the degree of relationship between response on an individual item to the total score. Low values are not desirable in tools. This is because the researcher cannot predict with some accuracy the total scale score from the individual item score when the correlation is low. (Nunnally, 1978)

Two additional alpha coefficients were calculated. One was for all items (68) except those with item-to-total correlations of .30 and below; the other was for all items (58) except those with item-to-total correlations of .35 and below. In both cases, the resulting scales demonstrated alphas of .96. The Pearson  $r$  for test-retest stability computed for both shortened scales remained stable at .76.

Elimination of the 16 less reliable items decreased the number of negative correlations in the intercorrelation matrix, and no zero correlations were found. Three correlations (-.24, -.17, and -.10) were between scale items that had reverse scoring or were judged to have slight back translation problems. The other 33 correlation values were close to zero, but negative (-.096 high; -.005 low). Of these items, 12 were items that were judged to have slight back translation problems. An American colleague and the investigator discussed the items with negative correlations. In most cases, a complex concept was to be conveyed, the American meaning was not precise, or the item was American culture-bound.

Validity of the Korean ECRS was checked by back translation. In back translation, an independent person knowledgeable in both languages is asked to make a translation back into the original (source) language without consulting the original version. Then the back translated version and the original version are compared for accuracy in translation. If both versions are comparable, the translation into the second language is successful (Jones, 1987). A native Korean who was a doctoral student in English literature was asked to "back translate" the 84 item Korean ECRS. Then an American scholar who has studied and researched empathy judged the accuracy of the back translation of the 58 most reliable items. Only one of the 58 items was judged to have a large difference in meaning; eight others had very small differences in meaning; the remaining 49 items were judged to have the same meanings.

**Empathy Findings.** In this sample of 40 native Koreans, the total mean (average) empathy score for the 58 item scale was 131.88. Possible mean score ranges are 58 (well-developed empathy) to 348 (non-empathy). The lowest item mean score was 1.53, "Feels that the opinions and values of others should not be heard, much less respected. This item is almost the same as Koreans in the discovery process said empathy was. The highest mean score for any item was 3.18, "Reaches out and touches another person in a soothing manner when it seems right.

A high mean score for this item is not surprising because of Korean cultural rules for touch. The mean score for all the items was 2.27. Two items with means of 2.30 are given here. "Offers no support to others." (reverse scored) "Listens thoughtfully and patiently to others."

These findings describe Korean perceptions of empathy, and they give validity to the translation.

#### Discussion

Because of its stability and high internal consistency, the 58 item Korean ECRS is considered the most efficient version. The .96 alpha for internal consistency is identical to those reported by La Monica (1983). The care taken in developing the translation and the success of the back translation are evidence of the validity of the Korean

ECRS. The 58 item Korean ECRS is the presently recommended version for use. Further study with native Koreans residing in South Korea should be done as a final check of the translation and its reliability. Sufficient numbers of subjects should be obtained to allow factor analysis for the purpose of determining construct validity. The investigator can be contacted for a copy of the complete scale.

This study has shown that Korean empathy can be measured with a Korean translation of an American-constructed questionnaire. Also, Korean empathy is perceived in the expected way. Empathy is a usable concept for education, training, and research in Korea.

Culturally conditioned behavior may contribute to perception, with the result being a culturally influenced difference in perception of similar phenomena. Cross-Cultural study about certain phenomena, such as empathy, is necessary to understand the behavior better. Scherer, Wallbott & Sommerfield(1986) found a highly significant difference in the number of empathic experiences between the countries studied. There may be a difference in perception of empathy, especially between Western and Oriental countries. Cross-cultural research using valid and reliable tools is needed.

Finally, words and expressions represent thoughts and ideas. The words or expressions carry meaning. Accurate translation is the changing of the words of one language into the words of another language without changing the meaning of the idea or concept those words represent. For this reason, accurate tool translation is a painstaking process. Careful attention to the concepts that are the basis for the tool and to the way those concepts are expressed in language is required. Development of tools to measure psychosocial, culturally-influenced concepts require more care than tools measuring physiological concepts.

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- 국문요약 -

## 한국인의 공감 측정 도구에 관한 연구

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내담자와 상담자간의 관계형성 촉진에 관한 연구가 C. Rogers에 의해 시작된 이래, 돕는자 또는 상담자가 가져야 할 주요 조건으로서 공감, 존중, 인정, 확고부동함, 진지성, 자기노출, 직면반응 등을 들고 있으며 이중 들 또는 세 요소 등을 선택하여 그 효과를 보고 있으나 역시 가장 주요한 요소로써는 공감을 들고 있다. 공감에 관한

연구는 그 본질의 정서적 측면, 인지적 측면 또는 복합적인 측면을 강조하면서 시도되고 있으나 간호원은 돕는자로서 환자의 문제해결을 위한 전수자적 역할을 해야한다는 점을 고려할때 간호현상에서의 공감에 관한 연구는 복합적인 측면을 강조하는 공감이어야 한다고 생각한다. 간호학자들도 간호원의 돕는 행위중 주요 요소로써 공감을 들고 있으며 특히 Lamonica는 공감측정을 위한 도구를 개발하였으며 공감이란 환자가 간호원이 환자의 입장을 이해하고 도와준다는 사실을 인지하고 그 고마움을 표현하는 것을 의미한다고 하였다.

본 연구자는 간호원-환자간의 촉진적 관계형성을 위한 교육내용 개발에 대한 기본 연구로써 한국인의 공감 정도를 측정할 수 있는 도구개발의 중요성을 느껴 Lamonica의 공감측정 도구를 번역하게 되었다. 본 연구의 구체적인 목적은 미국문화권에서 사용되는 공감측정 도구가 한국인에게 적합하고 의미있게 번역되었는지를 확인하고 또한 한국인이 인지한 공감에 대한 탐색을 하는데 있다. 위 목적달성을 위하여 횡문화적 연구과정을 통한 개념분석, 도구 개발에 대한 통계분석을 시도하였다.

한국인의 공감 개념 분석을 위하여 미국 텍사스 오스틴에 있는 한국인에게 공감의 뜻, 동의어, 어떤 경우에 공감을 느꼈는지, 어떤 경우에 비공감적임을 느꼈는지를 묻은 결과 한국인이 갖는 공감의 의미는 미국인의 것과 유사하지만 그 표현방법의 차이가 있음을 알게 되었다. 따라서 두 국가에서 사용되는 공감의 의미가 유사하고 또한 간호학자인 Lamonica가 개발한 공감측정 도구를 한국인에게 사용하는데 무리가 없을 것으로 판단되었다. 도구의 번역은 텍사스 주립대학 박사과정 지원생인 임상심리 학자에게 의뢰하고 그 정확성을 판단하기 위해 인간을 대상으로 하는 학문을 연구하는 한국인(간호학, 사회학, 신문방송, 광고학, 심리학 전공)에게 그 정확성 여부를 물어 최고 27점, 최저 9점중 22점 미만인 문항에 대해서는 미국 간호학자와 의논하여 수정·보완하였다. 그 후 일반인으로 간주되는 한국인에게 그 도구의 이해 여부를 확인한 후 통계분석을 시도하였다. 대상자는 미국 텍사스 오스틴에 거주하면서 한국을 떠난지 3년 미만인 성인 45명을 대상으로 하였다. 2차에 걸친 자료수집 과정상 5명의 자료는 분석 불가능하다고 판단되어 총 40명의 자료를 spss-X를 이용하여 cronbach's alpha, test-retest stability, intercorrelation matrix 분석을 통한 결과는 다음과 같다.

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- 1) cronbach's alpha는 1차 .9553 2차 .9666으로써 문항의 동결성을 보였고, 3, 4주 간격으로 행한 test-retest stability는 .7619( $p=000$ )이었다.
- 2) 반면에 intercorrelation matrix에서는 역관계 또는 무관계를 보였으며 84문항중 26문항의 item-to-total correlation값이 .35미만이었고 이 중 16문항은 .30미만이였다. 이들을 제외한 68문항과 58문항의 각각의 item-to-total correlation값은 .96이었고 test retest stability역시 .76으로써 84문항 전체에 관한 값과 유사하였다.
- 3) 역상관 또는 무상관의 값을 보인 문항을 미국 간호 학자와 재검토한 결과 본래 문항에서의 단어 의미가 복합적이거나 불분명한 것이었고 또는 미국 문화권에서 사용되는 특이한 용어임을 알 수 있었다. 따라서 한국인 공감 측정 도구의 타당성을 높이기 위해 역통역을 시도하였다. 그후 공감에 관한 연구

를 하고 있는 미국 학자에게 그 정확성을 판단하여 최종적으로 58문항이 한국인 공감측정 도구로서 적합하다는 판단을 하였다.

위 결과를 통한 결론 및 제언은 다음과 같다.

인간의 행위는 조건화된 문화권에 따라 다를 수 있으며, 이것은 같은 현상을 인지하는데도 영향을 미치게 되며 본 연구와 같이 어떤 현상에 대한 횡문화적 연구는 그 행위를 이해하는데 도움을 준다. 그러나 한국에서 간호에 대한 연구가 한국적 토착화 과정에 있으므로 그 연구 방법이나 도구사용이 서구의 것을 도입해야 하는 입장을 고려할때 도구번역 과정은 원래의 의미나 함축성을 내포한 번역이어야 하며 소홀히 해서는 안될 과정임을 재확인되었다. 또한 추후 연구로써 다양한 계층의 다수를 대상으로한 한국인 공감 측정 도구의 타당성을 재확인해야 하며 요인분석을 시도할 필요성이 있다고 사려된다.