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I am submitting herewith a dissertation written by Robin C. Armbrister entitled "A Cross-Cultural Comparison of Student Social Attributions." I have examined the final copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Education.

R. Steve McCallum, Major Professor

We have read this dissertation
and recommend its acceptance:

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Dean of the Graduate School

A CROSS-CULTURAL COMPARISON OF STUDENT SOCIAL ATTRIBUTIONS

A Dissertation
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Dedication

I dedicate this dissertation to Eddie. Your well-timed shoves kept me moving. I also dedicate it to Mom, Dad, Amanda, Lauren, and Leslie. Without all of you, I couldn't have done this.

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I would like to express great appreciation to Steve McCallum, my committee chair, professor, boss, and confusion-lifter. Your invaluable help and endless patience got me through this hoop. I would further like to thank my committee, Donald J. Dessart, Luther Kindall, and Richard Saudargas for making it as painless as possible. And much gratitude goes to Dr. Hee Do Lee, without whose interest (and data!) this dissertation would not have happened.

Abstract

One hundred sixty American and 397 Korean elementary school children were administered the Student Social Attribution Scale (SSAS), designed to assess students' explanations for social successes and failures; the SSAS assesses individual differences in social attributions. A Korean version of the SSAS was developed and used to compare the social attributions of Korean and American fourth and fifth graders. The American and Korean instruments' internal consistency reliability were determined (r's ranged from .56 to .86 for the Korean instrument and .62 to .88 for the American instrument). The means from both the American and Korean SSAS versions on the eight scales (success and failure ability, effort, luck and task difficulty indices) and global scores (e.g., internal, external) were compared. Based on the literature, Korean children should have shown greater Failure Effort scores than the American children and Americans should have shown higher Success Ability scores. In fact, Korean children did show significantly higher ($p<.005$) Failure Effort scores and American children showed significantly higher ($p<.005$) Success Ability scores. Apparently, Koreans are more willing to accept responsibility for failure than American students.

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Definition of Terms

Social Attribution:	Assignment of cause to social successes and failures
Internal Attribution:	Ability, effort
External Attribution:	Luck, task difficulty
SSAS:	Student Social Attribution Scale
Cronbach's Alpha:	A measure of internal consistency (reliability) of an instrument
Bonferroni Correction:	Mathematical adjustment for multiple comparisons; makes requirement for significance more stringent
Effect Size:	The difference between means in standard deviation units
Korean sample:	397 Korean 4^{th} and 5^{th} graders from Taegu, Korea
American sample:	160 American (Caucasian (126), Black (17), Native American (5), Hispanic (1), Mixed (6), and Other (5)) 4^{th} and 5^{th} graders from Knoxville, TN

Chapter I

PURPOSE AND LITERATURE REVIEW

The initial purpose of this study is to compare Korean and American students' attributions for successes and failures in social situations. Another goal was to assess the psychometric properties of the instrument, the Student Social Attribution Scale (SSAS), and specifically to determine internal consistency of both the American and Korean versions. Based on the literature, it was hypothesized that Korean children internalize responsibility for failure to a greater extent than do their American counterparts.

Attribution Theory and Research

"Now it is plain that whatever belongs to nature is not in our own power, but exists by some divine causes in those who are truly fortunate" (Aristotle, in Ozmon & Carver, 1995). As suggested by the quote attributed to Aristotle, people have always searched for causes for their own and others' behavior. And many, like Aristotle, believe that causes exist within the individual. Others believe that causes reside in the environment (e.g., Skinner, 1938), and some believe that causation is determined by an interaction of the environment and the internal will and that certain thoughts mediate outcomes (e.g., see Tolman's S-O-R model, 1932 and, more recently Ellis, 1962). Heider (1958) developed the first explicit theory of attributions as mediating variables for social outcomes with his common sense psychology, thereby making naive psychologists out of lay people. According to Heider, individuals use qualities such as similarity and proximity to assign causation. For example, when two events occur together (proximately), one is often perceived to be the cause of the other. Further, Heider

hypothesized that an internal attribution - to the person - is more likely than an external attribution - to the situation, and that 'ego-protective' attributions are common (Heider, 1958).

Little systematic research on attributions occurred until Weiner (1986) helped to modernize and extend Heider's theory, categorizing attributions such as luck and ability into one of three dimensions: internal or external, stable or unstable, or controllable or uncontrollable. In many studies, most of which required subjects to imagine or remember success and failure scenarios and assign causes to them, three factors emerged repeatedly: ability, effort, and task difficulty. These studies primarily attempted to ascertain a person's general attributional style that would hold true across situations. For example, a person might tend to attribute bad events to lack of ability and good events to an easy task. Some relevant findings have implications for sex differences (e.g., males are more self-enhancing, females more self-effacing (Burgner & Hewstone, 1993)), development of a learned-helpless style along with the related concepts of optimism/pessimism (i.e., internal and permanent causes for good events result in optimism and internal permanent causes for bad events result in pessimism (Seligman, 1991)), and development of educational implications (e.g., students with more internal attributions for success use more effort in school (e.g., Bell, McCallum, Bryles, Driesler, McDonald, Park, Williams, 1994; Weiner, 1986; Marsh, 1984)).

Academic Attributions

Attributions appear to be important for motivating children in school. For example, in Marsh, Cairns, Relich, Barns, and Debus (1984), results showed that high-achieving students attributed their success to internal factors, such as ability and effort, to a greater extent than low achieving students. Bell et al. (1994) found similar results, demonstrating that low achievers attributed their math failures to their lack of ability to a greater extent than high achievers. Likewise, low-achievers attributed their reading success to external factors.

Social Attributions

There is little research exploring the relationship between social outcomes and social attributions; the limited research shows that attributions may be an important determinant of self-concept. For example, Marsh (1984) developed the Sydney Attribution Scale (SAS), based on his multidimensional hierarchical model of self-concept, to assess attributions for school-related social situations. In 1995, Bell and McCallum developed the Student Social Attribution Scale (SSAS), a measure of individual differences in social attributions; it correlated significantly with factors on established measures of self-concept, such as the Self-Description Questionnaire ((SDQ; e.g., Success Effort/Total SDQ: $r = .36$, $p<.01$) and the Social Skills Rating Scale (SSRS; e.g., SSAS Success Effort/SSRS Sociometric: $r = .42$, $p<.01$).

In the above-mentioned study, Bell and McCallum also compared the students'

attributions with sociometric ratings and a social functioning measure. In addition to the SSAS, students were asked to choose three classmates they liked most and three they liked least. Two scores were calculated, Social Preference (SP; liked most minus liked least) and Social Impact (SI; liked most plus liked least). For the social functioning measure, students filled out the student form of the Social Skills Rating System (SSRS). The SSRS is a self-report measure of social skills, on which students rate the frequency of 34 descriptions of social behaviors (e.g., "I say nice things to others when they have done something well"). Students who had high internal scores for success events on the SSAS tended to have higher SSRS and SP scores, and students who had high internal scores for failure had lower SSRS and SP scores. These results indicate an apparent link between attributions and social skills (Bell & McCallum, 1995).

Culture and Attributions

The research linking cultural influences to attributions is not clear. Recently, considerable attention has been paid to the differences between American and Asian attributions for success and failure on school tasks (Bond, 1988). Since Weiner's first studies of attribution, there has been great interest in cross-cultural academic attribution, focusing mainly on the growing discrepancy between Asian and American students' performance in American schools. At first glance, findings have generally supported the stereotypical view - that Asians have attributional styles that reflect their collectivist culture (e.g. Ichikawa, 1986). One consistent finding is that Asians value effort a great

deal, often more than ability (Mizokawa & Ryckman, 1990; Tuss, Zimmer, & Ho, 1995; Salili, Maehr, & Gillmore, 1976; Ng, McClure, Walkey, & Hunt, 1995). This makes sense from the collectivist point of view - you should work hard to benefit your family or the state.

Some studies have found significant correlations between effort attributions and academic achievement. For example, Whang and Hancock compared Asian-American and Non-Asian American students' motivation and mathematics achievement. Fourth, fifth, and sixth grade students were questioned about their beliefs about their ability, perception of their parents' beliefs, causal attributions of academic success and failure, and reasons for engaging in the study of math. They found that Asian students mainly used lack of effort as their explanation for failure. Caucasian students "distributed responsibility more evenly across the options" (Whang & Hancock, 1994). For success, Asian students more often gave credit to a kind teacher or luck, (external factors) and were more likely than the Caucasian students to say they did not know why they had done well in math. This seems to support the general belief that Asians, given the choice, will give credit for success to the community (Ichikawa, 1986), and that Americans will spread blame more evenly across internal and external factors.

Tuss, Zimmer, and Ho assessed relationships between academic underachievement and attributions for success and failure among Caucasian, Chinese, and Japanese students. The instruments (Culture Fair Intelligence Test and a mathematics achievement test developed for the study) were translated from English into Chinese and

Japanese, back-translated into English, and back again into the Asian languages. Open-ended written responses to questions about the subjects' explanations for mathematics success and failure assessed attributions. Results showed that culture was the most important factor in determining attributional patterns for success and failure. As predicted, both Asian cultures emphasized effort more than the Americans, who emphasized ability more than the Asians. US students seemed to feel less control over failures than their Asian counterparts, blaming hard tests or low ability for their academic failures, more than lack of effort. According to the authors, this reflects "a widely held belief among American students that performance outcomes are not reflective of expended effort" (Tuss et al., 1995). Interestingly, Americans did more poorly than Chinese or Japanese on the mathematics achievement test. The authors conclude "the refusal of American students to accept responsibility for poor performance does not serve them well" (Tuss et al., 1995).

One aspect of culture that contributes to these results is the American culture's individualism - every person for himself - and the Asian culture's collectivism - every person for the common good (Crittenden & Bae, 1994). Because of their individualism, Americans may be too quick to take credit for their successes and pass the blame for their failures to others, and because of their collectivism, Asians may be too quick to take on the blame for their failures and pass credit for success to others. Korea is often ranked highest among Asian countries in collectivism and the US is ranked highest in

individualism (Crittenden & Bae, 1994). In terms of Attribution Theory, Americans should be relatively more internal for their successes and external for their failures, and Asians should be the opposite, particularly internal (effort-oriented) for failures (Fletcher & Ward, 1988). Recent research, mostly on academic attributions, is finding that the pattern may not be so simple. For instance, consistent with this pattern, Holloway (1987) found that Japanese children and parents cited effort as the most likely cause of school achievement, whereas Americans in the study cited ability the most. Holloway referred to the Japanese culture's more cooperative achievement situations and reward structures as cultural characteristics that contribute to this result. Choi, Bempechat, and Ginsburg (1994), assessed the relationship between parental socialization and attributions, and found that attributional patterns changed with age. In their study, Choi et al. found that Korean American fifth and sixth graders scored significantly higher on ability attributions for academic successes than Caucasian students. The Korean American students believed bad luck was the primary cause of failure. The same Korean American students' attributions were assessed again when they were ninth or tenth graders. Their attributions for successes had changed to include more external factors than before. For failures, the students used lack of ability or lack of effort significantly more than in the fifth and sixth grade.

Socialization and Attributions

An important part of all personality development is parenting. In the literature, there are large differences between American and Korean parenting. Again the

continuum of individualism and collectivism seems descriptive of these differences. The goal of most American parents is to help their children to gain independence, for children and parents to succeed without each other. Korean mothers, from the minute they find out they are pregnant, tend to live more for the baby. There are strict rules, called *t'aekyo*, for diet and behavior of pregnant mothers in order to provide the best possible chance for the baby (Kim & Choi, 1994). Two features of the mother-child relationship, indulgence and devotion, are the driving forces of the relationship. Unlike American mothers, Korean mothers are not as concerned with consistent discipline. They at turns ignore or cover up their children's faults and try to teach the correct behavior. Typically, Korean mothers are totally enmeshed with their children, achieving their outside-the-family success vicariously through the children. Interestingly, in a study of adolescent perception of parental discipline, Korean children saw the strictness of their parents as loving and a sign of low neglect. Many American children do not seem to feel that way (Rohner & Pettingill, 1984, in Kim & Choi, 1994).

Individuals within the two countries differ on individualism and collectivism and on parenting styles, and both seem to contribute to attributions. A child who believes in independence and that strictness is only for bad behavior may have the typically American style: internal for success and external for failure - a more individualist pattern. On the other hand a child that sees his mother live through him and learns to serve his family first should have the Korean style: internal and effortful - a more collectivist

pattern (Choi et al., 1994).

Within this collectivist philosophy, hard work and achievement are expectations the Korean culture increasingly places on its youth as the country works through its transition from traditional moral values to modern achievement values (Chung, 1991). Schools in Korea reflect collectivism as well. Curricula for public schools are determined primarily by the national government, and local boards implement the programs with little leeway, but the local government can choose to emphasize local issues. For example, in Taegu, the city from which this study's Korean sample was taken, the industry is textiles, so certain classes are tailored to focus on that subject (Lee, personal communication, May 6, 1998). Community awareness is built into the curriculum.

In a study assessing the relationships between parental socialization and academic achievement, Choi et al. (1994), found that elementary-aged Korean-American children demonstrated ability attributions for success when they were in fifth and sixth grades, but effort attributions for both success and failure when they were in high school. Mordkowitz & Ginsburg (1987) found that parents of Asian-American students held effort to be the most important factor in school success, and passed that belief along to their children. Although these studies were with students in American schools, the results are similar to studies with Korean students (i.e., Tuss et al., 1995). In order to promote perseverance, Korean parents teach their children to work hard, but experiences teach children that a combination of effort and ability will help them succeed.

Similarly, when Asian-Americans were compared with Caucasian-American

fourth, fifth, and sixth grade students, results showed that the Asian students saw their parents as less happy with their math performance (more strict), and used effort attributions more than other causes, such as luck or a difficult test. They were not as satisfied with their own math performance (ability) as the Caucasian-American students, even though it was superior (Whang & Hancock, 1994). There is very little in the literature that addresses these issues for *social* attributions. This study will assess whether these patterns hold true for social attributions as well. In particular, Korean children were expected to use more internal (effort) attributions for failure situations than American students and Americans were expected to show higher internal (ability) attributions for success.

Limitations of Cultural Overgeneralization

Common practice when researching cultural differences between samples from an Asian country and samples from America is to assume that Asian countries are similar enough to allow generalizations across countries (Crittenden & Bae, 1994, Mizokawa & Ryckman, 1990). Individuals in different Asian countries vary in many important characteristics, including collectivism, self-effacement, and general attributional patterns (Crittenden & Bae, 1994). Even so, some studies show evidence to support some "cross-country" generalizability of attributional constructs (Schuster, Försterlung, Weiner, 1989). Also, cross-cultural studies often employ theories of social psychology, including attribution theories, that are vastly American, white, and male in origin and

focus. It is easy to fall into the trap of ethnocentrism, forgetting that other cultures may not have similar values. One must be careful defining Asian students' behavior based on Caucasian theories (Jahoda, 1988). There is no concept exactly like Attribution Theory in Korean culture (Choi & Choi, 1992). Results of the present study are discussed in terms of both Attribution Theory and Korean social practices.

On the other hand, there is some research to support conceptualizing and assessing cross-cultural differences in attributions. Chandler & Spies (1992) used a semantic differential to assess how 7 cultures conceptualized attributions. Subjects rated 11 attributions on dimensions of locus, stability, controllability, predictability, and globality. The subjects from most of the countries in the study (China, France, Germany, Hong Kong, Israel, Spain, and the US) ranked the attributions similarly.

Individual Differences

When planning an intervention for a student who is having difficulties, it is not very useful to know that American kids in general often have internal loci of control for success and external loci for failure (Crittenden, 1983). What would be more helpful to know is the attributional style of the particular student, which might affect the amount of effort he exerts on school tasks (Gagne, Yekovitch & Yekovitch, 1993). Unfortunately, many instruments available to assess individual attributional differences are lacking in psychometric rigor.

One promising instrument, designed for use with students, is the Self-Description Questionnaire (SDQ; Marsh, 1988). The SDQ was developed to assess individual

differences in both academic and non-academic attributions. The Peer Relations subscale on the SDQ closely resembles the concept of social attribution. The SDQ was standardized on Caucasian Australians and is not appropriate for use with American students. Other scales are available, but all have limitations. For example, the Attributional Style Questionnaire (ASQ; Peterson, Semmel, von Baeyer, Abramson, Metalsky, & Seligman, 1982) is useful but employs a forced-choice format. That is, results might be more extreme because subjects are required to choose one of two answers, with no middle option. The ASQ also yields relatively low reliabilities on some individual dimensions (internal/external, stable/unstable, and global/specific). There is a new version developed by Dykema, Bergbower, Doctora, and Peterson (1996) that has higher reliability than the older versions, but still uses the forced-choice format.

Bell and McCallum (1995) designed an instrument to assess social attributions, based roughly on the three dimensions found in the research of Weiner (1986). It was modeled on the Sydney Attribution Scale (SAS) (Marsh, 1984), which assesses three dimensions of attribution: ability, effort, and external factors. Bell and McCallum broke the external factors dimension into two factors: chance (luck) and task difficulty. Both scales present hypothetical situations, followed by possible causes. Students are to rate how true each cause might be. The SSAS correlated significantly with most scales of the SDQ-I in predicted ways. For example, effort and ability attributions were related to Peer Relations, Nonacademic, and Total subscales (.34, .43, .59, respectively, $p<.01$). These

findings supported the SSAS' construct validity. Additional psychometric data are needed to determine the usefulness of the scale. Also, data showing the instrument's utility with other cultures (e.g., Asian) would be useful. There is some evidence in the literature that Asian and American children differ on academic attributions; in this study the SSAS was used to explore the possibility that similar differences exist for social attributions. A translated version was used to compare attributions of Korean and American children.

Statement of the Problem

Differences in academic attributions have been shown to partially explain discrepancies between Asian and Caucasian students' academic performance. The literature does not address these cultural differences in social attributions. This study addresses the deficit in the literature in the area of cross-cultural comparisons of individual differences in social attributions.

Research Questions and Hypotheses

General research questions and hypotheses guiding this research included:

1. What is the internal consistency (reliability) of the SSAS for Korean children? Will its Korean translation, administered to Korean fourth and fifth graders, yield internal consistency results comparable to the American version, i.e. in the .70's and .80's?

2. What are the relationships between culture and attributions for social situations? Specifically, is there a difference between Korean and American students' attributions for social successes and failures? According to the literature, the Korean

students were predicted to have a significantly higher mean score on the Failure Effort scale than their American counterparts. The American students were predicted to have a significantly higher mean score on the SSAS Success Ability scale than their counterparts.

Chapter II

METHOD

Participants

Participants in the Korean sample are 397 fourth and fifth graders from a middle class urban community school in a city with a population of about 2.5 million. Middle-class status was decided using "housing environment" (H. D. Lee, personal communication, September, 1997) levels of father's education, and teacher ratings of students' class. Participants in the American sample consist of 160 fourth and fifth graders, from a metropolitan area in the southeast with a population of approximately 300,000. The American sample was selected from intact classes from several elementary schools that matched as closely as possible the SES characteristics of the Korean sample. Even when all non-Caucasian races were combined (total non-Caucasian n=34; Black n=17; Native American n=5; Hispanic n=1; Mix n=6; Other n=5), there were not enough of them to make any significant difference in the American sample's scores on any of the attribution scales ($p>.05$), so the American sample was considered to be of one ethnic background for this study, like the Korean sample.

Instrument

The Student Social Attribution Scale (SSAS) is a 24-item questionnaire in which students are given common scenarios - social situations they may or may not have experienced. There are 12 success and 12 failure scenarios which are each followed by four randomly ordered causes of the situation. These causes follow the categories of

attributions: ability, effort, luck, and task difficulty. The students are asked to rate these causes on a 3-point Likert scale: True; Maybe true, Maybe false; False (See McCallum & Bell, 1995). Reliability on all subscales of the instrument were Success Ability .85, Success Effort (SA) .74, Success External (SX) .67, Failure Ability (FA) .81, Failure Effort (FE) .75, and Failure External (FX) .63 (Bell & McCallum, 1995). The external scales have since been divided into chance and task difficulty.

In general, research on translation of instruments has been promising. In a study on translating the Job Description Index, results showed high internal consistency of the Hong-Kong version (between .65-.90; Wu & Watkins, 1994). Another study involved translation of a questionnaire for assessing medical students' attitudes into Hebrew. Once again, results supported the psychometric integrity of the translated version (Sperber, Devellis, Boehlecke, 1994). In most of the studies found, the subjects were adults. Very little has been done on translation of an instrument for cross-cultural comparisons of school-aged children on any construct, let alone for social attributions.

In most cross-cultural studies of attribution - academic or social - the measure of interest (the dependent measure) is more nebulous than a simple questionnaire. For example, some studies use an activity to determine attributions. Lourenço, (1994) used stories about pictures of moral situations; Burgner & Hewstone (1993) used play situations and asked questions about children's perceptions; Hayamizu (1992) used a sentence-completion task. Others use interviews and other open-ended measures;

Stetsenko et al (1995) employed a structured interview; Stipek, Weiner, & Li (1989) used verbal descriptions which were rated according to how much reward or punishment the subjects thought the actors deserved; Little, (1987) used interviews based on simple stories about which the children answered open-ended questions. There are very few studies (e.g. Nurmi, 1991) that use a questionnaire format. Nurmi used an instrument, translated into Finnish, to compare emotions of American and Finnish undergraduates related to attributions for academic and affiliative situations. The SSAS was made to assess specifically social attribution using a self-report, independent rating format. Using the SSAS for Korean and American children makes it possible to obtain a more direct and psychometrically sound comparison between the cultures because the same items are presented to all children, regardless of culture, in the same manner. University professor Hee Do Lee translated the test and made minor revisions to make some items more salient to Korean children. For example, one item describes a situation in which a student is sent to the principal's office for discipline. Lee explained that, in Korea, teachers handle discipline, so he changed the wording of that item to reflect this. To ensure that the content is the same for both cultures, two experts, both familiar with American and Korean cultures and languages, compared the Korean and American translations; they appeared to be the same except for Professor Lee's changes. Both readers pointed out that the changes in wording made those five items relevant to Korean students, but did not change the overall meaning of the items.

Procedure

For the American participants, the questionnaire was administered to intact groups in elementary school classrooms by graduate students. For the Korean children, administration was conducted by several Korean educators, one of whom was a professor at a large university. Both versions were scored using two global scales: internal (consisting of ability and effort subscales) and external (luck and task difficulty subscales) for success and failure. The means on each scale (Success Ability/Effort, Luck/Task Difficulty (SA, SE, SL, ST); Failure Ability/Effort/Luck/Task Difficulty (FA, FE, FL, FT); Success Internal/External (SI, SEx); and Failure Internal/External (FI, FEx)) for American and Korean children were compared and tested for significant differences.

Data Analysis

For internal consistency data on the Korean translation, Cronbach's alphas were calculated and compared with the Cronbach's alphas of the American version. Means from all SSAS scales from the American and Korean instruments was compared using a two-tailed t-test for independent samples, except for the mean differences predicted from the literature; for these, a priori predictions allowed comparisons under one tail. The power of the results was assessed using the "d" effect-size statistic (Cohen, 1977), calculated for each scale by dividing the difference between the American sample mean and the Korean sample mean by the standard deviation of the Korean sample, because the

variances of all significantly different scales were equal.

Chapter III

RESULTS

Evidence necessary to address the general research questions, specific statistical questions, and hypotheses is found in the results of this study. The first question addresses the internal consistency of the Korean version of the SSAS. Reliability is reported for the translated and the American version (for this sample). The next question focuses on the relationships between Korean and American students' social attributions. Both groups' scores on the SSAS are compared and differences discussed.

Research Question 1

Internal consistency (reliability) of the SSAS for Korean children was addressed by computing a Cronbach's Alphas (Norusis, 1993) on the Korean translation of the instrument. The translator, Professor Hee Do Lee, changed 5 items to make them relevant to Korean school system practices. Item 3, originally "in an special class project" was changed to "in a beautification project of your class"; Item 10, originally "at the water fountain" was changed to "at the place where you gather and talk together"; Item 12, originally "with the principal," was changed to "with the teacher"; and Item 24, originally "at the shopping center," was changed to "at the department store." The instrument was reviewed by two native Korean speakers who agreed that the changes made the items meaningful for Korean students and did not change the overall meaning

of the items.

Reliability of the Korean SSAS

Reliability refers to the consistency of the measurement of an instrument and can be expressed as a reliability coefficient. Cronbach's Alpha (Norusis, 1993) coefficients on the total instrument, both Korean and American versions, were .83 and .86, respectively. The individual scale alphas (Success Ability/Effort, Luck/Task Difficulty (SA, SE, SL, ST); Failure Ability/Effort/Luck/Task Difficulty (FA, FE, FL, FT)) and global scale alphas (Success Internal/ External (SI, SEx); and Failure Internal/External (FI, FEx)) ranged from .56 to .86 for the Korean sample and .62 to .88 for the American sample (See Table 1). The SL (Korean version), ST, FL, and FT (both versions) scales yielded alphas below .70, and should be interpreted with caution.

Table 1

Alpha Coefficients for Scale and Total Scores of the American and Korean Versions of the SSAS *

Scale	Alpha	
	Korean	American
Success Ability	.81	.81
Success Effort	.75	.81
Success Luck	.65	.72
Success Task Difficulty	.63	.67
Failure Ability	.76	.85
Failure Effort	.75	.76
Failure Luck	.56	.65
Failure Task Difficulty	.64	.62
Success Internal	.86	.85
Success External	.76	.80
Failure Internal	.84	.88
Failure External	.74	.76

* All correlations are significant at $p < .01$ level.

Research Question 2

The question "Is there a difference between Korean and American students' attributions for social success and failures?" was addressed through a mean score comparison. Korean students were predicted to have higher mean Failure Effort scores than Americans and that Americans were expected to have higher mean Success Ability scores than the Korean students. The means for the Korean students' Failure Effort scores were 21.28, and 24.87, respectively. The means for the Americans' Failure Effort and Success Ability scores were 19.33, and 27.43, respectively. Based on a priori t's the differences between the Failure Effort and Success Ability scores were statistically significant ($p<.005$) for the two groups, in the predicted direction (Table 2).

Mean scores were calculated on each scale of the SSAS (SA, SE, SL, ST, FA, FE, FL, FT, SI, SEx, FI, and FEx. Means on the American sample ranged from 18.57 to 30.40 on the individual scales (SA, SE, SL, ST, FA, FE, FL, FT) and from 37.90 to 57.83 on the global scales (SI, SEx, FI, and FEx). Means on the Korean sample ranged from 18.76 to 24.87 on the individual scales and from 40.05 to 52.38 on the global scales. These means were compared using a posteriori t-tests for independent samples. A post-hoc Bonferroni (Norusis, 1993) correction for multiple mean comparisons was made (Norusis, 1993). Significant differences were found on all scales except FI, FA, and FT. Korean students had significantly higher mean scores than Americans on FE. On all other scales, American students had higher mean scores than Korean students.

Table 2

Korean and American Students' Mean SSAS Scores, t-values, and effect sizes for scale comparisons

Scale	Korean Mean	Korean SD	American Mean	American SD	t-value	p- value	Effect Size[b]
Success Ability	24.87	5.00	27.43	4.89	5.48	<.025[a]	.51
Success Effort	27.51	4.40	30.40	4.56	6.94	<.005[a]	.66
Success Luck	21.52	4.13	23.50	4.54	4.97	<.005*	.48
Success Task Difficulty	22.61	4.06	24.42	4.00	4.78	<.005*	.45
Failure Ability	18.76	4.57	18.57	5.23	-.40	.69	ns
Failure Effort	21.28	4.92	19.33	4.35	-4.37	<.025[a]	.40
Failure Luck	22.87	3.73	24.13	3.93	3.55	<.005*	.34
Failure Task Difficulty	22.56	4.00	23.18	3.76	1.68	.09	ns
Success Internal	52.38	8.41	57.83	7.82	7.05	<.005*	.65
Success External	44.13	7.19	47.92	7.51	5.55	<.005*	.53
Failure Internal	40.05	8.31	37.90	8.57	-2.73	.01	ns
Failure External	45.44	6.69	47.31	6.77	2.99	<.005*	.28

*Statistically significant; Critical value adjusted by Bonferroni correction; p=.005

[a] value adjusted for one-tailed test

[b] computed by $mean_a$ - $mean_k$ /standard deviation

In order to determine the magnitude of the mean differences, effect sizes for all significantly different scales were calculated. To obtain an interpretable standard score version of effect size, the difference between means for each scale was divided by a common standard deviation for each scale (Cohen, 1977). Because all significantly different scales had equal variances, the Korean standard deviation was used for each calculation. The result is "d," an effect size index for mean differences in standard deviation units. d's ranged from .26 to .66, indicating moderate effect sizes for each scale comparison.

In general, Americans score higher on the scales that the Koreans. Six of the eight SSAS individual scale scores of the American were higher than the scores of the Koreans. Importantly, when global scores are considered, it becomes clear that the Koreans assumed more responsibility for failure. That is, the only global score not *significantly* higher for American students was Failure Internal. Both predictions (that Korean students would have higher Failure Effort scores and that Americans would have higher Success Ability scores) were supported.

Chapter IV
DISCUSSION

This study was designed to compare 4th and 5th grade American and Korean students' social attributions to determine whether differences exist in how these two populations explain their social successes and failures. This was accomplished using the Student Social Attribution Scale, which was translated from English to Korean for the study. Discussion focuses first on the evidence obtained showing the internal consistency of the Korean version of the instrument. Next, findings from the comparison of means and how these findings relate to previous theory and research are addressed. Next, issues relating to ethnic and socioeconomic differences in the American sample are discussed. Then, practical uses for the information obtained in the study are explored. Finally, limitations of the study and implications for future research are examined.

Internal Consistency of the Korean SSAS

The goal in translating the SSAS was to develop a scale with adequate psychometric properties for use with Korean children. For example, reliabilities were anticipated to be equally high for Korean and American children. Salvia and Ysseldyke (1988) recommend instruments show a .60 reliability (or better) for experimental

research. Research question one addressed the psychometric properties of the SSAS. Cronbach's Alpha's (Norusis, 1993) were obtained for each of the twelve subscales. Each Alpha exceeded the .60 criterion, except for the Korean version's Failure Luck scale. Every correlation was significant at the $p = .01$ level. These values are considered adequate for research purposes, and the global scores (e.g., Success Internal) are appropriate for clinical purposes ($\geq .70$).

Differences Between Korean and American Students' Social Attributions

Comparisons of means through a priori and a posteriori t-tests were conducted to determine if there were any differences between Korean and American students' scores on the SSAS. A priori predictions of higher mean Success and Failure Effort scores for Korean students and higher mean Success Ability scores for American students were based on literature assessing mostly *academic* attributions (i.e., Whang & Hancock, 1994; Tuss, Zimmer, & Ho, 1995; Mordkowitz & Ginsburg, 1987). For social attributions as defined in this study, Koreans did score significantly higher than Americans on Effort, but only in failure situations, implying a willingness to accept responsibility for failure, which is a self-effacing attributional style. Self-effacement indicates internal attributions for successes and external attributions for failure, a pattern Crittenden & Bae (1994) found to be rated as more socially responsible and fractionally more likeable than its

opposite, self-enhancement. This is consistent with the literature on academic attributions, such as Whang & Hancock (1994) and Choi, Bempechat, & Ginsburg (1994).

Some literature is consistent with this finding. *Noon-Chi* is a Korean term that is similar to Western attribution theory. A *Noon-Chi* interaction involves complex inferences about another's motives, intentions, and needs from overt and covert cues. This means that the actors change their attributions to fit each situation, and must understand that the other person will do the same. Lee, Hallahan, & Herzog (1996) compared attributions made in editorial and sports articles in Hong Kong and United States newspapers. They found that the Hong Kong writers used more situational (unstable or impermanent) and fewer dispositional (stable or permanent) attributions than the American writers. Unlike attribution theory, however, *Noon-Chi* has as a goal improving or at least not jeopardizing a relationship; with attributions, there is no assumption of need to preserve a relationship between the parties (Choi & Choi, 1992). A person can attribute someone's actions to internal or external causes without knowing anything about him.

The *Noon-Chi* method of communication requires a strong awareness of one's impression on others and vice versa. To demonstrate Koreans' sensitivity to the meaning

behind theirs and others' attributions, Bae & Crittenden (1989) had Korean university students make inferences about someone who had completed the Attribution Style Questionnaire (ASQ). They were to classify the person in to one of four patterns: egotistic, self-effacing, internal, or external. The researchers used the raters' inferences to predict that the mean attributional style of Korean university students would be somewhat internal and in-between egotistic and self-effacing. Using these inferences, Bae & Crittenden (1989) had different students fill out the ASQ. Their predictions were supported; the Korean students had neither strongly egotistic nor strongly self-effacing attributions. One reason for this result is that social status is extremely important in Korean interactions. The students in the second part of the Bae & Crittenden study anonymously filled out a questionnaire administered by someone of similar social status. The Korean students in the present study were fourth and fifth graders who were given a questionnaire in class by adults from a university, and might have felt it desirable to respond in a more self-effacing way.

Impression management is a term used by Crittenden & Bae (1994) to describe Koreans' tendency to control others' attributions of their behavior. It might explain why Korean students scored lower than Americans on all Success subscales and the Failure Effort subscale. With very little information with which to determine how the researchers

might perceive their attributions, the Korean students might have unconsciously decided to tailor their attributions in the most conservative style, not committing to any one explanation for success. In failure situations, it is always safe to take responsibility for failures by saying that effort, rather than luck caused the failure.

All of the above explanations for this study's results may be tied to cultural influences and values on parents teaching responsibility for ones social outcomes. Within their highly collectivist culture, Korean parents tend to emphasize effort as the main cause of success and failure.

Ethnic and Socioeconomic Differences in the American Sample

Because there is much more cultural diversity in America than in Korea, a comparison of means was conducted to discover whether any ethnic differences exist in the American population on the scales of the SSAS. There were not enough subjects of any one non-white race to compare individual groups, so all non-white and mixed races were combined into one group for the comparison. In general, researchers have found differences between American ethnic groups' attributions for success and failure (e.g., Morgan, Griffin, & Heyward, 1996; Moghaddam, Taylor, Lambert, Wallace, & Schmidt, 1995). However, in this study there were no significant differences found on any of the 12 subscales between the non-white and mixed group and the Caucasian group ($p>.05$).

Consequently, it made sense to consider the American sample homogeneous for comparison with the Korean sample.

The American sample also was more diverse with regard to socioeconomic status (SES) than the Korean sample. Whether or not a student received free- or reduced-price lunch was used as the measure of SES level. A comparison of means on all scales of the SSAS showed no significant differences between students who reported receiving free- or reduced-price lunch and those who did not. Consequently, members of the two groups were combined for further analysis.

Attributions in School: Practical Uses for Cross-Cultural Data

In today's increasingly culturally diverse schools, it is more important than ever for children to learn to work together with students with many different backgrounds. The finding that Americans and Koreans differed significantly on almost all scales has implications for handling these groups' interactions in schools. Social attributions can be used as a tool for improving appreciation of cultural differences in classroom groups. In a study by Ostermeier (1992), American and Japanese 11^{th}- and 12^{th}-grade students participated in a 2- to 3-day unit on cultural diversity and communication. Attribution training was used to teach the students effective listening and to interpret events the way someone from another culture would. The pretest and posttest for this activity involved

students choosing from several attributions the causes of a conflict between people of different cultures. Attribution training appeared to help the students become more aware and understanding of ways people from other culture might interpret a situation. Beardsley (1994) found that using attribution training as a component of cross-cultural instruction, combined with a lecture to the American medical students on cross-cultural concepts in health care, helped international medical school residents assimilate to their American medical school culture. Presumably this indicates an increase in understanding of one another's cultural differences and needs.

The previous two studies used older adolescents or adults. There is little research using attributions to promote younger children's acceptance of cultural differences. One study using second- and third-graders described a program called Promoting Alternative Thinking Strategies (PATHS), which contains methods such as role-playing, modeling by teachers and peers, attribution training, and verbal mediation. The four primary goals of the program were to (a) teach how to "Stop and Calm Down", (b) increase children's vocabulary of feeling words to help the children understand themselves and others, (c) teach children to use emotional as well as cognitive and linguistic skills to solve problems, and (d) improve self-esteem and positive peer relations. PATHS was shown to increase the students' understanding of others' emotions (Greenberg, Kusche, and Cook,

1995).

Attributions are considered important for explaining academic cultural differences in success and failure (Choi, Bempechat, & Ginsburg, 1994; Whang & Hancock, 1994); social attributions can be equally important in explaining motivation for working and playing together. Presumably, those children who internalize the link between effort and outcome will be more successful in promoting positive social outcomes.

Limitations of the Study and Directions for Future Research

Characteristics of the sample may limit the generalizability of the findings. The American sample was extremely ethnically homogeneous, with only 24% of the sample non-Caucasian. Caution should be used when interpreting results outside East Tennessee. Also, no accommodations were made for students who may have had trouble reading the items on the questionnaire. However, no students reported difficulty. There might also be problems in the translation of the instrument. As cited previously, research on translation of questionnaires has been encouraging. However, we did not back-translate the SSAS into English; we considered the judgement of two native Korean speakers familiar with the American culture to be sufficient for determining equality of the scale items.

Social attributions are gradually being given more attention in the literature, as

more evidence is found for their impact on self-esteem and social success and failure (e.g., Bell & McCallum, 1995). Future research on cultural differences in social attributions should include a sample more representative of the American population. A comparison of attributions of students in their home country and students from the same ethnic background in American schools could be made. Patterns like those found in this study might be different for culturally different students in American schools. Perhaps the more generations a family has been in the US, the more "American" their social attributions become. Also, it would be important to determine the relative magnitude of relationships between attributions of Koreans and Americans and actual social outcomes (e.g., popularity, as measured by a sociometric). These relationships for Korean students could be compared with those for American students as well.

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