

DEVELOPING A HOPE SCALE WITH A STORY-BASED APPROACH

A Master's Thesis Presented to the
Faculty of the College of Education
University of Houston

In Partial Fulfillment
of the Requirements for the Degree

Master of Education

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Abstract

The purpose of this study was to develop a tacit scale for 3rd, 4th and 5th grade students to measure their level of hope accurately by relieving social desirability concerns and testing pressure. Story Hope Scale was grounded on Snyder's hope theory, and it was formatted as one story, including five questions and three choices for each question. Participants were recruited from non-special education, 3rd, 4th and 5th grade students who agreed to participate in the study voluntarily with their parents' consent. To test the reliability and validity of SHS, the present study correlated SHS with Children's Hope Scale (CHS) scores, Children's Epidemiological Studies- Depression Scale for Children (CES-DC) scores, and teacher judgments for a total of 47 students in Harmony School of Science in Houston. Students also retaken the SHS two weeks after the first administration. In order to examine whether SHS relieved social desirability and testing pressure, participants' responses to a questionnaire were analyzed. Results of the study included that CHS, CES-DC and teacher judgments significantly correlated with Story Hope Scale (SHS) scores ($p < .05$), in the expected directions and analysis of participants' responses revealed that SHS partially achieved the goal of avoiding social desirability responses and testing pressure. The conclusion was that SHS relieved testing pressure for most of the participants and social desirability concerns for a notable number of the students. Moreover, results supported the validity and high reliability (through test-retest) of SHS. Future research is required so as to test discriminant validity of SHS.

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Chapter I

Introduction and Literature Review

Positive psychology gained publicity in less than a decade beyond the circle of psychologists into the general public by Seligman and Csikszentmihalyi (Seligman & Csikszentmihalyi, 2000). Even though the term “positive psychology” was first used in 1954 by Maslow, it dates further back to the ideas of religious leaders and ancient philosophers who have devoted their lives to better humanity. The efforts persisted in discussing the good society, happiness, human strength, and so forth (Diener, 2009).

In the last 100 years, there have been pioneers such as Don Clifton (human strengths), George Vaillant (effective coping), Shelley Taylor (health) and Mihalyi Csikszentmihalyi (flow and creativity) who have conducted studies on positive aspects of psychology (as cited in Diener, 2009). They emphasized that humans’ positive sides need to be paid attention, to rescue the psychology from being half-baked in Martin Seligman’s words.

One of the most widely researched topic was “hope” within this burgeoning field. Since this concept’s meaning is overarching, there have been sizable numbers of studies examined relationship between hope and other concepts in such as suicidality (Range & Penton, 1994), physical illnesses (Garrett, 2001), academic performance (Gilman, Dooley, & Florell, 2006; Snyder, Shorey, & Cheavens, 2002), athletic achievement (Curry & Snyder, 2000; Curry, Snyder, Cook, Ruby, & Rehm, 1997), benefit finding (Tennen & Affleck, 1999) and psychological adjustment (Chang & DeSimone, 2001; Feldman & Snyder, 2005).

As construct hope captured researchers' attention, the construct was conceptualized distinctly by two schools. The first school labels hope as an "emotion." Averill, Catlin and Chon (as cited in Lopez et al., Averill, Catlin & Chon, 1990) described hope as an emotion governed by cognition. These researchers also claimed that environment has an effect on hope development or deterioration, so these scholars place hope in the social and cultural context.

Mowrer (as cited in Lopez et al., 1960) conceptualized hope as an emotion which is an affective form of secondary reinforcement. While researching on animals, he noticed that the emotion of hope appeared when the stimulus was associated with a pleasurable situation. The desired activity increased as the affective reinforcements were repeated since the pleasurable occurrence was anticipated by the animals. The conclusion emphasized that hope seemed to compel the subjects toward their goal.

The second school, which defined hope as cognitive, attracts more researchers than the emotion-based school. For instance, Ericson defined hope as "the enduring belief in the attainability of fervent wishes, in spite of the dark urges and rages which mark the beginning of existence" (as cited in Lopez et al., Ericson, 1964 p. 118)

Breznitz's (as cited in Lopez et al., 1986) identifies hope and *hope process* differently in a cognitive-based model. According to him, *work of hoping* is an active process which one must apply to experience hope. He distinguishes *hope* from *denial* which denotes signs of illusion and struggles.

Gottschalk (1974) defined hope as "optimistic outlook or expectation of a favorable outcome, be it luck in gambling, success in a business venture, improvement in the welfare of a socially deprived subculture, recovery from a serious illnesses or

reaching of a spiritual goal ” (p. 779). Gottschalk also believed that hope is a pushing force to drive people to handle their problems. According to Godfrey (1987), there are two types of hope: fundamental and ultimate hope. Fundamental hope is considered as mental set of goal attainment but ultimate hope is viewed as more relevant to social aspect of people, not individualistic. To Staats (1989), hope was defined as “the interaction between wishes and expectations” (p. 367).

Among these studies, Snyder and his colleagues’ hope theory (Snyder et al., 1991) that emphasizes the importance of goal attainment is mostly accepted by other researchers. Snyder and his colleagues (1991) conceptualized hope consisting of two factors which are “pathways” and “agentic thinking.” Pathways thinking refers perceived ability to generate routes when facing a block or barrier and agentic thinking motivates the person to engage actively in goal attainments. This part of hope compels us to reach the “finish line” and prevent the giving up has a significant effect on pathways thinking since agency spurs persistence.

As studies advanced to conceptualize construct hope, assessing individuals’ level of hope became crucial for the researchers in order to understand relationship between hope and other constructs. This importance led the researchers to develop tools to measure state hope for different age groups (Ericson et al., 1975; Gottschalk, 1974; Staats, 1989; Snyder et al., 1991; Vance, 1996). The first hope scale was developed by Ericson, Post and Paige in 1975. They developed the scale based on Stotland’s view of hope. This scale consisted of 20 goals which are not situation-specific but socially acceptable and desirable. Participants were asked to rate on a seven-point scale to what extent they are interested in achieving this goal. For instance: “I do not care if it happens

or not” (1 on the scale) or “It is extremely important. Without it, I’d rather be dead”(7 on the scale).

The later hope scale was developed by Staats (1989) and colleagues, grounded on Beck’s depressive triad. The scale consisted of two parts. The Expected Balance Scale which was measuring the affective part of hope had 9 negative and 9 positive items and used 5-point rating scale. Hope Index, which is the second part of the scale, was intended to measure the cognitive side of hope that contained four subscales: hope-self, hope-other, wishing and expecting.

Among these studies, only Gottschalk (1974) and Snyder and colleagues (1997) have attempted to measure children’s level of hope. Although these researchers targeted the similar age groups to study, they followed different methods to assess hope.

Gottschalk (1974) recorded participants’ five-minute speech sample about their interesting and dramatic personal life experiences and these samples were scored by content analysis technicians based on seven categories on Hope Scale. He rated the positive feelings such as optimism, resilience or happiness as +1 and the negative emotions such as bad luck, pessimism or hopelessness as -1.

As noted above, Snyder and his colleagues (1997) developed two self-report scales for children named based on Snyder’s Hope theory. Children’s Dispositional Hope Scale (Snyder, Hoza, et al., 1997) is a 6-item self-report instrument which is grounding on Snyder’s Hope Theory. CHS was established and validated for use with children ages 7 to16. Young Children’s Hope Scale (Mc Dermott et al, 1999) was developed for children with age 5 to 7. YCHS is a 6-item hope scale and uses 6- point Likert scale.

In 1996, Vance developed a new scale which was named as “Narrative Hope Scale”. NHS was established as an adult hope scale and this scale assess both structure and content of personal narratives for clues about the individual. To assess one’s hope level, knowledgeable raters about hope theory determine the high and low hope of indicators in narratives and rate these indicators by using a menu of descriptors consisting of thoughts, feelings and behaviors.

Abovementioned, except Gottschalk’s Hope Scale (1974) the Narrative Hope Scale (Vance, 1996), all other hope scales use direct questioning method. Although direct questioning methods provide illuminative information about assessed constructs, because of the basic human tendency to present oneself in the most favorable and acceptable way named “social desirability bias” distort the information obtained from self-report tests (Fisher, 1993). Results of these tests are systematically biased by the respondents’ view of what is socially acceptable (as cited in Fisher, Maccoby and Maccoby, 1954). Studies showed that nearly all types of self-report measures are affected by social desirability bias. (as cited in Fisher, e.g. Levy, 1981; Peltier and Wash, 1990; Robinette, 1991; Simon and Simon, 1975 Paulhaus and Zerbe, 1997).

Contrary to direct questioning methods, indirect questioning mitigates the effect of social desirability bias (Fisher, 1993). Indirect questioning is used as a projective technique and asks respondents to answer the questions from the perspective of others (as cited in Fisher, Anderson, 1978; Calder and Burncrant and 1977; Robertson and Joselyn, 1974). The assumption behind indirect questioning method is that respondents reveal their ideas unconsciously while responding the questions about ambiguous situations (Campbell, 1950; Sherwood, 1981).

Despite the benefits of indirect questioning to control social desirability bias, only two prior studies used this method to establish a hope measure (Gottschalk, 1974; Vance, 1996). Yet, both of the studies required either personal narratives or speech samples to assess individuals' level of hope. Since it is expected to obtain too various materials from the respondents to evaluate, NHS and Gottschalk's Hope Scale requires more time for scoring although they provide a rich source regarding respondents' thoughts, feelings and behaviors. Moreover, trained raters or technicians are needed to capture clues from personal materials for assessment.

As seen, it is needed to establish a scale using indirect questioning method and grounding on one material to avoid the time and training issues. To date, there has not been any attempt to use stories for developing a tacit measure despite the fact that stories are so much part of our lives. Moreover, any study conducted to use stories in order to measure children's level of hope although stories make much more sense for children than any other age group. In arguing the importance of fairy tales, Bettelheim asserted that (1989) "these tales, in a much deeper sense than any other reading material, start where the child really is in his psychological and emotional being" (p. 6).

There are several benefits to establishing an instrument to use stories for measuring children's level of hope. First, using stories might reduce social desirability bias effects on scores since children would occupy with story rather than pondering about which item present themselves in more acceptable way. Second, stories might mitigate testing pressure effects on scores since listening to stories is associated with home atmosphere and comfort.

Definition of Important Terms

The following terms are defined based on the aim of the study:

Agency: refers to the individual's perceived capacity for initiating or maintaining actions necessary to reach a goal (Snyder et al., 1996).

Pathways: refers to perceived ability to generate routes to one's goals (Snyder et al., 1996).

The Significance of Study

In social sciences, researchers' mostly prefer to use self-report tests and asking direct questions related to obtain information about specific construct. Based on an analysis by Vazire (2006), 98 % of researches published in *Journal of Research in Personality* in 2003 used self-report methods to assess personality traits. Paulhus and Vazire (2007) point out the practical and efficient advantages of self-report tests to obtain data from a large number of participants. However, there are notable shortcomings of self-report methods such as "socially desirable responding" (Paulhus, 1991). Paulhus claims that participants of the study often respond the questions in a way they consider favorable to themselves rather than in an honest way.

When previously developed hope scales were examined, it has been clear that most of the scales were developed by using direct questioning methods. Because of the testing pressure and social desirability responding, these scales might not give the accurate results especially for children. Thus, a tacit measure is needed to measure children's level of hope accurately and this measure of hope for children will differentiate better among children than the direct face-valid scales that now exist. With this method, the pressure of being tested or social desirability concerns will be relieved.

Chapter II

Method

Scale Development

Story development. Abovementioned, according to Snyder's theory, agency and pathways thinking manifest themselves when a goal exists. Thus, a goal and making this goal desirable was needed to capture children's attentions to the story. To truly hold the children's attention, stories must entertain them and arouse their curiosity (Bettelheim, B, 1976). To attract children, the story starts with the introduction which introduces the goal which is *Phoenix* in a remarkable way.

Phoenix is a mythical bird which is known universally with different names and different characteristics. For instance, it is named "Zumrut- u Anka" in Turkish, "Simurg" in Persian, Φοίνιξ in Greece, Փիւնիկ in Armenian, الفينيق طائر أو العنقاء in Arabic, 鳳凰 or 不死鳥 in Chinese and פניקס in Hebrew. This worldwide familiarity of Phoenix provides an opportunity to translate the scale to different languages for other countries' children. Thus, finding the *Phoenix* was determined as a goal to pursue for scale since it is attractive and well-known enough for the children.

In the story, it is mentioned that the Phoenix is the leader of the all birds over the world since he is deathless and powerful. The birds which came from the different parts of the world decide to ask help about their problems with other animals. They plan to go to the place where he lives. Since he dwells very faraway land and on the highest mountain of the world, they have so many troubles during the journey. At those hard times, the storyteller pauses and asks the children some questions about their decisions,

related to the factors of agency and pathways. The scale measures their attitude toward the hardship when facing adversity.

Content validation. To generate choices for questions of Story Hope Scale, content validation study was required. In the first step of Content Validation Study, 10 students were chosen randomly from the 3rd, 4th and 5th grade class and they were asked to rate the story. First, they listened to the story and were asked the questions of the scales without offering any choices. Their responses to these questions were gathered to provide the content validity form. Afterwards, the children were asked to fill out a rating scale which requires them to rate the story, characters and asked them improvements to the story. Based on their answers, the story was modified according to their interest since the test is being developed for children. Based on children's opinion about the whole scale (questions and story), the scale was modified while staying consistent with of Snyder's theory.

For the second part of the Content Validation Study, the blueprint which was formed based on children's responses to the story questions and generated items by the researcher according to Snyder's two-factor hope theory were gathered on Content Validity Form. This items pool was sent to the experts via e-mail and evaluation of those specialists were analyzed by using descriptive statistics and the stronger items for each question were chosen for original test.

The aim of content validation study was to ask the opinions of the positive psychologists as to the appropriateness of each possible choice and to ensure that each of the two categories (agency and pathways) was fully assessed. Experts were asked to indicate the category that each possible choices best reflected. They were also asked to

rate how strongly each statement reflects the category in which they placed them in terms of conceptual definition, language and age appropriateness (i.e., '3' -no question about it; '2' -strongly; '1' -not sure). Appendix B demonstrates the Content Validation Form that was distributed.

In content validity form, there were three types of choices for each question which are "positive responses," "negative responses" and "unclear responses." Since the story has five blocks to continue to the road in order to find the Phoenix, there were three possible decisions for each block which are "continue," "go back" and "unsure to continue or go back."

First and third questions of the Story Hope Scale were generated to assess "agency," and second and fourth questions were for "pathways." According to Snyder and his colleagues, agency and pathways thinking must be assessed together in order to obtain an overall idea of child's hope (Snyder et al., 1997).

The last question was to assess one of the crucial features of high-hope people which overlapped sequence of the last part of the story which is "Higher hope persons have been shown to be slightly concerned with distancing themselves from their past bad outcomes, but they appear to learn from such experiences" (Snyder et al., 2000, p. 14).

Choices order. Abovementioned, there are three types of answers for each question in Story Hope Scale. In order to provide randomization for answer orders for each question, a website was used "www.random.org" to generate random sequences. With this randomization, it was ensured that positive, negative and unsure answers are not in systematic order for each question so children do not have any chance to respond

to the questions as systemically since the positive responses are spread out in different orders. Thus, one of the possible errors was prevented.

Ethical Standards

This study adhered to the standards that articulated by American Psychological Association (2010) and the project was reviewed and approved by University of Houston Institutional Review Board for the Protection of Human Subjects Rights (assigned protocol number 12265-01)

Population and Subjects

The target population of this study is all 3rd, 4th and 5th grade students in the USA. Due to the limitation of reaching the targeted population, Harmony School of Science was chosen by convenience sampling method since the researcher can reach these students. Participants of this study were drawn from 47 students attending 3rd, 4th and 5th grade classes at Harmony School of Science in Houston. Most participants were 3rd grade students (53%) and 66% of the students were female. The study consisted entirely of a face-to-face survey.

For selected measurements, three of the participants did not want to respond CES-DC (Depression Scale); however, their CHS, SHS scores and teacher judgments were still regarded within the study.

Instruments

Children's Hope Scale. CHS is a 6-item self-report scale which was developed based on the idea that hope can be measured through understanding of “agency” and “pathways” (CHS; Snyder, Hoza et al., 1997). It has been produced and validated to use with children ages 7 to 16.

CES-DC. Center for Epidemiology Studies- Depression Child (Weissman et al., 1980) is a 20-item self-rating scale. Four items are about positive feelings and sixteen of them ask how often the children feel depressive symptoms.

Story Hope Scale. SHS is the scale which I am developing and it is consisting of one story, five questions and three choices for each question. In the story, there are thirty birds which fly together and try to find a powerful bird to ask help for their problems. During the journey, there are five impediments to the “Phoenix” and the story stops and asks the listener their opinions to continue to the journey or not.

After Test (SHS) Questionnaire. After Test Questionnaire is consisting of four questions and items such as “I felt comfortable because it was just a story” or “I wrote the best answer which a good person must think of.” This test will give an idea about whether students felt social desirability concerns and testing pressure.

Data Collecting Strategies

Before administering SHS, participants’ teachers were contacted and informed about what Hope Theory is, which features qualify a high-hope, medium-hope or low-hope children and the whole scale with story, questions and items. Once the teachers understood concept hope, they were asked to identify each student if the students were high-hope, mid-hope or low-hope. These results will be named as “teacher judgments” for the further pages.

Students took Children’s Hope Scale and Depression tests first since there was a possibility to be affected by the experimental story which might change their responses if the story was given first. The CHS and CES-DC took total 20 minutes to administer. Second, the Story Hope Scale was administered. Since the aim of the study is to remove

testing pressure and social desirability concerns, children should not be aware that they are being tested. To do this, they were told that they will listen to a story about the birds which are flying together and they have some difficulties during the journey. This focus shifts the attention to assist some birds and divert the attention of answering the questions in a desirable way. To administer Story Hope Scale, a power point slide was shown for the students and I read out loud to overcome any reading difficulty. On this power point slide, the story showed up with colorful and eye catching pictures. Each student had an answer sheet on their desk and they wrote their answers as “A,” “B” or “C.” Scantrons and bubble sheets were avoided as a potential scoring sheet due to the fact that children associate them to testing.

Story Hope Scale took approximately ten minutes. Then, participants responded to the After Test Questionnaire. In this questionnaire, children were asked how they responded the questions based on “their thinking” or according to “a good person must think of. One of the other questions asked children how they felt while responding Story Hope Scale question; “stressful because it was a test” or “comfortable because it was just a story.” After two-week interval, Story Hope Scale was administered again to provide test-retest reliability.

Story Hope Scale has five questions and three answers for each question. Each answer for each question offers only one of those decisions which are “continue,” “go back” or “unsure to continue or go back” when each impediment comes. Unsure responses will be scored as “1” point (low-hope persons are unclear about how to reach their goals, and do not seem to know what to do when countering a blocked goal [Snyder, 2000, p. 41]), “going back” responses as “2” points and “continue” responses as “3”

points (Pathways thinking: the more adaptive, positive emotional response to barriers by high-hope people probably occurs because they can find alternative paths when they are blocked (p. 9). Agency is the motivational component to propel people along their imagined routes to goal (p. 10). Then, minimum total score for each child will be “5” and maximum total score will be “15.”

Analysis of Data

Analysis of data for this study required quantitative methods. The data gathered by the Children’s Hope Scale and CES-DC (Depression Scale), Story Hope Scale and Teacher Judgments’ were analyzed with SPSS Statistical Software. Correlation between CHS and Story Hope Scale’s scores of the participants provided concurrent construct validity since both of the measurements aim to measure the same construct. Snyder, Hoza et al. (1997) correlated CHS scores with a depression scale’s scores and interpreted this correlation as a convergent validity of CHS. In present study, negative correlation between CES-DC and SHS was calculated to obtain convergent validity.

Teacher judgments of students also should correlate positively and significantly with the students’ Story Hope Scale scores and this correlation served as a convergent validity. The greater and significant correlation between these scales would prove the validity of Story Hope Scale. The participants’ teachers were asked to rate their students in one category which are “3” (high hope), “2” (medium hope) and “1” (low hope). Content Validation study ensured that two factors of hope which are “agency” and “pathways” are fully assessed within Story Hope Scale.

To provide reliability, test-retest method was used over fifteen- day interval and the data was gathered and interpreted.

STORY HOPE SCALE

Chapter III

Results

The purpose of this study was to develop a tacit hope scale for 3rd, 4th and 5th so as to relieve social desirability concerns and testing pressure. The research method was quantitative to examine these two questions:

Research Questions

1. Is it possible to develop a tacit hope scale for 3rd, 4th and 5th grade students so as to relieve social desirability responding and testing pressure?
2. Is this new tacit measurement valid and reliable?
3. Are there gender differences in children's responses to the Story Hope Scale?

Assumptions for convergent validity

- I) Teacher judgments should be positively and significantly correlated with SHS scores.
- II) Children's Epidemiologic Studies-Depression Scale for Children scores should be negatively and significantly correlated with SHS scores.

Assumption for concurrent construct validity

- I) Children's Hope Scale scores should be positively and significantly correlated with SHS scores.

Descriptive statistics were used to compare the mean scores, standard deviation, maximum scores and analysis included intercorrelations between Children's Hope Scale (CHS), CES-DC (Depression Scale) and teacher judgments.

Participants

A total of 47 Harmony School of Science students from 3rd, 4th and 5th grade participated in the study voluntarily and with their parents' consents. The study consisted entirely of a face-to-face survey. Table 1 shows the breakdown of participants' gender in numbers and percentage.

Table 1.

Gender of Participants

Gender	n	%
Female	32	66
Male	15	34

Table 2 shows the make-up of students by grade level. Third grade students make up most of the participants.

Table 2.

Grade Level of Participants

Grade Level	n	%
3 rd	28	59
4 th	9	20
5 th	10	21

Research Question 1: Is it possible to develop a tacit hope scale for 3rd, 4th and 5th grade students so as to relieve social desirability concerns and testing pressure?

Testing Pressure. Analysis of After Test Questionnaires results showed that 78 % of the participants responded the After Test Questionnaire by stating that “I felt comfortable because it was just a story” when they were asked how they felt while answering the story questions, while other (22 %) students expressed their discomfort by circling the item “It was stressful because I felt I am taking a test. Based on these results, the Story Hope Scale appears to relieve testing pressure for notable number of the participants. In addition to these results, depression scales’ scores of the latter students (ones who experienced testing pressure before or while taking SHS) were higher than the former students. Table 3 and 4 summarize the stressed and non-stressed groups’ scores separately.

Table 3.

Descriptive Statistics for the Stressed Group

Measures	N	Min	Max	Mean	SD
CHS	8	17	36	24.75	7.04
CES-DC	8	12	40	25.75	0.18
SHS	8	8	14	11.37	2.38

Note. N= Number of Participants; Min= Minimum Score; Max= Maximum Score; SD= Standard Deviation

Table 4 demonstrates the descriptive statistics of non-stressful group.

Table 4.

Descriptive Statistics for the Non-Stressed Group

Measures	n	Min	Max	Mean	SD
CHS	34	12	34	24.73	5.47
CES-DC	34	2	35	15.08	9.64
SHS	34	7	15	13.29	2.12

Note. N= Number of Participants; Min= Minimum Score; Max= Maximum Score; SD= Standard Deviation

As compared two groups' descriptive statistics; mean, minimum, and maximum scores of CES-DC are notably higher for stressed group. Moreover, those students' minimum and maximum SHS score is lower compared to non-stressed group. Although there is no significant difference between those groups' scores in terms of CHS statistics, mean of the SHS scores are higher within the non-stressed group (Mean of non-stressed group= 13.29, Mean of stressed of group= 11.37).

Social Desirability Concerns. One of the aims of this research was to relieve social desirability concerns. Another finding of this study showed that 63 % of the participants stated that they responded the questions based on their thinking not in a way "a good person must think of" while 47 % of them chose the answer "I circled the best answer a good person must think of" in After Survey Questionnaire.

It was hypothesized for the social desirability bias is SHS relieved social desirability concerns, more various results would be obtained since social desirability concerns would distort the SHS scores to a high level of hope. When comparing the variety of the scores, standard deviations of CHS and SHS were calculated. It was found that standard deviation of CHS is higher ($SD_1 = 5.51$) than SHS ($SD_2 = 2.57$). To compare the variety of CHS and SHS scores, Z scores of each participant were calculated and range of the Z scores were compared. Table 5 shows the ranges of CHS and SHS Z scores.

Table 5

Range of Z Scores

Z Scores	N	Range
CHS	47	4.25
SHS	47	3.54

Research Question 2: Is this new tacit measurement valid and reliable?

Convergent Validity Examinations of SHS. For convergent validity of SHS, three predicted hypothesis were examined. First, it was investigated if there is a support for the hypothesis that children's SHS scores positively and significantly correlated by their teachers' judgments. When SHS scores and teacher judgments results were analyzed by SPSS software, it was found that there is a significant and positive correlation between them ($r_{47} = .30^*$, $p < .05$)

Second hypothesis to test convergent validity was the prediction that children's SHS scores should be negatively and significantly correlated with CES-DC

scores. As predicted, results showed that children's SHS scores are negatively and significantly correlated with CES-DC scores ($r_{44} = -.34^*$, $p < .05$). Table 6 reflects the intercorrelations among measurements and teacher judgments.

Concurrent Construct Validity Examination of SHS. In order to test concurrent construct validity of SHS, the hypothesis was that children's SHS scores should be positively and significantly correlated with CHS scores since both of the scales measures the same construct. As hypothesized, there is a significant and positive correlation between CHS and SHS scores of the participants ($r = .30^*$, $p < .05$). Table 6 demonstrates the intercorrelations of SHS, CHS and other measurements.

Based on significant correlations, I found support the convergent and concurrent construct validity of Story Hope Scale. Table 6 demonstrates descriptive statistics and intercorrelations between CHS, CES-DC, Teacher Judgments and SHS scores.

Table 6

Descriptive Statistics and Intercorrelations of SHS and Other Measures

Measures	M	SD	CHS	CES-DC	TEAC	SHS
CHS	25.19	5.64				
CES-DC	16.86	10.33	-.39**			
TEAC	2.53	.62	.34*	-.18		
SHS	12.89	2.25	.30*	-.34*	.30*	

Note. CHS= Children's Hope Scale; CES-DC= Children Epidemiologic Studies-Depression Scale for Children; TEAC= Teacher's Judgments; SHS= Story Hope Scale
* $p < .05$. ** $p < .01$.

Reliability Examination of SHS. In order to test the reliability of SHS, the same test was given to 32 of the participants after two-week interval. The 2-week test-retest reliability was .85 which reflects high reliability of SHS.

3rd Grade Students' Scores. The purpose of the present study was to obtain more accurate results while measuring the level of hope of the 3rd, 4th and 5th grade students based on children's responses to a story through indirect means. Yet, results showed that SHS's correlations with other measurements were more significant among 3rd grade students. During the administration of SHS, it was observed that 4th and 5th grade students were more aware of the most hopeful choices for each question. Detailed results are presented in Table 7.

Table 7

Descriptive Statistics and Intercorrelations of SHS and Other Measures among 3rd Grade Students

Measure	M	SD	CHS	CES-DC	TEAC	SHS
CHS	24.60	5.51				
CES-DC	16.91	10.92	-.54**			
TEAC	1.56	.65	.43*	-.18		
SHS	12.12	2.57	.45*	-.52*	.51**	

Note. CHS= Children's Hope Scale; CES-DC= Children Epidemiologic Studies-Depression Scale for Children; TEAC= Teacher's Judgments; SHS= Story Hope Scale

* $p < .05$. ** $p < .01$.

As seen in the table, SHS correlations among 3rd with CHS and CES-DC are more significant than the total sample scores. However Z score ranges of the CHS are still broader than SHS (CHS ranges= 4.35166, SHS= 3.11164), teacher judgments and SHS have more significant associations than CHS.

Research Question 3: Are there gender differences in children's responses to the Story Hope Scale?

An independent-samples t test was conducted to compare SHS scores of girls with boys. When examined the average scores for girls and boys in the sample where both genders were represented, it was found that significant differences emerged to gender groups' SHS scores. Though Levene's test of homogeneity was significant, the ratio of standard deviations was below Hartley's F_{\max} test critical value (2.27); thus, the t test was considered valid. The difference between the scores were for girls ($M = 12.41$, $SD = 2.46$) and for boys ($M = 13.81$, $SD = 1.47$, $t = 2.1$, $p = .04$). These findings revealed a significant difference such that boys had higher mean scores than girls.

Chapter IV

Discussion

The purpose of the present study was to develop a tacit hope scale for children in order to obtain more accurate results by relieving social desirability concerns and testing pressure. The discussion chapter consists of six sections to discuss validity and reliability of SHS, testing pressure, social desirability concerns, gender differences, 3rd grade students' scores, strength and limitations and the chapter concludes by explaining how this study extends previous research.

Validity and Reliability of SHS

Based on analysis of test scores, it was found that SHS correlated with CHS and teacher judgments significantly and positively, and with CES-DC significantly and negatively as hypothesized. Significant correlations between test scores provided the convergent and concurrent construct validity of Story Hope Scale. Moreover, two-week interval of test-retest analysis revealed the high reliability of SHS.

Testing Pressure

After Test Questionnaire Results indicated that considerable number of the participants did not experience stress while responding SHS. There may be many reasons why students did not get stressed before or during taking Story Hope Scale. One possible explanation can be that stories make much more sense for children than tests and tests are associated more with anxiety. Therefore, the present study suggests that Story Hope Scale can be used as a viable tool to measure children's level of hope without causing testing pressure. With this scale, students can have indirect and less intimidating test experiences.

Participants who stated that they got stressed while responding SHS had higher CES-DC scores are higher than the non-stressed participants. One of the possible explanations for this finding is that the students who have more depressive symptoms also experience more test anxiety and perceive more situations as test-like. This explanation is consistent with assertions of Lee and Larson (2000) and Parikh et al. (2002) who pointed out that because depressive people are more pessimistic and they experience more helplessness, they experience higher degrees of test anxiety.

Social Desirability Concerns

Based on After Test Questionnaire results, more than half of the students stated that they responded the SHS questions based on their own thinking not in a way “a good person must think of.” Thus, it can be accepted that SHS relieves social desirable bias through indirect questioning. This finding is consistent with previous studies. Fisher (1993) found that indirect questioning is an effective method to control social desirability bias; it elicits much higher scores of socially undesirable characteristics than direct questioning (as cited in Jo, 1999).

One of the hypotheses of this study was that if social desirability concerns are relieved, SHS scores of the participants should be more various since social desirability concerns would distort the SHS scores to more a socially acceptable position, which is high hope level in this study. Literature supports this hypothesis by stating social desirability bias significantly distort the data gathered from self-report measures (Fisher, 1993) and the results are systematically biased because of the respondents’ tendencies toward what is “correct” or socially acceptable. Findings of this study showed that SHS scores are accumulated around the high level of hope. One possible explanation for this

result is that participants' actual hope level was already high unrelated to social desirability concerns. One support for this explanation is considerable high mean scores of CHS and teachers' judgments, and low mean scores of CES-DC as seen in the results chapter. According to the findings of the present study, the average score for CHS in this study is very close to the *high hope* level criteria which Snyder and his colleagues mentioned in Handbook of Hope (Snyder et al., 2000, p. 63). Another support for abovementioned explanation is that teachers stated that most of the students who participated in the study were notably successful at school. Researches showed that higher hope scores correlated with higher scores on consecutive achievement tests in elementary school children (Snyder, Hoza et al., 1997). Thus, it can be concluded that the reason of high scores might stem from participants' actual high level of hope, not because of the social desirability concerns.

Gender Differences

A t-test indicated the significant differences between gender groups for SHS scores and boys had higher mean scores than girls. The study showed that gender differences emerged in SHS scores. Likewise, Vance (1996) found that Narrative Hope Scale has produced gender differences, and this finding is accordant with present study. As opposed to NHS, Snyder and his colleagues have not found gender differences for CHS across several studies (as cited in Vance, Snyder, 1994b; Snyder, Simpson et al., 1996). One of the explanations for the existence of gender differences for SHS might result from the method that those two scales (CHS and SHS) use to assess construct hope. CHS is an objective self-report hope scale and the scale uses no subject that has gender. Contrary to CHS, Story Hope Scale use the subject "he" for both main character (Eaggy)

and his goal “Phoenix.” Since the children associates the main character with themselves while reading or listening to a story, a male character might make it hard to associate with a male character for female participants.

3rd Grade Students’ SHS scores

Based on analysis, it was found that 3rd grade students’ SHS scores correlated higher with CHS, CES-DC scores and teacher judgments than the total sample. As known, SHS was developed for 3rd, 4th and 5th grade students based on their reading level. Moreover, strength of the story was taken into consideration not to bore the participants because of the assumption that if they get bored, they might pay attention the story and the questions. However, it was observed during the administration of SHS that most of the 5th grade students either were not interested in the story or did not take the questions seriously like 3rd and 4th grade students did. This finding might be relevant to 5th grade students’ developmental characteristics. Developmentally, those participants are moving from childhood to adolescent, so the story of the SHS might be behind the level of those participants’ age specific interest. Another explanation might be that it was hypothesized for those age groups that they would not realize they are being tested while taking SHS since they would be occupied with the story, but 5th grade students were aware that questions were assessing their attitudes toward something. Based on this finding, more research should be conducted with a larger sample consisting of 5th grade students so as to obtain more dependable results whether SHS is valid and reliable among 5th grade students.

Strength and Limitations

Strength of the study lies in the method that is used to assess construct hope. Unlike the other hope scales, SHS provides a non-stressful and relaxed testing atmosphere by using a happy-end story for children. While measuring children's hope level, the story suggests a value, not to give up when blocked by the impediments. Moreover, Story Hope Scale relieves testing pressure and partially social desirability through indirect questioning, asking about the bird's decisions rather than how the child feels about various aspects of life. Thus, more accurate information may be obtained about the participants' hope level by SHS.

One of the limitations of this study includes sample restriction of the data to one elementary school and Houston cohort only. That limits the generalizability of the study. Future studies might replicate the study design with a larger sample from different schools across the nation. Second, the present study included only psychologically healthy students in the sample. More administration of SHS should be done on the children with psychological problems to see whether those students' SHS scores are lower than the students with no outstanding difficulties. Third, discriminant validity of the SHS was not examined in the present study because children's grades or scores on theoretically unrelated measures were unavailable, so future research should explore the discriminant validity of SHS. Most importantly, in all levels of the analysis, CHS scores correlated higher with CES-DC and teacher judgments than SHS scores.

To summarize, the present study demonstrated statistically significant correlation between SHS and CHS, CES-DC scores and teacher judgments. Partially social desirability concerns and notably testing pressure effects on SHS scores were

relieved by using a story-based approach. And finally, 3rd grade students' SHS scores exhibited the most powerful correlation to CHS, CES-DC and teacher judgments.

Relieving the effects of extraneous variables such as social desirability bias or testing pressure continues to be concern of test developers and researchers who are in pursuit of accurate test results. Beyond accuracy, there is one thing that parents, teachers, principals and researchers should remind themselves when working with children: Children should be treated differently than adults. Thus, any effort for children should be enriched with developmentally appropriate techniques and methods. This study demonstrated that using stories might be one of these techniques.

STORY HOPE SCALE

Appendix A

Content Validation Form

CONTENT VALIDITY FORM

INSTRUCTIONS: The following statements are being considered for inclusion in a survey which aims to measure children's level of hope. Please help me in reviewing the content of the statements by providing two ratings for each one. The definitions of the categories which the statements are supposed to reflect as well as the rating instructions are listed below.

	<u>CATEGORIES</u>	<u>CONCEPTUAL DEFINITION</u>
I.	AGENCY:	Individual's perceived ability to initiate or maintain the actions necessary to targeted goals.
II.	PATHWAY:	Individual's perceived capacity to generate routes for one's goals.

RATING TASKS:

The following story about birds who are attempting to find a special bird named "Phoenix". These birds will encounter five obstacles before reaching the Phoenix. After each obstacle, the story will pause and ask questions. For each question, there are three types of choices in the original scale which are "positive responses" to reflect "continue", "negative responses" to reflect "go back" and unclear responses to reflect "indecisiveness."

A) Please indicate the each category that each statement best fits by highlighting

(**A** or **P**). "A" stands for "agency" and "P" for "pathway."

B) Please indicate that how strongly every statement reflects the category in which you placed them in terms of conceptual definition, language and age appropriateness (**I** II III IV V).

- C) The last question aims to measure children's attitudes when the goal no longer exists. Only for this question, please indicate how strongly these items reflect higher hope. "Higher hope persons have been shown to be slightly concerned with distancing themselves from their past bad outcomes, but they appear to learn from such experiences" (Handbook of Hope, p. 14).

Once upon a time,

There was a special bird named "Phoenix" whose nest was in the Knowledge Tree. This huge and fantastic bird was so smart and beautiful with colorful feathers like a rainbow. His cry was musical, and his tears could cure illnesses. He could use fire to punish his enemies, and he was the most powerful bird all over the world because he lived forever.

All the birds heard that the Phoenix was living on the highest mountain very far away, called the "Great Mountain." Some of them believed that the Phoenix was real and some believed he was just a fairytale.

One day, the eagle Eaggy saw a huge feather with every color of the rainbow at the top of a nearby mountain, called "Dream Mountain". He invited the birds who lived in different parts of the world to the Bird Town to talk about the Phoenix. Many birds from different places came together in the town and Eaggy told them:

"I found a big feather on the Dream Mountain. No birds might have that big feather except the Phoenix. So, he is real. We can find him and tell that other animals are hurting us. Because he is powerful, we may ask help. " One of the other birds told:

“Even though the Phoenix is real, we cannot find him. He lives very far away on the highest mountain of the world. The road is dangerous and very long. We are not strong enough to take this trip.”

What would you think about finding the Phoenix in this situation?

POSITIVE RESPONSES	CATEGORY		RATING				
	A	P	I	II	III	IV	V
1) I can find him even though the trip is hard.							
2) I will do whatever I can do.	A	P	I	II	III	IV	V
3) Let's see what I can do.	A	P	I	II	III	IV	V
4) I am sure I will do well during the journey and find him.	A	P	I	II	III	IV	V
5) Let's try at least.							
6) I will see what I can do	A	P	I	II	III	IV	V
7) I will try at least.	A	P	I	II	III	IV	V
8) I can find the Phoenix.	A	P	I	II	III	IV	V
9) I believe I can find the Phoenix.	A	P	I	II	III	IV	V
10) If I try enough, I can reach the Phoenix.	A	P	I	II	III	IV	V
11) I will try my best to find the Phoenix.	A	P	I	II	III	IV	V
12) I am not scared of the difficulties to find him.	A	P	I	II	III	IV	V

NEGATIVE RESPONSES	CATEGORY		RATING				
1) I do not think I can do it.	A	P	I	II	III	IV	V
2) I cannot do it.	A	P	I	II	III	IV	V
3) It is a challenge.	A	P	I	II	III	IV	V
4) I will not do it.	A	P	I	II	III	IV	V
5) Even the Phoenix is real, I can't find him.	A	P	I	II	III	IV	V
6) I believe I cannot find the Phoenix.	A	P	I	II	III	IV	V
7) No one can complete the journey.	A	P	I	II	III	IV	V
8) I cannot reach the Great Mountain.	A	P	I	II	III	IV	V
9) I believe I cannot find the Phoenix.	A	P	I	II	III	IV	V
10) No one can complete the journey.	A	P	I	II	III	IV	V
11) I even won't try.	A	P	I	II	III	IV	V
12) I cannot overcome the difficulties during the journey.	A	P	I	II	III	IV	V
13) I am sure I cannot find him.	A	P	I	II	III	IV	V
14) It is going to be tough.	A	P	I	II	III	IV	V
15) It is going to be hard.	A	P	I	II	III	IV	V

UNCLEAR RESPONSES	CATEGORY	RATING
1) I have no idea if I can find him or not.	A P	I II III IV V
2) I cannot decide if can find him or not	A P	I II III IV V
3) I am not sure.	A P	I II III IV V
4) I do not know if I can find him or not.	A P	I II III IV V

While some birds laughed at them, the birds who wanted to find the Phoenix left the Bird Town and began a dangerous and tiring trip toward the Great Mountain. They were dancing together in the sky singing sweet songs and racing with the wind and the clouds.

Everything was wonderful and they were happy. Once they had passed the first valley, they saw the ocean. Canary Cecil screamed:

“What is that? It blocks all the roads to the Phoenix. We cannot land to eat and rest so we cannot continue our trip, anymore.”

Most of the birds were scared of the ocean. They walked around the beach but they could not find a way to cross over the water. The oldest bird:

“My sons and daughters, there is no way to pass this cruel water. It is endless. Forget the Phoenix. Let’s go back to the town!”

How would you answer if they asked your opinion?

POSITIVE RESPONSES	CATEGORY		RATING				
1. There is always a way.	A	P	I	II	III	IV	V
2. We should find a way.	A	P	I	II	III	IV	V
3. Let's try to find a way.	A	P	I	II	III	IV	V
4. We need to find a way because he is powerful.	A	P	I	II	III	IV	V
5. We can find a way to cross the ocean.	A	P	I	II	III	IV	V
6. I think we can find a way	A	P	I	II	III	IV	V
7. We need to find a way to find the Phoenix.	A	P	I	II	III	IV	V
8. Let's find a way.	A	P	I	II	III	IV	V
9. If we want, we can find ways to cross the ocean.	A	P	I	II	III	IV	V
10. I am sure there is a way to cross the ocean.	A	P	I	II	III	IV	V
11. Let's find a way and continue.	A	P	I	II	III	IV	V
12. You go back to the town. I will find a way.	A	P	I	II	III	IV	V

NEGATIVE RESPONSES	CATEGORY		RATING				
1) I am sure we can't find any way to cross the ocean.	A	P	I	II	III	IV	V
2) I am sure we can't think of any ways to pass the ocean.	A	P	I	II	III	IV	V
3) I think we cannot find a way to pass the ocean.	A	P	I	II	III	IV	V
4) I do not think we can find a way to pass it.	A	P	I	II	III	IV	V
5) The old bird is right. There is no way to cross the ocean.	A	P	I	II	III	IV	V
6) The old bird is right. The ocean closed all roads to the Phoenix.	A	P	I	II	III	IV	V
7) Let's go to the town. There is no way to cross the ocean.	A	P	I	II	III	IV	V
8) Let's not try because the ocean closed all ways to the Phoenix.	A	P	I	II	III	IV	V
9) I do not think there is a way to pass the ocean.	A	P	I	II	III	IV	V
10) I am sure there is no way to pass the ocean.	A	P	I	II	III	IV	V

UNCLEAR RESPONSES	CATEGORY		RATING				
	A	P	I	II	III	IV	V
1. I have no idea about what to say.							
2. I am not exactly sure.	A	P	I	II	III	IV	V
3. I do not know how to answer.			I	II	III	IV	V
4. Do I have to decide right now?	A	P	I	II	III	IV	V
5. I do not want to decide right now.	A	P	I	II	III	IV	V
6. I will decide later.	A	P	I	II	III	IV	V
7. I have no idea.	A	P	I	II	III	IV	V
8. Nobody knows what might happen next.	A	P	I	II	III	IV	V
9. We should have not begun the trip.	A	P	I	II	III	IV	V
10. Why everything is so hard.	A	P	I	II	III	IV	V
11. I knew we will not do anything right.			I	II	III	IV	V
12. I knew there will be something on our way	A	P	I	II	III	IV	V
13. See, I told you before.	A	P	I	II	III	IV	V

Most of them went back to the Bird Town. The birds who decided to fly over the ocean had a really hard time. They flew for days, so they went without eating and resting. The wind was so harsh and the rain did not stop. They got wet and weak.

After three days, they crossed the ocean and landed. Those few birds were so tired and hungry. They went around the beach and found a little food to eat. At night, they fell asleep quickly because they were so tired. When they woke up, they continued to fly. They flew for a week and came to the Great Mountain where the Phoenix lived. It was too high and frightening. Half of the mountain was above the clouds. One of them told others:

“The mountain is high and we are weak. We have never flown to that high before. We do not know this place. There might be so many dangerous animals and they could catch us. Let’s go back to the Bird Town like other birds did.”

What would you think in this situation?

POSITIVE RESPONSES	CATEGORY	RATING
1) I am not giving up at this point.	A P	I II III IV V
2) I would not give up.	A P	I II III IV V
3) We should keep going because other birds need us.	A P	I II III IV V
4) Keep going.	A P	I II III IV V
5) Represent yourself as a good person.	A P	I II III IV V
6) I am sure we can fly that high.	A P	I II III IV V

- | | | | |
|---|---|---|---------------|
| 7) I think we will do pretty well. | A | P | I II III IV V |
| 8) There is no way to give up. | A | P | I II III IV V |
| 9) I am not going anywhere without finding the Phoenix. | A | P | I II III IV V |
| 10) I can do it even if the mountain looks scary. | A | P | I II III IV V |
| 11) I am not weak to fly to the top. | A | P | I II III IV V |
| 12) I am not scared of the mountain. | A | P | I II III IV V |
| 13) I will continue and find the Phoenix. | A | P | I II III IV V |
| 14) I believe I can do it. | A | P | I II III IV V |
| 15) I believe I can fly that high and find the Phoenix. | A | P | I II III IV V |
| 16) You go back and I continue. | A | P | I II III IV V |
| 17) You go back but I will find him. | A | P | I II III IV V |

NEGATIVE RESPONSES	CATEGORY		RATING
1) I think I am giving up.	A	P	I II III IV V
2) I do not believe I can fly that high.	A	P	I II III IV V
3) I won't continue.	A	P	I II III IV V
4) I go back to the Bird Town.	A	P	I II III IV V
5) I am scared so I cannot continue.	A	P	I II III IV V
6) I do not think I can continue after this point.	A	P	I II III IV V
7) I do not think we will do well.	A	P	I II III IV V
8) I cannot do it because the mountain looks scary.	A	P	I II III IV V
9) I am scared of the mountain.	A	P	I II III IV V
10) I am weak to fly that high.	A	P	I II III IV V
11) I believe I can't do it.	A	P	I II III IV V
12) No one would continue after this point.	A	P	I II III IV V
13) I am going back right now.	A	P	I II III IV V
14) No bird can fly that high.	A	P	I II III IV V
15) My wings are not strong enough to fly that high.	A	P	I II III IV V

UNCLEAR RESPONSES	CATEGORY		RATING				
	A	P	I	II	III	IV	V
1) I am not sure if I can do it or not.							
2) I do not know what to do.	A	P	I	II	III	IV	V
3) I am not sure what to do.	A	P	I	II	III	IV	V
4) I do not know what exactly I can do.	A	P	I	II	III	IV	V
5) I am not sure what I would think.	A	P	I	II	III	IV	V
6) I do not know what I would think.	A	P	I	II	III	IV	V
7) It is hard to decide what I would do.	A	P	I	II	III	IV	V
8) I can't imagine what I would do.	A	P	I	II	III	IV	V
9) I cannot think of anything.	A	P	I	II	III	IV	V

Only Eaggy stayed and other birds returned to the Bird Town. He flew and flew to the top. After passing the part of the mountain which was above the clouds, he found himself in a snowstorm. He could not see anywhere so he was not able to fly anymore. He was not sure if he could continue to the trip.

What would you think if you were Eaggy?

POSITIVE RESPONSES	CATEGORY		RATING				
1) If I cannot fly, I can walk.	A	P	I	II	III	IV	V
2) I will find a way to continue.	A	P	I	II	III	IV	V
3) Find a shelter and continue until snowstorm stop.	A	P	I	II	III	IV	V
4) There should be a way to continue.	A	P	I	II	III	IV	V
5) I am sure I will find a way to continue.	A	P	I	II	III	IV	V
6) I can come up with a way to continue.	A	P	I	II	III	IV	V
7) I can find ways to solve this problem.	A	P	I	II	III	IV	V
8) I am sure there are so many ways to continue.	A	P	I	II	III	IV	V
9) I can think of a way to continue.	A	P	I	II	III	IV	V
10) I will find a way and continue.	A	P	I	II	III	IV	V

NEGATIVE
RESPONSES

CATEGORY

RATING

1) I do not think there is a way to continue.	A P	I II III IV V
2) 2) I do not think I can find a way and continue.	A P	I II III IV V
3) I would go back to Bird Town.	A P	I II III IV V
4) Find a way to go back.	A P	I II III IV V
5) I cannot think of any ways to continue.	A P	I II III IV V
6) I am sure there is no way to continue.	A P	I II III IV V
7) I cannot come up with a way and continue.	A P	I II III IV V
8) Even if there are ways to continue, I cannot find them.	A P	I II III IV V

UNCLEAR RESPONSES

CATEGORY

RATING

1) I have no idea.	A P	I II III IV V
2) I am not sure if I can find a way or not.	A P	I II III IV V
3) I do not know if there is a way to continue or not.	A P	I II III IV V

He continued on foot. After weeks of continuing on the road, the snow stopped. After a few miles, he saw a huge nest. He approached the nest and looked at it, but there was no one. There was no Phoenix

What would you think about the journey?

POSITIVE RESPONSES	CATEGORY	RATING
1) At least, I learned a lot during the journey.	A P	I II III IV V
2) Things I have done during the journey will help me in the future.	A P	I II III IV V
3) This experience will prepare me for my future journeys.	A P	I II III IV V
4) No worry. I did well during the journey.	A P	I II III IV V
5) I liked the challenges I encountered during the journey.	A P	I II III IV V
6) It was such a hard journey but I completed it.	A P	I II III IV V
7) Even though I could not find the Phoenix, I am not regretful.	A P	I II III IV V
8) It is not a failure but experience.	A P	I II III IV V
9) At least, I tried.		
10) It is not my fault not to find the Phoenix.	A P	I II III IV V
	A P	I II III IV V

NEGATIVE RESPONSES	CATEGORY		RATING				
1) The journey was waste of time.	A	P	I	II	III	IV	V
2) Beginning the journey was the most stupid thing I have ever done.	A	P	I	II	III	IV	V
3) I will not want to do anything after that.	A	P	I	II	III	IV	V
4) I should have gone back to the town with the other birds.	A	P	I	II	III	IV	V
5) I am a loser.	A	P	I	II	III	IV	V
6) It was a bad choice to go.	A	P	I	II	III	IV	V
7) It was not worth it.	A	P	I	II	III	IV	V
8) It was not worth of time.	A	P	I	II	III	IV	V
9) I was stupid to think that I can complete this quest.	A	P	I	II	III	IV	V
10) I am a sore loser in life.	A	P	I	II	III	IV	V
11) I knew I cannot find the Phoenix.	A	P	I	II	III	IV	V
12) I should have come earlier.	A	P	I	II	III	IV	V
13) It is my fault not to find the Phoenix.	A	P	I	II	III	IV	V
14) Nothing I ever did was good enough.	A	P	I	II	III	IV	V
15) The journey was a fault.	A	P	I	II	III	IV	V
16) It was my fault to begin the	A	P	I	II	III	IV	V

journey.

17) I should have returned like A P I II III IV V

other birds did.

18) I cannot do anything right. A P I II III IV V

19) It was a big mistake to A P I II III IV V

begin this trip.

20) Birds will laugh at me A P I II III IV V

when I return.

21) I deserved this. A P I II III IV V

UNCLEAR RESPONSES	CATEGORY		RATING				
1) I do not know what to say.	A	P	I	II	III	IV	V
2) I am not sure what I need to say.	A	P	I	II	III	IV	V
3) I do not want to say anything.	A	P	I	II	III	IV	V
4) I really don't know what to do?	A	P	I	II	III	IV	V
5) It's a hard decision on what to say.	A	P	I	II	III	IV	V
6) I cannot really think right now.	A	P	I	II	III	IV	V
7) I just do not really know.	A	P	I	II	III	IV	V
8) It is hard to decide.	A	P	I	II	III	IV	V
9) It is hard to think.	A	P	I	II	III	IV	V

STORY HOPE SCALE

Appendix B

Story Hope Scale

STORY OF THE THIRTY BIRDS



Once upon a time,

There was a special bird named “Phoenix” whose nest was in the Knowledge Tree. This huge and fantastic bird was so smart and beautiful with colorful feathers like a rainbow. His cry was musical, and his tears could cure illnesses. He was the most powerful bird all over the world because he lived forever. All the birds heard that the Phoenix was living on the highest mountain very far away, called the “Great Mountain.” Some of them believed that the Phoenix was real and some believed he was just a fairytale.

One day, the eagle Eaggy saw a huge feather with every color of the rainbow at the top of a nearby mountain, called “Dream Mountain”. He invited the birds who lived in different parts of the world to the Bird Town to talk about the Phoenix. Many birds from different places came together in the town and Eaggy told them:

“I found a big feather on the Dream Mountain. No birds might have that big feather except the Phoenix. So, he is real. We can find him and tell that other animals are hurting us. Because he is powerful, we may ask help. ” One of the other birds told:

“Even though the Phoenix is real, we cannot find him. He lives very far away on the highest mountain of the world. The road is dangerous and very long. We are not strong enough to take this trip.”



1) What would you think about finding the Phoenix in this situation?

A) I cannot overcome the difficulties during the journey.

B) I am not scared of the difficulties to find him.

C) I am not sure if I can find the Phoenix or not.

While some birds laughed at them, thirty birds who wanted to find the Phoenix left the Bird Town and began a dangerous and tiring trip toward the Great Mountain. They were dancing together in the sky singing sweet songs and racing with the wind and the clouds.

Everything was wonderful and they were happy. Once they had passed the first valley, they saw the ocean. Canary Cecil screamed:

“What is that? It blocks all the roads to the Phoenix. We cannot land to eat and rest so we cannot continue our trip, anymore.”



Thirty birds were scared of the ocean. They walked around the beach but they could not find a way to cross over the water.

While they were trying to decide what to do, the oldest bird told them:

“My sons and daughters, there is no way to pass this cruel water. It is endless. Forget the Phoenix. Let’s go back to the town!”

How would you answer if they asked your opinion?

A) The old bird is right. The ocean closed all roads to the Phoenix.

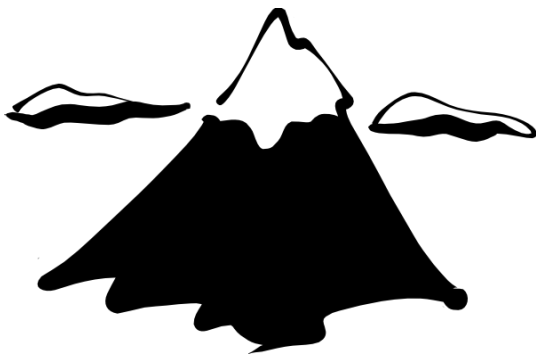
B) I am sure there is a way to cross the ocean.

C) I do not know how to answer.



Most of the birds went back to the Bird Town. The birds who decided to fly over the ocean had a really hard time. They flew for days, so they went without eating and resting. The wind was so harsh and the rain did not stop. They got wet and weak. After three days, they passed the ocean and landed. Those few birds were so tired and hungry. They went around the beach and found a little food to eat. At night, they fell asleep quickly because they were so tired.

When they woke up, they continued to fly. They flew for a week and came to the Great Mountain where the Phoenix lived. It was too high and frightening. Half of the mountain was above the clouds.



One of them told others:

“The mountain is high and we are weak. We have never flown to that high before. We do not know this place. There might be so many dangerous animals and they could catch us. Let’s go back to the Bird Town like other birds did.”



What would you think in this situation?

- A) I am going back right now.**
- B) I am not going anywhere without finding the Phoenix.**
- C) I am not sure what to do.**



Only Eaggy stayed and other birds returned to the Bird Town. He flew and flew to the top. After passing the part of the mountain which was above the clouds, he found himself in a snowstorm.

He could not see anywhere so he was not able to fly anymore. He was not sure if he could find a way to continue to the trip.

2) What would you think if you were Eaggy?

- A) Even if there are ways to continue, I cannot find them.**
- B) I am sure there are so many ways to continue.**
- C) I have no idea.**

He decided to continue on foot. After weeks of continuing on the road, the snow stopped. After a few miles, he saw a huge nest. He approached the nest and looked at it, but there was no one. There was no Phoenix.

3) What would you think about the journey?

A) The journey was waste of time.

B) This experience will prepare me for my future journeys.

C) I do not know what to say.

He did not go back to the town. After waiting for the Phoenix for weeks, Eaggy saw a secret door open in the nest. He went through and entered a secret tunnel. This tunnel led to a wonderful garden. The garden was so colorful and full of fruit. He saw the huge Knowledge Tree and the Phoenix's hidden nest. After a few moments, a wonderful smell came to his nose. The Phoenix showed up at this moment. Eaggy could not believe his eyes. The Phoenix was so beautiful. He had brilliant eyes and shiny feathers. His tail was like silk and gold. He was smiling at Eaggy:



“You are brave! It was such a hard journey but you did not give up. As a price of your determination, you can ask of me whatever you want.”

Eaggy was amazed by his beauty. He could say:

“I came to ask help, dear Phoenix. We are living in a faraway country and other animals are

“We will go to your town together and take all the birds here. You will live happily and No one will hurt you forever ” the Phoenix replied.

The Phoenix took Eaggy on his back and they flew to his country in a moment. When they reached the Bird Town, none of the birds could believe what they saw. The Phoenix took all the birds to the secret and beautiful garden. Afterward, they lived in peace and no other animals hurt them, forever after...



The end

STORY HOPE SCALE

Appendix C

After Test Questionnaire

NAME:

LAST NAME:

GENDER:

GRADE LEVEL:



STORY OF THE THIRTY BIRDS

- 1) How did you like the story?
 - A) I liked it a lot.
 - B) I did not like it.
 - C) It was ok.
- 2) How did you feel while answering the questions?
 - A) I felt comfortable because it was just a story.
 - B) It was stressful because I felt I am taking a test.
- 3) How did you answer the questions?
 - A) I wrote the best answer which a good person must think of.
 - B) I wrote the best answer I can think of.
- 4) How do you feel after story?
 - A) I am happy because he found the Phoenix.
 - B) I am bored because the story was long.

STORY HOPE SCALE

Appendix D

Answer Sheet

NAME:

LAST NAME:



1.

2.

3.

4.

5.

References

- Affleck, G., & Tennen, H. (1996). Construing Benefits from Adversity: Adaptational Significance and Dispositional Underpinnings. *Journal Of Personality*, 64(4), 899-922. doi:10.1111/1467-6494.ep9706272191
- Battelheim, B. (1989). *The uses of enchantment: The meaning and importance of fairy Tales*. New York: Vintage Books.
- Campbell, D. T. (1950). The indirect assessment of social attitudes. *Psychological Bulletin*, 47(1), 15-38. doi:10.1037/h0054114
- Chang, E. C., & DeSimone, S. L. (2001). The influence of hope on appraisals, coping, and dysphoria: a test of hope theory. *Journal of Social and Clinical Psychology*, 20, 117-129.
- Cook, Elaine. (2009). Positive psychology: Making the most of our lives. Retrieved from <http://aphroweb.net/papers/positive-psych.htm>
- Curry, L. A., Snyder, C. R., Cook, D. L., Ruby, B. C., & Rehm, M. (1997). Role of hope in academic and sport achievement. *Journal Of Personality And Social Psychology*, 73(6), 1257-1267. doi:10.1037/0022-3514.73.6.1257
- Curry, L.A., & Snyder, C.R. (2000). Hope takes the field: Mind matters in athletic performances. In C.R. Snyder (Ed.), *Handbook of hope: Theory, measures, and applications* (pp. 243-260). San Diego, CA: Academic Press.
- Ellingson, J. E., Sackett, P. R., & Hough, L. M. (1999). Social desirability corrections in personality measurement: Issues of applicant comparison and construct validity. *Journal Of Applied Psychology*, 84(2), 155-166. doi:10.1037/0021-9010.84.2.155

- Erickson, R. C., Post, R. D., & Paige, A. B. (1975). Hope as a psychiatric variable. *Journal Of Clinical Psychology, 31*(2), 324-330.
- Feldman, D. B., & Snyder, C. R. (2005). Hope and the meaningful life: Theoretical and empirical associations between goal-directed thinking and life meaning. *Journal of Social and Clinical Psychology, 24*, 401-421.
- Fisher, R. J. (1993). Social desirability bias and the validity of indirect questioning. *Journal of Consumer Research, 20*, 303-315. Retrieved from <http://www.jstor.org.ezproxy.lib.uh.edu/stable/2489277>.
- Garrett, C. (2001). Sources of hope in chronic illness. *Health Sociology Review, 10*(2), 99+. Retrieved from <http://go.galegroup.com.ezproxy.lib.uh.edu/ps/i.do?id=GALE%7CA173925944&v=2.1&u=txshracd2588&it=r&p=HRCA&sw=w>
- Gilman, R., Dooley, J., & Florell, D. (2006). Relative levels of hope and their relationship with academic and psychological indicators among adolescents. *Journal of Social and Clinical Psychology, 25*, 166-178.
- Gottschalk, L. A. (1974). A hope scale applicable to verbal samples. *Archives of General Psychiatry, 30*(6), 779-785.
- Jo, M. (1999). Controlling social desirability bias via method factors of direct and indirect and indirect questioning in structural equation models. *Psychology Marketing, 17*(2), 137-148.
- Lee, M., & Larson, R. (2000). The Korean examination hell: Long hours of studying, distress, and depression. *Journal of Youth and Adolescence, 29*, 249-271.

- Lopez, S. J., Snyder, C. R., & Pedrotti, J. (2003). Hope: Many definitions, many measures. In S. J. Lopez, C. R. Snyder, S. J. Lopez, C. R. Snyder (Eds.) , *Positive psychological assessment: A handbook of models and measures* (pp. 91-106). Washington, DC: American Psychological Association. doi: 10.1037/10612-006
- Lopez, S. J., Snyder, C. R. (2009). Oxford handbook of positive psychology. New York: Oxford University Press.
- Mandler, G., & Sarason, S. B. (1952). A study of anxiety and learning. *The Journal Of Abnormal And Social Psychology*, 47(2), 166-173. doi:10.1037/h0062855
- Parikh, R., Chakraborty, N., Sonawalla, S., Mehra, G., Dracos, S., & Fava, M. (2002). Depression in college students in Bombay: A study of 2273 individuals. *European Nevropsychopharmacology*, 12, 247-247.
- Paulhus, D. L. (1984). Two-component models of socially desirable responding. *Journal Personality and Social Psychology*, 46, 598–609.
- Paulhus, D. L. (1991). Measurement and control of response bias. In J. P. Robinson, P. R. Shaver, & L. S. Wrightsman (Eds.), *Measures of personality and social psychological attitudes* (pp. 17–59). San Diego, CA: Academic Press.
- Paulhus, D. L., & Vazire, S. (2007). The self-report method. In R. W. Robins, R. C. Fraley, & R. Krueger (Eds.), *Handbook of research methods in personality psychology* (pp. 224–239). New York, NY: Guilford Press.
- Pearsall, P. (2003). *The Beethoven factor: The new positive psychology of hardiness, happiness, healing and hope*. Charlottesville, VA: Hampton Roads Publishing Co.

- Rand, K. L. (2009). Hope and optimism: Latent structures and influences on grade expectancy and academic performance. *Journal of Personality*, 77(1), 231-260.
doi:10.1111/j.1467-6494.2008.00544.x
- Range, L. M. & Penton, S. R. (1994). Hope, hopelessness and suicidality in college students. *Psychological Reports*, 75, 456-8.
- Scioli, A., Ricci, M., Nyugen, T., & Scioli, E. R. (2011). Hope: Its nature and measurement. *Psychology Of Religion And Spirituality*, 3(2), 78-97.
doi:10.1037/a0020903
- Sherwood, G. G. (1981). Self-serving biases in person perception: A reexamination of projection as a mechanism of defense. *Psychological Bulletin*, 90(3), 445-459.
doi:10.1037/0033-2909.90.3.445
- Snyder, C. R. (1995). Conceptualizing, measuring, and nurturing hope. *Journal of Counseling & Development*, 73, 355-360. Retrieved from 6a97-44a1-a5f4-90958a48b5fe%40sessionmgr115&vid=1&hid=122
- Snyder, C. R. (2000). *Handbook of hope: Theory, measures, & applications*. San Diego, Calif.: Academic.
- Snyder, C. R., Harris, C., Anderson, J. R., Holleran, S. A., Irving, L. M., et al. (1991). The will and the ways: Development and validation of an individual-differences measure of hope. *Journal of Personality and Social Psychology*, 60, 570-585.

- Snyder, C. R., Hoza, B., Pelham, W. E., Rapoff, M., Ware, L., Danovsky, M., Highberger, L., Rubinstein, H., & Stahl, K. (1997). The development and validation of the Children's Hope Scale. *Journal of Pediatric Psychology, 22*, 399-421.
- Snyder, C. R., Lopez, S. J., Shorey, H. S., Rand, K. L., & Feldman, D. B. (2003). Hope theory, measurements, and applications to school psychology. *School Psychology Quarterly, 18*(2), 122-139. doi:10.1521/scpq.18.2.122.21854
- Snyder, C. R., Shorey, H. S., Cheavens, J., Pulvers, K., Adams, V., & Wiklund, C. (2002). Hope and academic success in college. *Journal Of Educational Psychology, 94*(4), 820-826. doi:10.1037/0022-0663.94.4.820
- Staats, S. R. (1989). Hope: A comparison of two self-report measures for adults. *Journal of Personality Assessment, 53*, 366-375.
- Staats, S. R., & Stassen, M. A. (1985). Hope: An affective cognition. *Social Indicator Research, 17*, 235-242.
- Vazire, S. (2006). Informant reports: A cheap, fast, and easy method for personality assessment. *Journal of Research in Personality, 40*, 472-481.
- Weissman, M. M, Orvaschel, H., Padian N. (1980). Children's symptom and social functioning self-report scales: Comparison of mothers' and children's reports. *Journal of Nervous Mental Disorders, 168*(12), 736-740.