Nonprofits as Pathways of Hope

Chan M. Hellman, PhD and Ricky T. Munoz, MSW, JD.

University of Oklahoma – Tulsa Schusterman Center

Nonprofits exist to optimize functioning in the clients they serve. These clients are often characterized as living in high stress environments that leave them at a greater risk for such things as poverty, substance abuse, intimate partner abuse, child abuse, etc. Indeed, nonprofits maintain a pro-social concern for others and see their purpose as a “safety net” for our community. Nonprofit organizations provide services for their clients through specialized programs relative to the mission of the agency and the specific client populations they serve. While transitioning through these programs, the client and agency staff establishes client outcomes (goals) that are believed to enhance optimum functioning of the client given their psychological, social, and demographic means. What is of particular interest is the pathway toward goal attainment and the important mental processes that are impacted. One important mental process that has received prominence in the positive psychology literature is the cognitive construct of hope (Snyder, 2002). We argue that nonprofit program services are pathways of hope for the client as a precursor to goal attainment (cf. Feldman, Rand, & Kahle-Wrobleski, 2009).

Hope Theory.

Hope theory, as described by Snyder (2002), is a cognition related to one’s expectation toward achieving some future goal. Indeed, on the basis that we are driven by our goals, Snyder (2002) argues to the extent we can establish clear strategies or pathways to achieving the goal and are willing to direct mental energy (agency) toward pursuing these pathways, we are experiencing hope. Those who have a pathway but low energy, motivation (agency) are considered low hope. Similarly, those with high
mental energy but no mental pathways toward goal attainment are considered low hope. In order to be high hope, the individual must have both pathways and agency toward the goal.

Snyder and his colleagues developed a psychometrically suitable measure (Snyder, Harris, Anderson, Holleran, Irving, Sigmon, Yoshinobu, Gibb, Langelle, & Harney, 1991). Our recent work (cf. Hellman, Pittman, & Munoz, in press) have provided for the psychometric stability of this measure. To date, there have been approximately 400 scholarly publications using this measure. Empirical findings have shown that hope is a strong predictor of well-being, hope is positively associated with behavioral change, and is positively associated with physical well-being. This concept of hope can be empirically supported as a theory of change for the nonprofit community.

Our Approach:

We have found that hope is differentiated by levels of social connectedness, hope is positively associated with program services, and that high hope parents have a better quality of life and more positive parent-child relations compared to low hope parents. To date, no other published studies have applied hope theory to understanding optimum client functioning in the nonprofit arena. We are developing goal specific hope measures using the framework of pathways and agency tied to the specific services of the nonprofit agency. The following questions drive our outcomes research for nonprofit organizations

1. How do program services impact client hope across time?

2. To what extent, is hope predictive of goal attainment (e.g., change)?

3. What individual differences are potential moderators in the relationship between hope and goal attainment?

4. How is the hope of a nonprofit staff member related to the hope of the client being served?

5. Can hope serve as a buffer to burnout and turnover among nonprofit staff?
The First Twenty Years of the Will and the Ways: An Examination of Score Reliability Distribution on Snyder’s Dispositional Hope Scale

Chan M. Hellman · Megan K. Pittman · Ricky T. Munoz

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Abstract C. R. Snyder has established hope theory as an important contributor to positive psychology. As the empirical evidence continues to grow, hope researchers need to have confidence that their measures will produce reliable scores. This study presents a reliability generalization on both the internal consistency and test-retest reliability estimates from Snyder’s dispositional hope scale. While over 300 published works were found to have cited the target article 74 present internal consistency scores and 17 reported scores for test-retest reliability. The results of the reliability generalization suggest support for the score reliabilities produced by the dispositional hope scale. However, internal consistency was higher for studies using the eight-item response format ($\alpha = 0.82$) compared to those using the four-item response format ($\alpha = 0.77$). Additionally, the test-retest score reliability was high 0.80 with no statistically significant differences by response format. Findings also demonstrated that score reliability estimates were not significantly influenced by the coded sample characteristics.

Keywords Dispositional hope · Reliability generalization

1 Introduction

Approximately 20 years ago, C. R. Snyder introduced a theoretical framework of hope along with a dispositional measure of hope (cf. Snyder 1989; Snyder et al. 1991a, b). Snyder et al. (1991a, b) defined hope as "...a cognitive set that is based on a reciprocally derived sense of successful (a) agency (goal-directed determination) and (b) pathways

C. M. Hellman (✉)
Tulsa Schusterman Center, Department of Human Relations, University of Oklahoma, 4502 East 41st Street, Tulsa, OK 74101, USA
e-mail: chellman@ou.edu

M. K. Pittman
Center of Applied Research for Nonprofit Organizations, University of Oklahoma, Tulsa, OK, USA

R. T. Munoz
Anne and Henry Zarrow School of Social Work, University of Oklahoma, Tulsa, OK, USA

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(planning of ways to meet goals)” (p. 571). The basic assumption of hope is that purposeful human behavior is based upon an expectation of reaching a desired goal (cf. Locke and Latham 2002). It follows that hope is a cognitive process that is grounded in the interrelated trilogy of future goals, pathway thinking and human agency. High hope people can identify detailed strategies toward attaining these goals as well as their positive mental energy in pursuing these pathways. High hope individuals have confidence in their pathways and can often find alternative pathways when they experience barriers in their goal pursuit (Irving et al. 1998; Snyder 1994; Snyder 1995; Snyder 1996; Snyder 2000; Snyder 2002; Snyder et al. 1998).

Feldman et al. (2009) found that hope, especially agency, predicted future goal-attainment (accomplishment). Similar empirical findings suggest that higher hope individuals have a greater number of goals, have more success at obtaining those goals, have greater happiness and less distress, better coping mechanisms, recover better from physical injury and report less work burnout (Bailey et al. 2007; Bailey and Snyder 2007; Gallagher and Lopez 2009; Lopes and Cunha 2008; Snyder 1994). In addition, high hope individuals are more likely to engage in healthy behaviors with respect to prevention and compliance, as well as adjustment toward illnesses such as diabetes, cancer, HIV+, and end of life issues Snyder et al. (2000a, b; Harney 1990; Floyd and McDermott 1998).

1.1 Purpose of Study

In the context of establishing hope as a psychological construct important in explaining human behavior, Snyder (2002) stated, “Once a new psychological theory has been defined, a useful next step is to develop and validate an individual difference scale that reflects the theory structure. Beyond the scale representing a faithful rendering of its theory, it must be both reliable and valid” (p. 255). To this end, the purpose of the current article is to present a reliability generalization study on the dispositional hope scale presented by Snyder et al. (1991a, b).

1.2 Dispositional Hope Scale

Snyder (2002) argued that, “...hope was something more than the thoughts surrounding a specific goal...That is to say, people had enduring, self-referential thoughts about their capacities to produce routes to goals, and their capacities to find the requisite motivations for those goal pursuits” (p. 250). Therefore, dispositional hope reflects the general belief that individuals possess the ability to develop mental pathways and focus mental energy toward any desirable goal. Moreover, this conceptualization argues that hope is stable across time and context. The dispositional hope scale Snyder et al. (1991) consists of 12-items designed to measure an individual’s hopeful disposition. This scale attempts to measure the additive role of both agency and pathways thinking toward goal attainment—i.e., the hope construct. As such, four items reflect the agency (mental energy) for past, present and future goals. Four items were determined to reflect the cognitive pathways toward goal attainment. Finally, four items are considered filler items and not part of the total hope scale. While subscale scores can be computed for both agency and hope, adding scores from the eight items can derive a total scale score. Indeed, Snyder et al. (1991) argued the items for agency and pathway reflect a higher-order latent construction of hope that can describe individual differences.
1.3 Structural Validity Studies

Several studies have examined the structural validity estimates of the dispositional hope scale (Babyak et al. 1993; Brouwer et al. 2008; Creamer et al. 2009; Peterson and Byron 2008; Roessler and Vaughn 2006). Indeed, structural validity studies have supported the dispositional hope scale to measure separately the agency and pathway dimensions as well as the latent higher order construct of hope as described by Snyder. The dimensionality of a measure impacts alpha coefficients (Cortina 1993). Furthermore, studies have demonstrated that hope is distinct from optimism (Bailey et al. 2007) and self-efficacy (Magaletta and Oliver 1999).

1.4 Score Reliability

Score reliability is specific to each sample of individuals responding to a given measure of interest (Crocker and Algina 1986; Gullicksen 1950; Thompson 2003). Indeed, samples, sampling procedures, and testing situations, among other unique study characteristics, influence measurement error such that inducing reliability from previous empirical results will rarely be appropriate (cf. Vassar et al. 2008). Further, scores obtained from samples using a particular scale, with a given number of items, under different circumstances have varying reliability properties. These systematic sources of measurement error serve to reduce effect size estimates potentially increasing type II error rates (Henson 2001; Lord and Novick 1968; Podhazur 1997). The reliability of any psychometric measure is significant because one of the basic statistical assumptions from the general linear model is that the variables have been measured without error. Consider the importance of measurement in clinical and experimental interventions where reliability coefficients are expected to be 0.80 or higher (Howell and Shields 2008). Indeed, the conclusions drawn about the efficacious nature of a clinical intervention when measures have substantial error have direct impact on theoretical development, let alone the well-being of clients and the future of other interventions.

1.5 Reliability Generalization

Following the traditions of validity generalization, Vacha-Haase (1998) introduced reliability generalization as a technique to quantitatively assess score reliability across studies. Reliability generalization describes the central tendency of a reliability estimate for a given measure, the variability of these reliability estimates, and the various study characteristics that tend to produce higher or lower reliability scores (Vacha-Haase 1998). To conduct a reliability generalization study, previous studies using a specific measure are obtained by the researcher and sorted based upon the type of reliability statistic computed, noting those studies that have induced or failed to report score reliability. Articles are further coded for specific sample and study characteristics (i.e., average age, number of items used, etc.) with specific attention to those characteristics that are believed to impact the variability in the reliability estimates.

2 Methods

2.1 Sample of Articles

A literature search was conducted in the PsychARTICLES database for articles that have cited Snyder’s dispositional hope scale Snyder et al. (1991). This search resulted in a total
of 303 articles or book chapters. Not all articles were available in full text format. Thus, electronically unavailable articles were obtained via inter library loan. An examination of these 303 publications resulted in 173 articles not using the scale for empirical purposes. Of the remaining 130 studies, 20.2% did not report a reliability score and no studies were found that induced a reliability score from another study. Cronbach alpha estimates were reported in 74 studies and test-retest scores were reported in 17 studies (n = 91). Sample characteristics and study features that were coded included number of items, scale mean, scale standard deviation, sample size, average age, percent male, percent Caucasian, and subject source for the study.

3 Results

While hope scores are comprised of both agency and pathway items, all published reliability estimates in this study were based upon a total scale score. Consequently, internal consistency scores (N = 74) from the total scale score of the dispositional hope scale in addition to temporal stability scores (N = 17) of the total scale score were examined.

3.1 Internal Consistency Reliability

In regards to the dispositional hope scale, Seventy-four studies were found that assessed the reported internal consistency reliability scores. Of the 74 studies, 28 reported using a four-point Likert format and 16 used the eight-item Likert response format. An ANOVA demonstrated that the mean score reliability estimate for the four-item response format (0.77; SD = 0.06) was lower than the eight item format (0.82; SD = 0.05) and was statistically significant F (1, 42) = 8.34; p < 0.05; η² = 0.17.

For those studies using a four-point response format, the mean reliability estimate was 0.77 (SD = 0.07; SE = 0.01) with a 95% confidence interval ranging from 0.75 to 0.79. The median and mode reliability coefficient were each 0.78. Moreover, the distribution was slightly skewed negatively (−0.07; SE = 0.44) with a kurtosis of −0.67 (SE = 0.86). All raw scores were converted to z-scores and ranged from −1.82 to 1.58. For those studies using the eight-point response format, the mean reliability estimate was 0.82 (SD = 0.07; SE = 0.01) with a 95% confidence interval ranging from 0.79 to 0.85. The median reliability coefficient was 0.82 and the mode was 0.78 respectively. Moreover, the distribution was positively skewed (0.35; SE = 0.56) with a kurtosis of −0.71 (SE = 1.09). All raw scores were converted to z-scores and ranged from −1.70 to 1.63.

The average internal consistency estimates are not statistically significantly correlated with the average sample characteristics. More specifically, the relationships between score reliability and sample size (r_x, x-item = −0.06; r_y, y-item = 0.00; p > 0.05); average age of the sample (r_x, x-item = 0.17; r_y, y-item = 0.03; p > 0.05), percent male of the sample (r_x, x-item = −0.16; r_y, y-item = −0.09; p > 0.05); as well as the percent Caucasian of the sample (r_x, x-item = 0.31; r_y, y-item = −0.32; p > 0.05) were not statistically significant.

3.2 Test–Retest Reliability

A second important type of reliability germane to the measurement of dispositional hope is test-retest reliability, which assesses the degree to which scores on the same test are consistent over time. Seventeen studies were found that independently assessed the temporal consistency reliability scores for their study. Differences by response format were not
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statistically significant \([F (1, 10) = 2.83; \ p < 0.05; \ \eta^2 = 0.19]\). The mean test–retest reliability estimate for the 17 studies was 0.80 (SD = 0.05; SE = 0.01) with a 95% confidence interval ranging from 0.77 to 0.82. The median and mode reliability coefficient were 0.81 and 0.85 respectively. Moreover, the distribution was slightly skewed negatively, \((-0.76; \ SE = 0.564)\) with a kurtosis of \(-0.365 (SE = 1.09)\). All raw scores were converted to z-scores and ranged from \(-2.17\) to \(1.04\) suggesting no cutters in the data set.

The average test–retest estimates are not statistically significantly correlated with the average sample characteristics. More specifically, the relationships between score reliability and sample size \((r = -0.23; \ p > 0.05)\); average age of the sample \((r = 0.29; \ p > 0.05)\), percent male of the sample \((r = -0.35; \ p > 0.05)\); as well as the percent Caucasian of the sample \((r = 0.28 \ p > 0.05)\) were not statistically significant.

4 Discussion

The objectives of the present study were to examine reliability estimates for Snyder’s et al. (1991) dispositional hope scale using reliability generalization techniques and investigate study characteristics that may influence score reliability both at the internal and temporal consistency level. For the internal consistency scores, response format makes a significant difference in that using an eight point format produces a higher average score reliability compared to the four-point format as originally introduced by Snyder et al. (1991a, b). Nevertheless, the mean reliability estimate for internal consistency for both formats was in the acceptable range for both survey development and experimental applications but potentially at the lower end for clinical studies (Howell and Shields 2008). Subsequent analysis suggests that internal consistency scores are relatively independent from sample characteristics.

Another potentially important finding from the current study is the high level of test–retest reliability estimates across the studies. The average test–retest reliability estimate found in this study was approximately the same as the internal consistency estimate described previously. This high score suggests support for Snyder’s et al. (1991a, b) argument that dispositional hope is stable across both time and situation. These findings suggest an important measure of an individual’s general disposition of generating both pathways and agency toward a future valued goal. Generally, Snyder’s dispositional hope scale appears to be relatively consistent across samples for both internal consistency and temporal stability.

4.1 Impact of a Reliable Hope Measure

Hope theory is establishing itself as a meaningful construct within positive psychology. However, if we are to generate confidence in hope’s strength based perspective, researchers must have confidence in the ability to adequately measure the construct. From a practitioner perspective, hope is the catalyst that facilitates behavioral change within the client. In fact, hope has been proposed as a meta theory that unites all clinical treatment modalities (Snyder 2000). Particular focus has been paid on hope to better explain cognitive behavioral therapy, problem solving and solution focused therapies (Snyder et al. 2000a, b). Given the growing evidence of the relationship of hope to both cognitive and behavioral outcomes in multiple therapeutic contexts, the reliable measurement of hope offers the potential to better track clinical intervention efficacy (Cheavens et al. 2006).
4.2 Limitations of Study

As with any reliability generalization analysis, this study is limited in the number of published studies that have empirically used the dispositional hope scale. Indeed, while over three-hundred publications were found to have cited the original study Snyder et al. (1991a, b), only ninety-one studies empirically used the measure. This potentially invokes the file drawer problem addressed specifically by Howell and Shields (2006) to help understand the number of unpublished studies needed to nullify the reliability generalization results. Using the unweighted formulas provided by Howell and Shields (2008) and a lower threshold coefficient value of 0.70, shows that 111 studies would be needed for internal consistency and 28.33 for test–retest reliability respectively to negate our findings. Another limitation is the fact that many psychometric studies are based upon college student convenience samples. It is clear, that more research is needed if application of hope theory to the well-being of diverse populations is to be established across more applied clinical, community, and health psychology situations. Our correlational findings suggest score reliability estimates are relatively independent of sample characteristics. This study has demonstrated support for the ability of the dispositional hope scale to generate consistency in scores across items and time. Given the results of this reliability generalization study of the dispositional hope scale, it is clear the instrument has value as a measurement tool toward our understanding of optimum human functioning.

References

Bruce Jovanovich College Publishers.
Snyder’s Dispositional Hope Scale


