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THE EMPLOYMENT HOPE SCALE: MEASURING AN EMPOWERMENT PATHWAY TO EMPLOYMENT SUCCESS

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ABSTRACT

This chapter presents findings on revalidation of the Short Employment Hope Scale (EHS-14) using a recently collected independent sample of 661 low-income jobseekers. This client-centered measure captures an aspect of multi-dimensional psychological self-sufficiency (SS) as a process-driven assessment tool. The original employment hope metric was constructed as a 24-item six-factor structure from its earlier conceptualization resulting from client focus group interviews.

The EHS measure was initially validated using an exploratory factor analysis (EFA), resulting in a 14-item two-factor structure with Factor 1 representing ‘psychological empowerment’ and Factor 2 representing ‘goal-oriented pathways’. In the following revalidation process using a confirmatory factor analysis (CFA), this 14-item two-factor EHS was modified into a 14-item four-factor EHS-14, with two higher order components, based on the original theoretical suggestion. The CFA result on the modified model adds another evidence for generalization, indicating that EHS-14 is a consistent and valid tool.

Key words

Employment hope, psychological self-sufficiency, measurement, workforce development, low-income

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INTRODUCTION

With the recent emergence of positive psychology and strengths-based approaches, researchers have taken an interest identifying and examining individuals' personal strengths, competencies and adaptive behaviors, as opposed to focusing primarily on pathology (Valle, Huebner, & Suldo, 2006). The concept of hope is one such positive attribute that has gained researchers' attention in recent years and has the potential for myriad applications. High levels of hope have been positively correlated with an increase in positive outcomes including higher levels of self-esteem and better academic performance (Valle, et al., 2006), as well as facilitating meaning-making in people with terminal illnesses (Elliott & Olver, 2009). Hope is energizing in situations of adversity and is almost synonymous with finding meaning (Buckley & Herth, 2004). Lazarus (1999) maintains that without the prospect of hope, the individual is left to the uncomfortable arousal state of despair and hopelessness, whereby a person does not possess the capacity to foresee any desirable outcome.

Hong and his colleagues (2009; 2012) have developed and validated the Employment Hope Scale (EHS). EHS was originally designed to measure an aspect of psychological self-sufficiency (PSS) to complement a rather dominant paradigm of economic self-sufficiency (ESS) in workforce development. The former has been defined as a transformative process of reaching one's employment and financial goals (Hong, Sheriff, & Naeger, 2009) that involves overcoming perceived employment barriers by way of enhancing employment hope (Hong, 2013). The latter ESS on the other hand has been used commonly as an outcome-driven concept that often relies on a combination of employment status, financial security, and independence.

Employment hope is a necessary and key condition for achieving economic success for low-income jobseekers (Hong, 2013). To test the relationship between PSS and ESS, emerging studies have hypothesized and found that ESS is positively affected by employment hope (Hong & Choi, Under Review; Hong, Lewis, & Choi, In Press). Particularly for low-income jobseekers, employment

hope has been found to be a positive psychological motivator, non-cognitive internal strength, and psychological empowerment tool that help one sustain the uphill battle of job search, employment, and retention (Hong, 2009; 2013). In other words, employment hope is critical for individuals to continue believing in the ‘possible-self’ (Oyserman, Bybee, Terry, & Hart-Johnson, 2004) against all obstacles and remain committed to their career paths.

In this regard, this chapter seeks to test for revalidation of the Short Employment Hope Scale (EHS-14), a new name for the original EHS that was modified into a four-factor scale in an earlier multi-sample confirmatory factor analysis (CFA) study (Hong, Choi, & Polanin, Under Review). Using a more recent sample of 661 low-income jobseekers surveyed in 2012, this follow-up study tests the extent to which EHS-14 is a robust measure in a different independent sample. This client-centered measure captures the state of one’s psychological empowerment, futuristic motivation, skills and resources, and goal-orientation as a developmental process. With revalidation of EHS-14, development of and changes in employment hope can be monitored, with assessment on how each factor plays a part in incremental stages of psychological transformation.

BACKGROUND LITERATURE

Chi (2007) maintains that hope has not been the easiest concept to research because of “its ambiguous nature, its blend of intangibility and reality, and various individual interpretations of its meaning” (p. 415). Snyder (1995) affirms that many previous writers had been skeptical and ambivalent about hope, suggesting that it was too vague to measure, and useless to measure if they could. The past two decades have brought a different perspective, though, one that states that hope is not only viewed as a coping strategy, but is increasingly being perceived as understandable and measurable.

Snyder and colleagues (1991) were one of the pioneers in quantitative hope studies within positive psychology, using it as a framework for understanding and conceptualizing human behavior. Most definitions of hope stem from Snyder’s 1991 cognitive-based

model presenting hope as “a cognitive motivational construct with reciprocally related elements of goals, pathways or strategies, and agency or motivation to achieve goals” (Davidson et al., 2010, p. 170). Bernardo identifies Snyder’s hope theory as “one of the most influential theories of hope in the last 15 years” (Bernardo, 2010, p. 944). Reflecting Snyder’s (1991) conceptualization, Larsen, Edey, and Lemay (2007) define hope as “the sum of mental will power (goal directed energies) and way power (perceived pathways to goals) that one has to achieve goals,” as well as a multi-dimensional “process of anticipation that involves the interaction of thinking, acting, feeling, and relating, and is directed toward a future fulfillment that is personally meaningful” (p. 402).

Goals, pathways and agency in Snyder’s hope are referred to as the “trilogy” for understanding the concept (Snyder, 2002, p. 250). Goals are viewed as mental representations directed toward ‘positive goal outcome’ or the avoidance or delay of ‘negative goal outcome’. Pathways are described as an individual’s ability to link one’s present reality with an ‘imagined’ future. High-hope individuals have a ‘highly articulated,’ or clearly defined pathway to achieve their goals. They also possess an ability to adapt in the event that a singular pathway fails to lead to a desired outcome. Finally, agency is described as “the perceived capacity to use one’s pathways to reach desired goals” (Snyder, 2002, p. 251). This is what Snyder identifies as the ‘motivational component’ in the definition of hope. Agency and pathway interact reciprocally, and cumulatively, to increase goal-directed thinking.

The core essence in the evolution of Snyder’s definitions of hope is an expectation within a person that they will achieve some goals. When this expectation is present, the individuals experiencing hope gain the sense of security in the future. In addition, ones with hope gain additional motivation because they believe in their ability to realize their goals. Ultimately, hope is the belief that one can achieve their goal and the accompanying sense that they possess the tools to do so. Snyder et al. (1991) emphasizes that this positive emotional state leads to high probabilities of goal attainment and a higher focus on success. Empirical research has consistently found that individuals with greater hope tend to have more goals, more

challenging goals, and more pathways and agency to achieve their goals (Snyder et al., 1991).

Another stream of thinking in hope research took off in the field of nursing, particularly focusing on terminally ill patients and their caregivers (Dufault & Martocchio, 1985; Herth, 1989; 1990; 1991; 1993). Dufault and Martocchio (1985) conceptualized hope as “a multidimensional dynamic life force characterized by a confident yet uncertain expectation of achieving a future good which, to the hoping person, is realistically possible and personally significant” (p. 380). Hope is both generalized and particularized. Generalized hope is not constrained by specific time or goals, whereas particularized hope is contextualized in specific time and goals. The multidimensionality of hope includes the following dimensions: affective (emotions), cognitive (imagination, thinking, state of being), behavioral (actions taken to achieve a hope), affiliative (relationships), temporal (past, present, future and being), and contextual (context of life)

Herth defines hope as, “[a] dynamic inner power that enables transcendence of the present situation and fosters a positive new awareness of being” (Herth, 1993, p.538). Hope is a vital coping mechanism for the cancer patient (Herth, 1989). In contrast to Snyder’s hope, Herth measures hope by tapping into both goal-oriented cognition and non-goal related optimism, and other perceived social and spiritual support (Farran, Herth, & Popovich, 1995). The Herth Hope Scale (HHS; Herth, 1991) captures the following theoretically-derived dimensions of hope: (1) cognitive-temporal (perceptions that a desired outcome is realistically probable), (2) affective-behavioral (confidence in the initiation of plans to attain desired outcomes), and (3) affiliative-contextual (perception of spiritual and social support) (Farran, Herth, & Popovich, 1995, p.62).

The concept of hope is significant in workforce development and vocational psychology because it contributes to the pursuit and attainment of meaningful work, especially for low income or disenfranchised populations. Applying Snyder’s (2000) conceptualization of hope, Juntunen and Wettersten (2006) developed the Work Hope Scale (WHS). They defined work hope as

“a positive motivational state that is directed at work and work-related goals and is composed of the presence of work-related goals and both the agency and the pathways for achieving those goals” (p.97). Diemer and Blustein (2007) also developed a vocational hope and identity measure taking into account structural barriers. Brown, Lamp, Telander, and Hacker (2012) contextualized vocational hope with the social cognitive career theory (SCCT) framework. Based on this model, vocational hope is conceptualized as a positive emotional and motivational state associated with envisioning a future in which satisfying and meaningful work is attainable.

Hong, Sheriff, and Naeger (2009) uncovered hope at the center of the bottom-up definition of SS from a focus group of low-income jobseekers. Critically questioning the main policy focus on ESS and the subsequent adherence to benchmarking ESS in job training programs, the clients defined SS as a process of developing psychological strength and making a goal-oriented progression toward realistic financial outcomes. Finding that this definition resembles Snyder’s (1991) conceptualization of hope, it was named employment hope. Employment hope comprised six conceptual groupings under two higher order components—(1) psychological empowerment (self-worth; perceived capability; and future outlook) and (2) process of moving toward future goals (self-motivation; utilization of skills and resources; and goal orientation). These findings were further confirmed by a follow-up focus group study of service providers, clients, and graduates of the training program (Hong, 2013).

Using a 24-item instrument—a total of 6 dimensions with 4 items per dimension—constructed from the earlier conceptualization of employment hope, Hong, Polanin, and Pigott (2012) initially validated the Employment Hope Scale (EHS) via exploratory factor analysis (EFA). This procedure resulted in a 2-factor 14-item structure with Factor 1 representing ‘psychological empowerment’ and Factor 2 representing ‘goal-oriented pathways.’ In the following revalidation effort using a multi-sample CFA (Hong, Choi, & Polanin, under review), EHS was modified into a 4-factor 14-item model based on the original theoretical suggestion, given the unacceptable fit of the 2-factor model suggested by the preliminary

EFA study. Based on the stringent criteria employed to reduce the original 6-factor 24-item EHS to the 2-factor 14-item EHS, the revalidated 4-factor 14-item EHS was named the Short Employment Hope Scale (EHS-14; Hong, Choi, & Polanin, under review). This study aims to test for validation of EHS-14 using a recently collected data and add another evidence of validity.

METHOD

Sample and Data Collection

This study uses an independent sample of 661 low-income jobseekers attending job readiness workshops provided at the Chicago Urban League between November 2011 and October 2012. Participants of the Success Strategies Workshop were given 30-40 minutes to fill out the self-report surveys administered by a staff person of the Chicago Urban League and Loyola University Chicago on the orientation day of the program. Participants, who are incumbent workers as well as individuals with little or no previous work experience, attend these workshops to receive assistance in finding pathways to employment and career advancement. The Workforce Development Department of the Chicago Urban League works to raise African-American employment and income levels through job training and placement services, career exposure, career advancement, seminars, coaching and long-term retention strategies. It helps individuals access the skills, knowledge, support and networks they need to enter the workforce and advance in their careers. It also has formed partnerships with local employers and training providers to provide employment and internship opportunities.

The 661 respondents were on average 39.21 years of age ($SD=12.45$) and relatively evenly divided by gender (Male=54.5%, Female=45.5%). The vast majority of participants was African-American (95.4%), and not employed (90.6%). While about ten percent of participants (9.4%) had less than high school education and thirty percent had completed high school or GED (28.4%), about

a quarter of respondents had above associate degree (23.5%). More than two-thirds of the participants received job training in the past 10 years (70.8%), and more than half earned less than \$5,000 for the previous year (60.9%).

Table 1. The demographic descriptive of the sample

| | <i>N</i> | % | | <i>N</i> | % |
|--|----------|------|--------------------------------|----------|------|
| Gender | | | Employment status | | |
| Male | 316 | 54.5 | Employed | 58 | 9.4 |
| Female | 264 | 45.5 | Not employed | 561 | 90.6 |
| Age group | | | Job training experience | | |
| 18-29 | 234 | 35.4 | Experienced | 368 | 70.8 |
| 30-39 | 123 | 18.6 | No experience | 152 | 29.2 |
| 40-49 | 134 | 20.3 | Household income \$ | | |
| 50-59 | 126 | 19.1 | None-999 | 356 | 53.9 |
| over 60 | 44 | 6.7 | 1,000-4,999 | 46 | 7.0 |
| Race | | | 5,000-9,999 | 85 | 12.9 |
| Black or African American | 557 | 95.4 | 10,000-29,000 | 54 | 8.2 |
| Other | 27 | 4.6 | Above 30,000 | 120 | 18.2 |
| Education level | | | Housing | | |
| Less than high school | 54 | 9.4 | Rental | 330 | 53.7 |
| High-school / GED | 163 | 28.4 | Own home/condo | 118 | 19.2 |
| Some college but no degree | 162 | 28.3 | No home | 48 | 7.8 |
| Diploma/certificate from technical, vocational, and trade school | 59 | 10.3 | Assisted housing | 38 | 6.2 |
| Associate degree | 36 | 6.3 | Other | 81 | 13.2 |
| Bachelor's degree | 74 | 12.9 | | | |
| Master's degree | 22 | 3.8 | | | |
| Professional school | 2 | .3 | | | |
| Doctorate | 1 | .2 | | | |

Measure

Hong et al. (2009) originally developed the 24-item 6-factor structure EHS (4 items under each factor)—(1) self-worth, (2) perceived capability, (3) future outlook, (4) self-motivation, (5) utilization of skills and resources, and (6) goal-orientation—which was informed theoretically from qualitative analyses. EHS is a Likert type scale ranging from 0 to 10 where 0 indicates ‘strongly disagree’ and 10 indicates ‘strongly agree’. This measure was initially validated using EFA, resulting in a 14-item 2-factor structure (Hong et al., 2012). The two factors were: (1) psychological empowerment (4 items), and (2) goal-oriented pathways (10 items). In the following effort to revalidate EHS using a multi-sample CFA, given unsatisfactory model fit of the 2-factor model, the 2-factor 14-item model was modified into a 4-factor 14-item model (EHS-14) derived from two components as suggested by Hong and colleagues (2012). This modification is based on the original theoretical suggestion: (1) psychological empowerment (4 items), (2) futuristic self-motivation (2 items), (3) utilization of skills and resources (4 items), and (4) goal-orientation (4 items) (Hong, Choi, & Polanin, under review).

Analysis

In order to add another evidence for the consistency and validity of EHS-14, we utilized CFA to assess the proposed dimensionality by examining the fit of the individual items to their respective scales. Maximum Likelihood (ML) estimation method and full information maximum likelihood (FIML) missing data estimation methods were used.

In addition, additional reliability and validity tests were performed. Cronbach’s alpha was computed to determine internal consistency. Cronbach’s alpha coefficients above .70 are considered to be meaningful (Tabachnick & Fidell, 2007). To collect the evidence of construct validity, we correlated the subscales of EHS-14 with theoretically related or unrelated measures to estimate convergent and discriminant validity (Campbell & Fiske, 1959; Messick, 1980; Rubin & Babbie, 2008). The evidence of criterion-

related validity was determined by testing the EHS-14's predictability to distinguish between groups that might assume to have different levels of employment hope.

RESULTS

Descriptive and Correlation Statistics

As reported in Table 4, the mean value of the four factors of EHS-14 (i.e., psychological empowerment, futuristic self-motivation, utilization of skills and resources, and goal-orientation), are 9.4, 8.6, 8.6, and 8.7, respectively. As expected, four subscales of EHS-14 were correlated positively with each other ($r > .52, p < .01$).

Confirmatory Factor Analysis and Internal Consistency

To ensure the validity of EHS-14, we performed a CFA using AMOS 7.0. Several model-fit indices were used in order to increase the robustness of the conclusions: the Root Mean Square Error of Approximation (RMSEA; Browne & Cudek, 1993), the Comparative Fit Index (CFI; Bentler, 1990), and the Tucker-Lewis Index (TLI; Tucker & Lewis, 1973). Traditional Chi-square model-fit statistics were not considered (although reported) due to the large sample size and the issue of strict null hypothesis (Bentler & Bonett, 1980; Fabrigar et al., 1999; Meade, Johnson, & Braddy, 2008). The values of CFI and TLI above .90 are considered a good fit (Bentler & Bonett, 1980; Kline, 2011), and conservatively above .95 are an excellent fit (Hu & Bentler, 1999). RMSEA values up to .08 indicate an acceptable fit (Kline, 2011), and up to .06 is a close fit (Hu & Bentler, 1999).

The authors evaluated three alternative models: a baseline one-factor model, a two-factor model, and a four-factor model. In the one-factor model, all 14 items are fallen into one general factor. The preliminary 2-factor EHS had been initially validated by the EFA study (Hong, Polanin, & Pigott, 2012). The four-factor model was recently revalidated by a multi-sample CFA (Hong, Choi, & Polanin, under review).

The model comparison with fit-indices and χ^2 difference test are presented in Table 2. According to the values of CFI, TLI, and RMSEA, the four-factor model fit the data better than the other two models.

The χ^2 difference test confirmed the superiority of the 4-factor model with the statistically significant difference, comparing with the one-factor baseline model ($\Delta\chi^2(\Delta df) = 954.404$ (4), $p < .01$) and the initial 2-factor model ($\Delta\chi^2(\Delta df) = 363.958$ (3), $p < .01$).

Table 2. The result of Confirmatory Factor Analysis (N=661)

| | χ^2 | df | TLI | CFI | RMSEA (95% CI) |
|---------------------------|----------|------|------|------|------------------|
| Baseline One factor Model | 1356.954 | 77 | .663 | .753 | .159 (.151-.166) |
| Two factor Model | 766.508 | 76 | .816 | .867 | .117 (.110-.125) |
| Four factor Model | 402.550 | 73 | .916 | .941 | .077 (.070-.085) |

The substantially increased fit indices and significant Chi-square difference indicated that the 4-factor model fits the data better than the baseline model and 2-factor model.

The 4-factor model fit is not only satisfactory, but all factor loadings are highly significant and exceed .6 (the minimum loading was .625) (see Table 3). Factors 2, 3, and 4 load onto a higher-order factor of goal-oriented pathways and had highly significant factor loadings (futuristic self-motivation .924; utilization of skills and resources .839; and goal-orientation .876), indicating the three factors well represent goal-oriented pathways.

Finally, we generated the Cronbach's alpha coefficient to determine the internal consistency. The overall EHS-14 and all the four subscales were shown to be internally consistent, with Cronbach's alpha coefficients as below: EHS-14 total=.926, psychological empowerment=.853, futuristic self-motivation=.715, utilization of skills and resources=.889, and goal orientation=.828.

Convergent and discriminant Validity

Convergent validity evidence was gathered by measuring the correlation between two theoretically related measures, while

discriminant validity evidence was gathered by correlating two theoretically unrelated measures (Rubin & Babbie, 2008).

We hypothesized that EHS-14 would positively and strongly correlate with scores on the General Self-Efficacy scale (Chen, Gully, & Eden, 2001). Self-efficacy is known as a significant variable in the SCCT model of vocational hope (Brown, Lamp, Telander, & Hacker, 2012), and the theoretical relationship between employment hope and self-efficacy has been confirmed in a recent study (Hong, Lewis, & Choi, In Press). As illustrated in Table 4, the results presented strong convergent validity evidence for EHS-14, with all factors having statistically significant positive correlation with self-efficacy ($r > .50$, $p < .01$).

Table 3. The factor loadings of the four-factor EHS-14 (N=661)

| | Factor1 | Factor2 | Factor3 | Factor4 |
|---|-----------------|-----------------|-----------------|-----------------|
| 3. When working or looking for a job, I am respectful towards who I am. | 1.140 (.817) | | | |
| 4. I am worthy of working in a good job. | 1.070 (.841) | | | |
| 5. I am capable of working in a good job. | .996 (.806) | | | |
| 6. I have the strength to overcome any obstacles when it comes to working. | 1.000 (.625) | | | |
| 11. I am going to be working in a career job. | | 1.000 (.611) | | |
| 15. I feel energized when I think about future achievement with my job | | 1.211 (.846) | | |
| 17. I am aware of what my skills are to be employed in a good job. | | | .792 (.716) | |
| 18. I am aware of what my resources are to be employed in a good job | | | .928 (.738) | |
| 19. I am able to utilize my skills to move toward career goals. | | | .944 (.868) | |
| 20. I am able to utilize my resources to move toward career goals. | | | 1.000 (.828) | |
| 21. I am on the road toward my career goals. | | | | 1.027 (.745) |
| 22. I am in the process of moving forward reaching my goals. | | | | .990 (.867) |
| 23. Even if I am not able to achieve my financial goals right away, I will find a way to get there. | | | | .664 (.675) |

| | | | | | |
|--|--|--|--|--|-----------------|
| 24. My current path will take me to where I need to be in my career. | | | | | 1.000 (.713) |
|--|--|--|--|--|-----------------|

Note. Standardized factor loadings are reported in parentheses.

Table 4. Correlations to assess Convergent and Discriminant Validity (N=661)

| | Mean(SD) | Range | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|----------------------|-----------|-------|-------|------|------|------|------|------|---|---|
| 1 Empowerment | 9.4 (1.3) | 0-10 | 1 | | | | | | | |
| 2 Self-motivation | 8.6 (1.8) | 0-10 | .512 | 1 | | | | | | |
| 3 Skills & resources | 8.6 (1.7) | 0-10 | .515 | .575 | 1 | | | | | |
| 4 Goal-orientation | 8.7 (1.7) | 0-10 | .546 | .651 | .641 | 1 | | | | |
| 5 Self-esteem | 2.2 (.38) | 1-3 | .354 | .364 | .360 | .349 | 1 | | | |
| 6 Self-efficacy | 4.3 (.63) | 0-5 | .430 | .500 | .513 | .499 | .550 | 1 | | |
| 7 Gender | | | -.007 | .009 | .017 | .042 | .062 | .017 | 1 | |

Note. All correlation coefficients from items 1 to 6 are significant at $p < .01$.

We hypothesized a moderate correlation with gender, as evidence of discriminant validity (Bryant & Cvengros, 2004). The discriminant validity evidence was gathered based on the results of EHS-14 and all its factors having insignificant low correlation with gender ($-.06 < r < .03$, $p > .1$).

Criterion-related Validity

We determined the criterion validity of the EHS-14 by examining its capacity to discriminate between groups that one might assume to have different levels of employment hope. Specifically, we hypothesized that participants who were categorized as not being economically self-sufficient would have lower EHS-14 scores compared to their counterparts. Economic self-sufficiency was measured by using a combined score of the following three variables: (a) employment status, (b) ability to pay all the bills, and (c) receipt of welfare. These variables were each dummy coded and were summed up for a total score that ranges from 0 to 3 where 3 indicates 'fully economically self-sufficient' and 0 indicates 'not self-sufficient at all'. It is conceptualized that cases with scores above two are economically self-sufficient and cases with scores one or below are not self-sufficient.

Table 5. Mean difference between self-sufficient group and not self-sufficient group

| Scale | Mean (SD) | | t | p | Effect size <i>d</i> |
|-------|-------------------------------------|--|--------|--------|----------------------|
| | Economically self-sufficient (n=58) | Not economically self-sufficient (n=561) | | | |
| EHS | 9.21 (.99) | 8.69 (1.56) | -2.07 | .040* | .40 |
| EH1 | 9.55 (.92) | 9.17 (1.51) | -2.11 | .037* | .30 |
| EH2 | 8.99 (1.44) | 8.56 (1.88) | -1.419 | .157 | .26 |
| EH3 | 8.98 (1.51) | 8.33 (1.97) | -2.098 | .037* | .37 |
| EH4 | 9.05 (1.40) | 8.57 (1.76) | -1.948 | .055* | .30 |
| ESS | 3.02 (1.07) | 2.35 (1.09) | -2.847 | .005** | .62 |

Note. Effect size: Cohen's $d = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{S_p^2}}$.

We conducted a t-test to estimate this hypothesis with being economically self-sufficient as the independent variable and EHS-14 as the dependent variable. The results are presented in Table 5. Given that t-test is influenced by sample size, effect size was calculated to measure the magnitude of mean difference. The values of effect size above .20 are considered to have medium effect (Cohen, 1988). Given the observed effect size, it appears that EHS-14 and each factor can be distinguished between groups. The results indicate that participants who are not economically self-sufficient had significantly lower scores on EHS-14 than the economically self-sufficient group ($-2.11 < t < -1.419$, $.26 < d < .40$). This result reveals that EHS-14, a measure reflecting psychological self-sufficiency, has predictive validity based on the known-groups approach.

DISCUSSION AND IMPLICATION

Hong et al. (2009) originally conceptualized employment hope as the psychological dimension of SS based on a qualitative examination of a client focus group. Out of this study was the 6-factor 24-item EHS instrument developed. A preliminary validation

of the measure was conducted using EFA, which resulted in a 2-factor 14-item structure (Hong et al., 2012). This measure was modified to a 4-factor 14-item model in the following multi-group CFA paper (Hong et al., under review). This study verifies the validity of the recently suggested 4-factor EHS (EHS-14) with an independent data.

The CFA on EHS-14 revealed a satisfactory result, demonstrating that the modified 4-factor model fits the recent data very well. This result provides another evidence for the validity of EHS-14 with the following structure: (1) psychological empowerment (4 items), (2) futuristic self-motivation (2 items), (3) utilization of skills and resources (4 items), and (4) goal-orientation (4 items). Additionally, the test results on internal consistency and criterion and construct validity indicate that EHS-14 is a reliable and valid instrument.

It is important to note that EHS-14 is a hope measure that was developed from a bottom-up process of defining the success benchmark called SS in workforce development. From the perspectives of participants and service providers in job training and employment readiness programs, SS was found to be a process rather than an outcome (Hong, 2013). This transformative process is one that involves developing PSS to reach ESS. At the heart of this process is the concept of hope. Employment hope is a necessary component that helps overcome the obstacles that keep one from taking the first steps toward employment or those that make one give up the path after being employed. It is argued that without a reservoir of employment hope, one cannot but give in to the negative structural, institutional, family, and individual forces that challenge his or her resilience and even the positive power of character asserted by Tough (2012)—persistence, self-control, curiosity, conscientiousness, grit, and self-confidence.

In essence, employment hope embodies the essential container that holds together all principal ingredients for one's success in employment and career development. The ingredients include the hard skills—i.e., education, skills, training—and the soft skills—i.e., being punctual, following workplace rules and directions, managing anger and frustration in situations of stress or confrontation, etc.

Employment hope may be the precursor necessary for nurturing personality traits or non-cognitive skills that Heckman (2013) would maintain to contribute significantly to various success outcomes—i.e., openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism/emotional stability. This chapter proposes employment hope to be the soil from which these traits can grow and blossom into any contextualized success outcome.

Given the support for hope as a factor that contributes to positive outcomes in other circumstances (Elliott & Olver, 2009; Valle, et al., 2006), this paper posits that the concept of hope could play a vital role in increasing employment opportunities for historically difficult-to-employ clients served in various social service settings. The focus on “hope for employment” as not just a desired and measureable outcome of employment training, but also as a factor that could increase the chances of the client achieving employment, could have many implications for how employment training programs are facilitated and evaluated. For example, employment training/job readiness programs may incorporate a curriculum specifically aimed at increasing the client’s hope for employment by addressing each factor of EHS-14. This increase in “employment hope” may be viewed as an essential outcome of such training and, if shown to increase the client’s chances for achieving employment, may become a satisfactory measure of the effectiveness of such training programs.

In addition to clinical implications, applying employment hope to workforce development programs also has mezzo and macro implications. Both Hong and his colleagues (2009) and Juntunen and Wettersten (2009) point out that labor market inclusion of traditionally disenfranchised groups and low-income persons need to be addressed in conjunction with clinical interventions. Moreover, economic mobility relies on more than a change in job structure. Policy, family, and educational institutions must be rejuvenated, as well (Hong, Naeger, & Sheriff, 2009). These structures that impede economic mobility also, consequently, impede employment hope.

REFERENCES

- Benlter, P. M. (1990). Comparative Fit indexes in Structural Models. *Psychological Bulletin, 107*, 238-246.
- Benlter, P. M. & Bonett, D. C. (1980). Significance Tests and Goodness of Fit in the Analysis of Covariance Structure. *Psychological Bulletin, 88*, 588-606.
- Bernardo, A. B. I. (2010). Extending hope theory: Internal and external locus of trait hope. *Personality and Individual Differences, 49*, 944-949.
- Brown, S.D., Lamp, K., Telander, K.J., & Hacker, J. (2012). Career development as prevention: toward a social cognitive model of vocational hope. In E. Vera (Ed.), *The Oxford Handbook of Prevention in Counseling Psychology* (pp. 374-392). New York: Oxford University Press.
- Browne, M., & Cudek, R. (1993). Alternate ways of assessing model fit. In K. Bollen & J. Long (Eds.), *Testing structural equation models* (pp. 136-162). Thousand Oaks, CA: Sage Publications.
- Bryant F.B., & Cvenegros, J.A. (2004). Distinguishing hope and optimism. *Journal of Social and Clinical Psychology, 23*, 273-302.
- Buckley, J., & Herth, K. (2004). Fostering hope in terminally ill patients. *Nursing Standard, 19*, 33-41.
- Campbell, D. T., & Fiske, D. W. (1959). Convergent and discriminant validation by the multitrait-multimethod matrix. *Psychological bulletin, 56*, 81-105.
- Chen, G., Gully, S. M., & Eden, D. (2001). Validation of a new general self-efficacy scale. *Organizational Research Methods, 4*, 62-83.
- Chi, G. (2007). The role of hope in patients with cancer. *Oncology Nursing Forum, 34*, 415-424.
- Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Davidson, C. L., Wingate, L. R., Slish, M. L., & Rasmussen, K. A. (2010). The great black hope: Hope and its relation to suicide risk among African Americans. *Suicide and Life-Threatening Behavior, 40*, 170-180.
- Dufault, K., & Martocchio, B.C. Symposium on compassionate care and the dying experience. Hope: Its spheres and dimensions. *Nursing Clinic of North America, 20*, 379-391.
- Elliott, J.A., & Olver, I.N. (2009). Hope, life, and death: A qualitative analysis of dying cancer patients' talk about hope. *Death Studies, 33*, 609-638.

- Fabrigar, L. R., Wegener, D. T., MacCallum, R. C., & Strahan, E. J. (1999). Evaluating the use of exploratory factor analysis in psychological research. *Psychological Methods, 4*, 272-299.
- Farran, C.J., Herth, K.A. & Popovich, J.M. (1995). *Hope and Hopelessness: Critical clinical constructs*. Thousand Oaks, CA: Sage.
- Heckman, J.J. (2012/13). Hard evidence on soft skills. *Focus, 29*, 3-8.
- Herth, K. (1989). The relationship between level of hope and level of coping response and other variables in patients with cancer. *Oncology Nursing Forum, 16*, 67-72.
- Herth, K. (1990). The relationship between hope, coping style, concurrent losses, and setting to grief resolution in elderly widow(er)s. *Research in Nursing and Health, 13*, 109-117.
- Herth, K (1991). Development and refinement of an instrument to measure hope. *Scholarly Inquiry for Nursing Practice, 5*, 39-51.
- Herth, K. (1992). Abbreviated instrument to measure hope: Development and psychometric evaluation. *Journal of Advanced Nursing, 17*, 1251-1259.
- Hong, P. Y. P. (2013). Toward a client-centered benchmark for self-sufficiency: Empowering community partners for social change. *Journal of Community Practice, 21*.
- Hong, P. Y. P. & Choi, S. (Under Review). Psychological and economic self-sufficiency: The moderating effects of labor market attachment.
- Hong, P. Y. P., Choi, S., & Polanin, J. R. (Under Review). Multi-sample confirmatory factor analysis of the Short Employment Hope Scale (EHS-14).
- Hong, P. Y. P., Lewis, D. & Choi, S. (In Press). Employment hope as an empowerment pathway to self-sufficiency among ex-offenders. *Journal of Offender Rehabilitation*.
- Hong, P. Y. P., Polanin, J. R., & Pigott, T. D. (2012). Validation of the Employment Hope Scale: Measuring psychological self-sufficiency among low-income jobseekers. *Research on Social Work Practice, 22*, 323-332.
- Hong, P. Y. P., Sheriff, V. A., & Naeger, S. R. (2009). Bottom-up definition of self-sufficiency: Voices from low-income jobseekers. *Qualitative Social Work, 8*, 357-376.
- Hu, L., & Bentler, P.M. 1999. Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal, 6*, 1-55.
- Juntunen, C. L., & Wettersten, K. B. (2006). Work hope: Development and initial validation of a measure. *Journal of Counseling Psychology, 53*, 94-106.

- Kline, R. B. (2011). *Principles and practice of structural equation modeling* (3rd ed.). New York: The Guilford Press.
- Larsen, D., Edey, W., & Lemay, L. (2007). Understanding the role of hope in counseling: Exploring the intentional uses of hope. *Counseling Psychology Quarterly*, *20*, 401-416.
- Meade, A. W., Johnson, E. C., & Braddy, P. W. (2008). Power and sensitivity of alternative fit indices in tests of measurement invariance. *Journal of Applied Psychology*, *93*, 568-592.
- Messick, S. (1980). Test validity and the ethics of assessment. *American psychologist*, *35*, 1012-1027.
- Oyserman, D., Bybee, D., Terry, K., & Hart-Johnson, T. (2004). Possible selves as roadmaps. *Journal of Research in personality*, *38*, 130-149.
- Rubin, A., & Babbie, E. (2008). *Research methods for social work* (6th ed.), Belmont, CA: Thomson Higher Education.
- Snyder, C.R. (1995). Conceptualizing, measuring, and nurturing hope. *Journal of Counseling & Development*, *73*, 355-360.
- Snyder, C. R. (2000). *Handbook of hope: Theory, measures, and applications*. San Diego, CA: Academic Press.
- Snyder, C. R. (2002). TARGET ARTICLE: Hope theory: Rainbows in the mind. *Psychological Inquiry*, *13*, 249.
- Snyder, C. R., Harris, C., Anderson, J. R., Holleran, S. A., Irving, L. M., Sigmon, S. T., 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.
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics*. Boston: Allyn and Bacon.
- Tough, P. (2012). *How children succeed: Grit, curiosity, and the hidden power of character*. New York: Houghton Mifflin Harcourt.
- Tucker, L.R., & Lewis, C. (1973). A reliability coefficient for maximum likelihood factor analysis. *Psychometrika*, *38*, 1-10.
- Valle, M.F., Huebner, E.S., & Suldo, S.M. (2006). An analysis of hope as a psychological strength. *Journal of School Psychology*, *44*, 393-406.