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Psychological and economic self-sufficiency among low-income jobseekers with physical disability barriers

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Abstract: The purpose of this research is to investigate the process of psychological empowerment by way of examining the effects of perceived employment barrier on employment hope, and employment hope on economic self-sufficiency. A structural equation modeling analysis was used with a sample of 517 participants in a job readiness program of a community-based social service organization in Chicago. Results indicate that employment hope mediates the path between perceived barriers and economic self-sufficiency. Findings provide preliminary evidence to support an empowerment-based approach to rehabilitation, promoting self-sufficiency among people with physical disabilities using interventions that address employment barriers and employment hope.

Keywords: disability, self-sufficiency, employment barriers, employment hope, low-income

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1. Introduction

Unemployed and job seeking individuals tend to face a wide variety of mitigating factors and circumstances, often referred to as employment barriers (Danziger *et al.*, 2000; Hong and Wernet, 2007). Particularly, these barriers—i.e., health and mental health, human capital, child care, labor market exclusion, and soft skills—become more pronounced for low-income individuals engaged in job training programs (Hong *et al.*, 2014). When one faces difficulty and attributes the source of it to individual effort, ability, and choice, he or she is known to have internal locus of control; when attributing it to outside influence, he or she is said to have external locus of control (Rotter, 1966; 1990). As such, how they perceive their barriers may alter the way they view their chances of employment.

According to the U.S. Bureau of Labor Statistics

(2013), at least 50% of all unemployed individuals with a disability had some type of employment barriers in May 2012. Out of total 28.3 million civilian non-institutionalized individuals with a disability, only 18.2% reported to be employed. And even when employed, disability served as a barrier to completing job-related duties for over 50% of this group. Nearly 81% of persons with a disability identified their own disability as a barrier to employment (BLS, 2013).

As such, this paper focuses on jobseekers who perceive physical disability as a key barrier as they seek employment opportunities. It examines the relationship among employment barriers, employment hope, and economic self-sufficiency (ESS). It provides a block of evidence on an empowerment-based approach to rehabilitation by way of psychological self-sufficiency (PSS)—operationalized as a dynamic psychological ‘process’ captured by the relationship between perceived employment barrier and employment

hope—to affect ESS as the economic success ‘outcome’ in the labor market (Hong, 2013).

The issue of ESS among low-income jobseekers with disability is a significant one given the structural labor market and social policy conditions. Recent economic conditions have had a disproportionate impact on this group, whose rate of employment has declined at nearly three times the rate of workers without disabilities (Fogg, Harrington and McMahon, 2010). The magnitude of this economic climate may even weigh heavily on those who are working and identify as having a disability, as they may avoid disclosing their need for assistance for fear of joining the ranks of the unemployed. At the same time, with the passage of the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA; U.S. Public Law 104-193), welfare recipients with disabilities, many of them with little job experience, have been challenged to enter the workforce.

There is no one official definition for ESS in policy and workforce development practice, but a commonly accepted one has to do with finding employment and not being on public assistance (Hong, Sheriff and Naeger, 2009). Employment as a core element of ESS is not merely intertwined with economic variables; it impacts and is impacted by psychological outlooks and emotional states (Schur, 2002). An emerging branch of employment research bolsters the idea that optimism and attitude toward life directly impact employment choices, and even wage potential (Mohanty, 2009). Among the components of overall orientation toward life are optimism, self-esteem, and hope.

Within disabilities studies, there is much literature to support the importance of intrinsic motivation and self-determination in vocational rehabilitation (Blomquist *et al.*, 1998; Mabin and Randall, 2014; Siegert and Taylor, 2004; Wehmeyer, 1998). Despite recently burgeoning studies on the relationship between PSS and ESS (Hong, 2013; 2014; Hong, Hodge and Choi, 2015; Hong, Lewis and Choi, 2014; Hong, Sheriff and Naeger, 2009), there is yet a dearth of empirical evidence for the effects of intrinsic motivation among people with disabilities with regard to job search. Because their everyday lives are filled with multiple barriers to a much greater extent compared to those of jobseekers without disabilities, it is important to understand job search through the lens of how individuals navigate through such obstacles with the power of motivation and determination.

In this regard, the purpose of this research is to in-

vestigate the process of psychological empowerment by way of examining the effects of perceived employment barrier on employment hope, and employment hope on ESS. Survey data are used from participants in a job readiness training program at the Chicago Urban League, a social service agency in the Chicago Metropolitan Area. Based on PSS as a theoretical framework (Hong, 2013)—using specific features of the Perceived Employment Barriers Scale (PEBS; Hong *et al.*, 2014) and Employment Hope Scale (EHS; Hong, 2012; Hong, Choi and Polanin, 2014)—it is hypothesized that perceived employment barrier negatively affects the level of employment hope and employment hope positively contributes to ESS. The study aims to provide implications for empowerment-based rehabilitation counseling and employment support services for those with physical disability barriers.

2. Background Literature

2.1 Employment Barriers

Hong *et al.* (2014) characterized two dimensions of employment barriers—structural and individual. Labor market exclusion, child care and human capital were seen as structural while health and mental health, soft skills were considered to be individual barriers. In 2014, unemployment rate for persons with a disability was at 12.5% in comparison to 5.9% for its counterpart (BLS, 2015). Many efforts to combat disability unemployment have focused on structural barriers to employment. The Disability Community, particularly in the United States, has been vocal about societal biases being a primary reason for exclusion (Shapiro, 1993). They argue that employment exclusion has less to do with the skills and inherent traits of people with disabilities and more to do with a social context that is unwilling to make accommodations.

The Americans with Disabilities Act of 1990 was instituted, in part, to improve employment outcomes for people with disabilities (both physical and mental). Though discrimination and termination on the basis of disability are expressly illegal, success has been described as uneven, falling short of its original intention (Estlund, 2003). While it has supported improving employment outcomes and workplace culture and norms to become more inclusive, negative employer attitudes, low wages of disabled workers, and narrow court interpretations of the law have continued since ADA (Moss and Burris, 2007). ADA served as the

basis for employment lawsuits, with more than 22% of Supreme Court's decisions made on labor and employment cases in 2001–2002 were related to ADA (Befort, 2003). Given the structurally limiting external barriers, disability rarely stands alone; rather, it is often clustered or co-occurring with other internal barriers that pose disproportionate hardship on a person in combination (O'Connor, 2013). Livneh and Wilson (2003) examined the relationships among four predictors (functional limitations, perceived visibility of condition, and two disability-associated affective responses—anxiety and depression), coping strategies, and two outcome measures of psychosocial adaptation to disability (disability-specific psychosocial adjustment and life satisfaction). Scholars generally agree that more counts of co-occurring barriers have a negative impact on employment / self-sufficiency outcomes. Biegel *et al.* (2010) found that employment outcomes were significantly lower when psychiatric disability was compounded by the added barriers of substance abuse, racial biases, limited work history, low self-esteem, and social stigma.

2.2 Employment Hope

Though demographic traits are not within one's personal control, high dispositional optimism—a concept related to hope—was a prominent factor leading to greater chances of employment. However, few studies have focused on the attitudes and expectations of people with disabilities toward employment. There is a dearth of research surrounding the idea of *hope* among unemployed, disabled populations. Though often regarded as a “soft” concept (Farran, Herth and Popovich, 1995), hope has also been described as a “fundamental, integral part of life” (Dorsett, 2010, p. 85), a universal among all people.

Some scholars have examined the ideas of hope and optimism among people with disabilities. Largely, findings suggest that physical impairment does not necessarily correlate with how people feel about their present and future lives. Albrecht and Devlieger (1999) explored the paradox of people with disabilities reporting a high quality of life, despite people without disabilities perceiving that their lives are less than desirable. Extending far beyond mere logistics of daily living, many study participants cited psychological and spiritual well-being as important factors needed to offset their limitations in physical abilities. On the

other hand, those who report lower quality of life tended to have “low levels of control over their medical conditions and daily routines” (p. 986).

In recent years, scholars have begun to hone in more formally on role of *hope* in employment—not simply for people with disabilities, but for all people (Hong, Polanin and Pigott, 2012; Hong, Choi and Polanin, 2014). In the acknowledgement of individual differences and strengths among jobseekers, there is a growing body of literature suggesting that attitudinal variables interact more prominently with situational variables in the employment process than previously assumed. *Hope*, in an employment context, shares commonalities with some basic tenets of positive psychology, namely the valued subjective experiences of well-being, contentment, satisfaction with the past, and optimism for the future (Seligman and Csikszentmihalyi, 2000).

Various scholars have examined the effects of hope on life outcomes including employment-related ones. Nunn *et al.* (1996) suggest that individuals perceive their future in terms of dimensions of hope and despair. A survey-based study by Magaletta and Oliver (1999) found that hope predicts general well-being independent of self-efficacy and optimism. Luthans *et al.* (2007) confirmed the effects of variables that are major components of Psychological Capital (PsyCap)—hope, resilience, optimism, and efficacy—on work performance and satisfaction.

As a primary mode of assessing hope has been through the development of psychometric measures. Snyder *et al.* (1991) was the first to validate a scale measuring factors that comprise human hope. In the context of employment, Diemer and Blustein (2007) measured vocational hope as a concept that connects to one's vocational future despite external pressures or barriers. Hong, Sheriff and Naeger (2009) asserted that a bottom-up definition of self-sufficiency relates more to inner strength and positive future outlook than to measurable economic security. The Employment Hope Scale was developed as a measure used to capture psychological empowerment and goal-oriented pathway—self-worth, self-perceived capability, futuristic self-motivation, utilization of skills and resources, and goal orientation—as jobseekers pursuing employment opportunities (Hong, Polanin and Pigott, 2012; Hong and Choi, 2013; Hong, Choi and Polanin, 2014).

2.3 Psychological Self-Sufficiency

PSS embodies the process of recognizing employment barriers and building employment hope; it is theorized as a precursor to achieving ESS (Hong, 2013). The PSS theoretical framework purports perceived employment barriers that block jobseekers from moving toward their goals to be the point of departure in the quest for employment (Hong, 2013). Supported by the mental contrasting model of goal pursuit and attainment—switching from barrier-filled perception to positive hope-filled motivation (Oettingen, Pak and Schnetter, 2001)—PSS highlights the importance of ‘process’ of transforming barriers into hope that will lead to desirable economic ‘outcomes’. When employment barriers remain only as negative obstacles, it traps individuals to stay captivated to the forces beyond one’s control—external locus of control. However, these barriers tend to interact with one another to affect the degree to which one maintains the hope and invests in personal actions that could yield a sizable return in terms of employment outcomes and upward mobility—internal locus of control.

Disability, in particular, is a barrier often accompanied by economic and social hardships (Dalal, 2010; Choe, 2013; Palmer, 2012). Young adults with disabilities continue to have lower rates of employment than non-disabled peers (Gold, Fabian and Lucking, 2013). Achterberg *et al.* (2009) conducted a systematic review of what hinders young adults with disability in the labor market and found that gender, education, age, and psychosocial functioning all play a role. The combination of personal characteristics and barriers paints a picture of the complexity and inconsistency for jobseekers with disabilities. Structural barriers shape not only the overall opportunity structure but also the way in which disabled persons view themselves as potential workers. A related question in the literature is whether people with disabilities are more demotivated by the challenging external circumstances or motivated by their internal character and drives. Studies have shown that, for people with disabilities, socio-economic status and physical circumstance factor less into subjective well-being than do optimism (VanCampen and Stantvoort, 2013), social support networks (Pescosolido, Wright and Sullivan, 1995; VanCampen and Stantvoort, 2013), and the experience of the world as coherent and predictable (Antonovsky, 1987).

As such, perceived employment barrier, employ-

ment hope, and ESS represent a transformative process toward employment outcomes (Hong, 2013). Employment outcome may not be reached in the short-term and it should be acknowledged that, in Western cultures, work and the pursuit of work carry symbolic value related to self-esteem and sense of achievement (Meda, 1995). Ville and Winance (2006) discourage the stringent binary of work vs non-work in their qualitative investigation of hope among wheelchair users contemplating a return to the workforce. “The possibility of building a satisfactory occupational trajectory,” they write, “also depends upon the meaning that the person confers upon the occupation” (p. 427).

Kent and LaGrow (2007) investigated the relationship between disability characteristics and adjustment to acquired hearing loss, focusing specifically on the role that hope plays in that relationship. Finding that hope to be a mediator accounting for 45% of the relationship between the amount of hearing loss and successful social adjustment, hope was described as “a causal pathway between degree of loss and adjustment” (p. 334). Svajger and Winding (2008) studied Slovenian citizens with musculoskeletal disorders about their possibilities for returning to the workforce. They highlight how constructing a narrative about returning to work that incorporates hopes, doubts, and fears was important to participants for giving meaning to their experience. Because work is linked to identity, the hope to reclaim a lost identity was more prominent in participant narratives than doubt about personal abilities.

Despite the wide yet disparate range of research on PSS as an empowerment process, a notable gap in the literature exists as it relates to the impact of perceived employment barrier on employment hope among people with physical disabilities. In this regard, the current investigation builds upon literature about PSS as it relates to ESS among people with disabilities, particularly the role of hope and internal motivations as they relate to employment and adversity.

3. Methods

3.1 Sample and Data Collection

This study employs data collected from the Chicago Urban League (CUL). CUL is an historic organization dedicated to assisting clients with employment, education, affordable housing, and community growth. With locations in south and southwest Chicago, it

seeks to work for economic, educational and social progress for African-Americans and promotes strong, sustainable communities through advocacy, collaboration and innovation. Individual participants in the study can be characterized as adult, low-income job-seekers, who participated in the job readiness program at CUL between January 2012 and December 2013. The majority of participants are identified as African-American and have low levels of education. Most participants face a variety of barriers to employment. A self-reported survey instrument was developed and approved by the researcher's university Institutional Review Board and was administered by a project staff as part of the pre-participation assessment on the orientation day or first day of the workshop. Completed surveys were then de-identified and entered into SPSS software and later analyzed by the researcher.

The sample consists of 517 low-income job seekers who perceive physical disability as employment barrier. The sample was slightly more male (58.8%) and consisted of individuals mostly between 30–50 years of age ($M=43.21$, $SD=15.49$). The vast majority of the sample was African-American (70.4%) with White or European American (12.0%) and non-white Hispanic (4.3%). About one fourth of participants earned less than \$5,000 in the previous year (35.7%). Most individuals completed at least 12 years of formal schooling (90.5%) and were not employed (78.0%). About two thirds of respondents had received some job training in the past 10 years (65.1%).

3.2 Measures

A recently validated perceived employment barrier scale (PEBS; Hong *et al.*, 2014) was used to measure employment barrier. The measure consists of 5 factor and 20 items: (1) physical and mental health (4 items); (2) labor market exclusion (3 items); (3) child care (3 items); (4) human capital (5 items); and (5) personal balance (5 items). The study partially employs PEBS—four (16 items) out of the five factors—because the physical disability item from the physical and mental health barrier factor was used to select the sample. PEBS is a Likert type scale ranging from 1 to 5, 1 indicating 'not a barrier' and 5 indicating 'strong barrier'. Each question reflects respondents' perception of employment barrier—i.e., lack of adequate job skills.

The dependent variable is ESS. It is defined as the self-assessed level of economic and financial independence, basic needs met, and well-being. We used the WEN Economic Self-Sufficiency Scale to measure

the multidimensionality of ESS (Gowdy and Pearl-mutter, 1993). This continuous measure includes 15 questions that fall under 4 factors: (i) autonomy and self-determination; (ii) financial security and responsibility; (iii) family and self well-being; and (iv) basic assets for community living. Each question reflects respondents' assessment of how their financial situation in the past 3 months allowed them to do certain things that represent ESS—i.e., pay one's own way without borrowing from family or friends. Respondents rated each statement on a Likert-type scale ranging from 1 to 5, 1 indicating 'not at all' and 5 indicating 'all the time'.

The study hypothesizes the mediating effect of employment hope in the pathway from employment barrier to self-sufficiency. This study defines employment hope as a psychologically transformative process in which one becomes psychologically empowered and motivated for future and makes progress toward goals by utilizing skills and resources (Hong, Sheriff and Naeger, 2009). This study uses the Short Employment Hope Scale (EHS-14) (Hong and Choi, 2013; Hong, Choi and Polanin, 2014), which consists of four factors and 14-item items—(i) psychological empowerment (4 items), (ii) futuristic self-motivation (2 items), (iii) utilization of skills and resources (4 items), and (iv) goal orientation (4 items).

3.3 Data Analysis

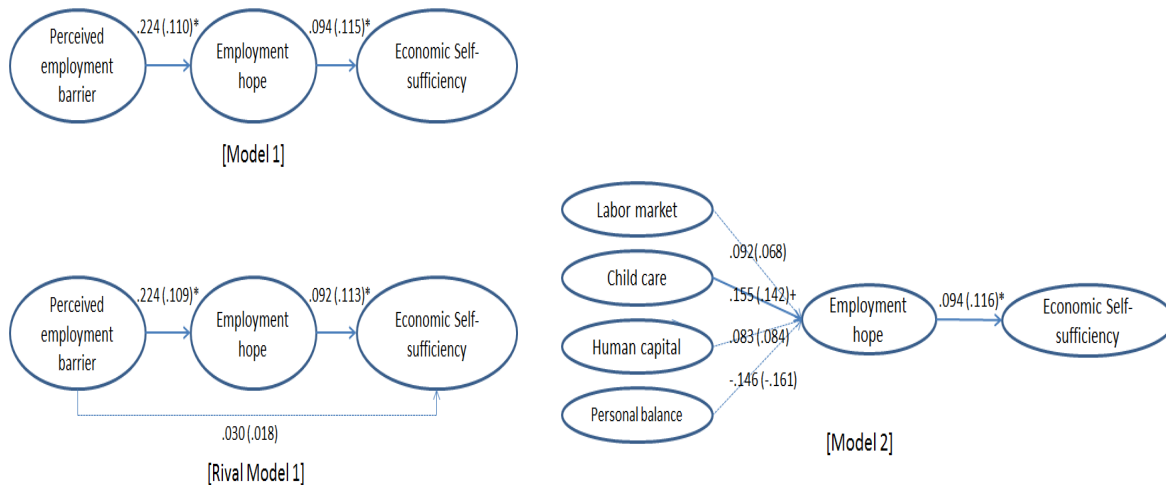
The study conducted a confirmatory factor analysis (CFA) to assess the proposed dimensionality through the fit of the individual items to their respective scales. Next, the hypothesized model was tested using structural equation modeling (SEM) to test the relationships among employment barrier, employment hope, and ESS among individuals perceiving disability as employment barrier.

Publications using SEM have been remarkably increased in social science research (Tremblay and Gardner, 1996), which is largely due to the benefits of SEM over the traditionally dominant techniques such as principal component analysis and multiple regression (Chin, 1998; Hong, 2003). First, SEM controls measurement error by using communality derived from multiple measured variables and therefore produces more accurate results than other techniques using measured variable including measurement error. Second, SEM has advantages in handling mediator regression; third, SEM is able to evaluate the theoretical model. The study adopts SEM for analysis be-

cause our hypothesized model is a latent construct and includes a mediator.

In both analyses of CFA and SEM, the study employs maximum likelihood (ML) for estimation method and full information maximum likelihood (FIML) for handling missing data. Finally, we com-

pared the hypothesized model with a rival model to determine the plausibility of our models, as presented in Figure 1. If our hypothesized model fits the data better than the rival model, we may conclude our model is more explainable to understand the dynamics of self-sufficiency among the physically disabled.



+*p*<0.1 **p*<0.05 ****p*<0.001
 Note. Standardized path coefficients are reported in the parentheses.

Figure 1. The results of structural equation modeling on the hypothesized models and the rival models.

4. Results

4.1 Measure Validation

The individual item reliability was tested to assess the proposed dimensionality. The 2 items out of PEBS were deleted because item factor loadings were lower than 0.7 (Fornell and Larcker, 1981). CFA was performed after two items were deleted, using AMOS 20.0.

The study utilized several model-fit indices in order to increase the robustness of the analysis: The Comparative Fit Index (CFI) (Bentler, 1990), the Tucker-Lewis Index (TLI) (Bentler and Bonett, 1980), and the Root Mean Square Error of Approximation (RMSEA) (Browne and Cudek, 1993). Traditional χ^2 statistics were not considered because of the sensitivity to sample size and the strict null hypothesis (Anderson and Gerbing, 1988; Marsh and Grayson, 1990). The values

of CFI and TLI above 0.90 are considered a good fit (Bentler and Bonett, 1980; Kline, 2011), and more conservatively above 0.95 are determined an excellent fit (Hu and Bentler, 1999). RMSEA values up to 0.08 indicate an acceptable fit (Kline, 2011), and up to 0.60 is a close fit (Hu and Bentler, 1999).

The study has two models. Model 1 analyzes the total effect of employment barrier on ESS via employment hope, while Model 2 analyzes the effect of each factor of employment barrier more specifically. As seen in Table 1, the measurement model fits the data reasonably well with the RMSEA of 0.052 (95% CI: 0.040 – 0.064), TLI of 0.968, and CFI of 0.979 in Model 1. Model 2 with sub dimensions of PEBS also indicates an acceptable fit with the RMSEA of 0.068 (95% CI: 0.064 – 0.074), TLI of 0.907, and CFI of 0.928.

Table 1. The result of confirmatory factor analysis (CFA)

Model	$\chi^2(p)$	df	TLI	CFI	RMSEA (95% CI)
Model 1	121.886 (0.000)	51	0.968	0.979	0.052 (0.040–0.064)
Model 2	656.405 (0.000)	194	0.907	0.928	0.068 (0.062–0.074)

4.2 Descriptive Analyses

Table 2 shows the descriptive statistics, correlations and coefficient alphas for the study variables. Contrary to our expectation, perceived employment barrier is positively correlated with employment hope and economic SS. Employment hope appears to be positively correlated with self-sufficiency, as expected.

The study variables show a high internal consistency with alpha-coefficients of 0.907 (perceived employment barrier), 0.942 (employment hope), and 0.938 (economic self-sufficiency), as presented in Table 2.

4.3 Hypothesis Test

The hypothesized model represents a full mediation

model, in which no direct path is drawn from employment barrier to ESS. In other words, the study hypothesizes that employment barrier affects self-sufficiency only through employment hope. As presented in Table 3, all fit indexes show an acceptable fit in both Model 1 [$\chi^2(df)=122.010$ (52); TLI=0.969, CFI=0.979, RMSEA=0.051 (0.039–0.063)] and Model 2 [$\chi^2(df)=663.381$ (198); TLI=0.908, CFI=0.928, RMSEA=0.067 (0.062–0.073)]. As seen in Figure 1, the hypothesized paths from employment barrier to employment hope and from employment hope to self-sufficiency are statistically significant. In the consecutive analysis of Model 2, only the ‘child care’ factor of PEBS appears to have a marginally significant effect on employment hope, while employment hope consistently affects ESS.

Table 2. Descriptive and bivariate statistics for the study variables

Variable	Mean (SD)	Skewness	Kurtosis	Range	1	2	3
1 Perceived employment barrier	2.97 (0.99)	0.213	0.107	1.0–5.0	(0.907)		
2 Employment hope	8.66 (1.54)	–2.046	5.76	0.0–10.0	0.136**	(0.942)	
3 ESS	2.61 (1.11)	0.367	–0.870	1.0–5.0	0.033	0.123**	(0.938)

Notes: ** $p < 0.01$

(1) The reliability coefficients are reported in parentheses on the diagonal. (2) All the scales in the study are Likert scales.

Perceived employment barrier (1 = not a barrier to 5 = strong barrier). Employment hope (0 = not at all to 10 = all the time).

Economic self-sufficiency (1 = strongly disagree to 5 = strongly agree)

Table 3. The result of structural equation modeling (SEM)

	$\chi^2(p)$	df	TLI	CFI	RMSEA
Model 1	122.010 (0.000)	52	0.969	0.979	0.051 (0.039–0.063)
Rival Model 1	121.886 (0.000)	51	0.968	0.979	0.052 (0.040–0.064)
Model 2	663.381 (0.000)	198	0.908	0.928	0.067 (0.062–0.073)
Rival Model 2	656.105 (0.000)	194	0.907	0.928	0.068 (0.062–0.074)

4.4 Alternative Nested Models

The study compared the hypothesized Model 1 with a rival model in order to determine the plausibility of our model. Rival Model 1 is a partial mediation model in which employment barrier directly affects ESS, as seen in Figure 1. Despite the adequate fit in Rival Model 1 [$\chi^2(df)=121.886$ (51); TLI=0.968, CFI=0.979, RMSEA=0.052 (0.040–0.064)], as reported in Table 3, the χ^2 difference between the hypothesized model (i.e., the full mediation model) and the rival model (i.e., the partial mediation model) is not significant, which implies the superiority of our hypothesized model ($\Delta\chi^2(\Delta df)=1.124(1)$). The goodness-of-fit indices confirm

the superiority of the hypothesized full mediation model over the partial mediation model designated as the rival model. Model comparisons are summarized in Figure 1. The result reveals that perceived employment barrier affects ESS, mediated by employment hope rather than directly.

5. Discussion

The purpose of this study was to examine the relationship between perceived employment barrier, employment hope, and self-sufficiency among low-income jobseekers with a physical disability barrier. Results confirmed that employment hope fully medi-

ates the path between perceived employment barrier and ESS. However, opposite to the hypothesized direction, it was found that employment barrier positively affects employment hope; as hypothesized, employment hope positively contributes to ESS. Instead of neutralizing the effect of jobseekers' perceived employment barrier, hope reinforced its effect to further impact ESS. It is possible that, for individuals with the physical disability barrier, PEBS could be reflecting the degree to which one recognizes and accepts existing barriers as such as opposed to the degree to which they are present in their lives (Hong, Polanin and Choi, 2014). The former would indicate an empowered state as one comes to understand the reality of one's employment landscape, bearing in mind a host of employment barriers that inhibit opportunities to enter the labor market. It could also be the case that as one experiences greater degree of multiple barriers, particularly coupled with a physical disability barrier, stronger hope activation is the key to reaching ESS.

One thing to re-emphasize is that the disability barrier was one of the items included in the physical and mental health factor of the PEBS (Hong *et al.*, 2014). As PEBS can be characterized as systemic and socio-economic on the one hand (i.e., labor market exclusion, child care, and human capital barriers) and individual on the other (i.e., health and mental health and soft skills), the disability barrier is not a stand-alone individual barrier as it seems. As with complex social phenomena, individual barriers are rarely isolated or singular, and can occur in chorus with other barriers that make employment seem distant or unachievable. As such, individuals with the disability barrier in the sample tend to score significantly higher on all other 26 barrier items in PEBS. This group of individuals has 19 total employment barriers on average, compared to only 4 for its counterpart.

Thus, the degree to which employment barrier impacts one's employment hope and the degree to which employment hope changes the rate of progress toward economic goals reflects at least two different types of scripts—one of disabling and the other of enabling. First, while barriers and hope may arguably be socially constructed concepts espoused differently by different populations, they represent structural barriers experienced by people with disabilities and the nature of hopelessness engendered by systemic inequities and discriminatory practices in the labor market. Second, the pathway that seem blocked by the weight of multiple co-occurring barriers with the disability bar-

rier can be transformed into a possibility through employment hope that is triggered by both structural and individual conditions. Employment hope may not be a sufficient condition but a necessary condition for change in the labor market for individuals with the disability barrier.

One limitation of this study includes specificity of population, i.e., only low-income adult participants in vocational training programming in Chicago. As such, the study is not generalizable to wider populations, as it did not include a representative sample in terms of race, age and socio-economic status. Additionally, the term 'disability' as defined on the PEBS refers to physical disability only. As participants needed to self-identify with disability, they may or may not have considered themselves disabled if they possessed a sensory disability, psychiatric disability, or even a minor physical disability. The notion of self-identification brings with it limitations to the study related to perception and semantics. Persons completing the survey employed their own, personal definitions of disability; the criterion was not objectively defined for the purposes of the study.

Despite the limitation, this study has merit in that it addressed a significant work-limiting physical barrier that either discourages one's attempt at seeking employment or obstruct sustainability of any employment one is able to secure. Within this context, subjectively perceived level of overall barriers may provide the most valid assessment particularly for understanding the level of awareness one has about existing barriers one is faced with, given the nature of it being socially constructed and how the disability barrier tends to co-occur with other individual and structural barriers. More research is needed on the way in which employment hope takes this awareness of barriers further into internalization of transformative process leading to self-sufficiency and actual employment outcomes among persons with physical and other disabilities.

6. Conclusion

It is notable, however, that employment hope consistently affects ESS. Therefore, workforce advocates should be encouraged to build hope-centered interventions—i.e., counseling services—into their program designs. Author Albert Camus has been quoted as saying, "Where there is no hope, it is incumbent on us to invent it" (Groopman, 2003; Schultz, 2014). With some creativity, community agencies can build around

their curricula, individualized mentoring, coaching, and other psycho-social support services to carve out spaces for their clients—their inventors of hope—to be partners in developing and implementing the most appropriate intervention. To the extent it is possible, these interventions should be personalized to account for the unique differences in individual experiences, personalities, and attitudes.

To assist this process, it is important to note that employment hope is the transformative engine that shifts the mindset of being stuck under the structural employment barriers to a liberated state that allows for overcoming individual employment barriers in the PSS process as it relates to the ESS outcome (Hong, 2013; 2014). Collaboratively strengthening, monitoring, and sustaining the level of employment hope of clients by each factor of the EHS—self-worth, perceived capabilities, futuristic self-motivation, utilization of skills and resources, and goal orientation—could provide the map of a client-centered intervention to help achieve employment success.

One innovative, evidence-informed approach to using the PSS framework as a theory of change is called Transforming Impossible into Possible (TIP) (Hong, 2015). This intervention was developed by a social work research team at Loyola University Chicago using participant-centered evidence from ten years of community-based focus group and survey data (Hong, 2013; 2014; Hong, Choi and Polanin, 2014; Hong, Hodge and Choi, 2015; Hong, Lewis and Choi, 2014; Hong, Polanin and Pigott, 2012; Hong, Sheriff and Naeger, 2009). By strengthening internal locus of control, TIP may not only empower persons with a disability with multiple co-occurring barriers to

become job ready, but also charge employers to respond with best accommodations to what best talent and motivation that these individuals bring to the labor market. One goal in formulating interventions for jobseekers should be to examine the differences in work attitudes and expectations between people with disabilities and those without disabilities (Ali, Schur and Blanck, 2011). Future study is needed to provide insight into these differences as this study is limited by only examining those who perceive physical disability as barriers. This study found that people who perceive employment barrier to a greater level tend to have higher employment hope and this subsequently leads to a higher level of self-sufficiency. The opposite is the case for those without disabilities where PEBS negatively affects employment hope. By examining the particularities of how the disability barrier interacts with employment hope given the overarching social and environmental barriers impacting self-sufficiency, population-specific interventions at workforce development agencies can be further honed.

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