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The Links between Vocational Outcome Expectancies, Career Decision Self-Efficacy and Environmental Conditions and Job Search Behaviours in Higher Education Students

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Abstract

This article empirically examines the links between vocational outcome expectations, career decision self-efficacy, and job seeking behaviours of post-1992 university students. It uses Social Cognitive Career Theory (SCCT) as its theoretical framework. The article finds that career decision self-efficacy and career outcome expectancy are positively linked to job seeking behaviours and that students' job seeking behaviours are mediated by their ethnicity and gender. There is a notable absence of empirical outcome expectancy studies in the literature. The article demonstrates the importance of the vocational outcome expectancy to SCCT and its strong links with students' job seeking behaviours.

Keywords

career decision self-efficacy, career outcome expectancy, Social Cognitive Career Theory, employability, Higher Education, job seeking behaviours

Introduction

Higher Education Institutions (HEIs) are facing increasing economic, political and environmental pressures, in part, due to a combination of higher fees and low economic growth with resulting changes in the educational environment (Freedman, 2011). One outcome is that governments have imposed increasing graduate employability as a central part of HEI's agendas (HEA, 2012). These changes have serious implications for universities in general, and post-1992 universities in particular, as they are being transformed into the providers of a narrow, utilitarian vocational education more attuned to serving a corporate business environment (Walton, 2011). The choices of vocational professions and employability opportunities offered to students differ vastly – students from the leading universities occupy the top positions in the well-paid older professions whereas students from post-1992 universities study more vocational courses and struggle to find graduate employment (Nixon, 2011; Stevenson, 2011; Allen & Ainley, 2007; Sutton Trust, 2005).

As universities are forced to balance their academic educational agendas with work-related outcomes (Gunn *et al*, 2010) increasing students' employability has become a strategic

priority. However, the employability agenda is being adopted on an *ad hoc* basis and the effectiveness of different approaches is not empirically based.

Social Cognitive Career Theory (see Figure 1 page x.) is adapted as a conceptual framework to analyse job seeking behaviours¹ of university students. SCCT has been designed specifically for the career development and employability efforts of different groups of people, including students (Lent, 2013). In particular, it is concerned with the psychological and social effects of gender and ethnicity as being important in career development due to the social-cultural environment that, in turn, links to the opportunity structure. It explicitly recognises that individual employability or career choice preferences are not always possible due to environmental factors such as: constraints by family wishes, the economic situation of the individuals and the quality of one's prior education (Lent, 2013). The next section discusses SCCT concepts in more detail.

Self-Efficacy

SCCT claims that people's career decisions will be influenced by their self-efficacy and outcome expectations as individuals are often influenced by what their family wants them to do and whether their skills are sufficient for a given career choice. Brown and Lent (1996) claim that people might eliminate certain occupation choices as a result of their faulty self-efficacy and outcome expectation beliefs. Helms and Piper (1994) also claim that a person's expectation or belief of his or her race is a significant predictor of his/her career option is an important factor in his/her vocational behaviours. For example, certain ethnicities might believe that certain careers are only available to White people or that some career options have less status in their communities.

The links between self-efficacy (measured as career decision self-efficacy), outcome expectations and students' job seeking behaviours are explored through the following hypotheses:

H₁. Students' career decision self-efficacy is positively correlated with their job seeking behaviours.

H₂: Students' career decision self-efficacy is a predictor of their job seeking behaviours.

Outcome Expectations

Outcome expectation and self- efficacy are often confused in the literature (Maddux, *et al.* 1986; Constantino *et al.*, 2011). However, while the concepts are related, they are not the same (Pintrich & Schunk, 1996). Maddux *et al.* (1982) postulate that self-efficacy and outcome expectation are independent of each other. Their study found that an increase in outcome expectation has a positive impact on participants' intentions to perform a certain behaviour and increases in self-efficacy expectation has no impact on participants' intentions to perform a certain behaviour. Participants are more likely to perform a relatively difficult behaviour if they believe it is going to result in a favourable outcome (Maddux, *et al.* 1992). Maddux *et al.*'s (1986) study confirms that outcome expectation and self-efficacy expectation are independent in predicting behavioural intentions.

recent years, only a few studies have looked at outcome expectations in an organisational context (Fridrich, *et al.* 2015).

¹ Job seeking behaviours represent *Performance Domains and Attainments* and have been added in red font.

The links between outcome expectations and self-efficacy, and outcome expectations and students' job seeking behaviours are explored through the following hypotheses:

H₃. Students' vocational outcome expectations are correlated with their job seeking behaviours.

H₄: Students' vocational outcome expectations are a predictor of their job seeking behaviours.

H₅: Students' vocational outcome expectations are positively correlated with their career decision self-efficacy.

Gender and Ethnicity Influences

Gender and ethnicity issues are clearly recognised in the SCCT literature (Lent, 2013). Gender stereotypes result in individuals' inaccurate self-efficacy beliefs and outcome expectations (Heppner, 2013). Children learn occupational stereotypes early in life and their beliefs persist, at least at an unconscious level, despite their later experiences (Heppner, 2013). Correll (2001) found that culturally held stereotypes about gender impact women's competence at career-related tasks. Gender issues also affect men in the helping professions such as nursing or stay at home fathers (Heppner, 2013). Students may rule out career choices due to their restricted gender views or due to unrealistically low career self-efficacy (Lent, 2013). This research aims to investigate the impact of gender and ethnicity on students' career decision self-efficacy, and, subsequently, on students' job seeking behaviours. Ethnicity and culture influence learning experiences that a young person will be encouraged to have (Gushue, 2006). There is no one universal definition of ethnicity in the literature, however, the consensus being that ethnicity is characterised by a sense of group belonging based on shared history, culture and language, with culture being most emphasised (Brown, 2010). Doornbos (1991) points out that ethnicity needs to be examined by research rather than being used as an explanatory variable.

Career self-efficacy, outcome expectations and career progress of ethnic students (African American women, Hispanic and Asian American) are affected by role modelling, racist experiences and social expectations to pursue certain careers (Lent & Shau, 2010; Hackett & Byars, 1996). Culture also influences learning experiences of young people (Gushue, 2006).

These issues are explored in the following research hypotheses:

H₆. Students' career decision self-efficacy and job seeking behaviours are mediated by students' ethnicity.

H₇: The combination of gender & ethnicity moderates students' vocational outcome expectations and their job seeking behaviours.

H₈. Students' vocational outcome expectations and job seeking behaviours are mediated by students' ethnicity.

H₉. Ethnicity moderates students' vocational outcome expectations and their job seeking behaviours.

H₁₀. Vocational outcome expectations mediate students' career decision self-efficacy and their job seeking behaviours.

Performance Domains and Attainments: Employability Efforts as Job Seeking Behaviours

Employability Efforts are chosen to represent Performance Domains and Attainments from the original SCCT model. Employability and employment cannot be used interchangeably as being employed means a job acquisition whereas employability refers to graduates who are capable of being employed (Lees, 2002) and encompasses different skills discussed in the previous section.

Measuring employability skills and outcomes has been inconsistent and existing studies have failed to empirically evaluate changes in young people's employability skills as a result of interventions (Blades *et al.* 2012). The surveys often do not provide a comparison group and use un-validated scales so there is a need to develop a coherent set of employability skills measures (Blades *et al.* 2012). Since employability focuses on the development of soft skills, it has been suggested by various UK government reviews that it is difficult to propose a generic model or a set of indicators measurement employability soft outcomes that would fit all learners (Lloyd & O'Sullivan, 2004). The Effective Intervention Unit (2009) suggests a list of core employability outcomes and indicators that fall into four categories: personal development and social competence; basic work skills and attributes; core skills; personal effectiveness and aptitude. Since the soft outcomes measures are not standardised it is difficult to compare different employability studies (Blades *et al.* 2012). Deloitte's (2010) review found that although suitable measures for accessing soft skills might be available or designed, the problems lay in finding or developing measures that are valid, reliable and can be used effectively. The problem of the lack of appropriate measurement methods of employability soft outcomes is compounded by the lack of funding for studies in this area (Blades *et al.* 2012). Blades *et al.*'s (2012) review of the academic literature finds that employability as whole is focused on using career-self efficacy (Rothwell & Arnold 2007) and on generic skills (Van Der Heijde & Van Der Heijden 2006). Blades *et al.*'s (2012) review of recent employability programme evaluations found that most evaluations included generic quantitative and qualitative measurements of employability that included confidence, problem solving, interpersonal skills, planning, communication skills and self-awareness.

In summary, there is an absence in the employability literature of the recommended employability outcome measures since employability relates to soft skills and subjective evaluations. Attempted measures of employability skills and outcomes have been inconsistent, a generic model or set of indicators that measure employability soft outcomes have not been constructed and there are issues with designing soft skill measures that are valid, reliable and which can be used effectively. Hence, job search behaviours were chosen as a behavioural domain that acted as a proxy for employability efforts in this study. Job searching behaviour is a multidimensional construct that is defined in many different ways in the literature (Van Hoyer, 2013). Measures of job search, for example, focus on use of job sources, job search intensity, or specific job search behaviours (Blau, 1993). However, there are few studies that used identical and common measures, variables and criterion (Kanfer *et al.*, 2001). Hence, due to differences in job search behaviour measures it is difficult to compare them (Van Hoyer, 2013). Based on the literature review, it was found that most job search behaviours are using a modified version of Blau's (1994) research. Blau (1994, 1993) divided job search behaviours into *preparatory job search behaviours* (such as gathering initial information about potential job leads) and into *active job search* (such as sending out a CV, contacting prospective employers, or applying for jobs and going through an interview process). Blau (1994) found that job search was sequential, i.e. a preparatory phase was followed by an active phase.

Following the literature review the following research questions informed this study:

RQ1. *Are students' career decision self-efficacy and vocational outcome expectations associated with their job seeking behaviours?*

RQ2. *What is the impact of gender and ethnicity on students' self-efficacy, outcome expectations and their job seeking behaviours?*

Material and methods

Research Design and Sampling Strategy

In October 2015, the survey was distributed to all Business School Year 1, Year 2 and Year 3 students attending a post-92 London university, using *convenience sampling*. Students were asked to provide demographic data on their gender and ethnicity. The questionnaires were also emailed to Business School students and staff. It was distributed via email, Survey Monkey, during tutorials, lectures or using a hard copy provided in the Business School office yielding 245 responses in total. The sample was selected from the University's Business population of approximately 3,550 students (7% response rate).

Of these respondents, 110 were Male and 134 Female (45.1 per cent and 54.9 per cent). The breakdown of the ethnicity descriptive statistics is provided in Table 1.

Research Instruments

The Career Decision Self-Efficacy Scale (CDSE: Taylor & Betz, 1983)

The Career Decision Self-Efficacy Scale (CDSE: Taylor & Betz, 1983) is used most often in career counselling, and measures an individual's levels of career decision self-efficacy (Miller *et al.*, 2009). It measures a person's belief that he or she can engage in activities such as career planning, self-appraisal, problem-solving skills acquisition, gathering relevant occupational information and selecting appropriate goals (Betz & Taylor, 2001). The CDSE scale is reliable for different languages with a Cronbach's α coefficient of .94 (Nam *et al.*, 2011). The reliability generalisation study shows high internal consistency (Nam *et al.*, 2011; Nilsoon *et al.*, 2002).

Job Seeking Behaviour Scales (modified Saks & Ashforth, 1999)

Currently, there are no consistent employability outcome measure (Blakes *et al.*, 2012) and there are only a few studies that use theoretical models to examine job search processes (Wang *et al.*, 2007). Job seeking behaviour is a multidimensional construct (Van Hoyer, 2013). As such, the Job Seeking Behaviour Scale used in this study combines *preparatory, active and job search intensity* measures as advocated by Saks & Ashforth (1999) who have warned against combining them into one job search measure. The scale provides an important distinction between different stages of the job process as well as job search specific activities linked to each stage (Saks & Ashforth, 1999; Blau, 1994). This scale was originally proposed by Blau (1993) and subsequently, further developed by Saks & Ashforth (1999) and adapted for the current study. It consists of two sub-scales: preparatory job search behaviour scale (α

= .74) and an active job search behaviour scale ($\alpha = .75$) (Saks & Ashforth, 1999). However, the *preparatory job search behaviour* scale was further modified for the current study by adding two questions on the use of social networking searches. Although academic research has not yet looked at the use of social media when seeking employment, practitioner-oriented journals started offering advice to companies as to how use social networks to hire graduates (Herbould & Douma, 2013). LinkedIn, Facebook and Twitter are the social networking sites used most frequently by job seekers and career centres for career information and job seeking activities (Osborn & LoFrisco, 2012). For the current study, students were asked to indicate the frequency with which they performed each task in the last 3 months on a 5-point scale where 1= Never (0 times), 2=rarely (1 or 2 times), 3 = occasionally (3 to 5 times), 4=frequently (6 to 9 times), 5 = very frequently (at least 10 times). The two items, added to the Preparatory Job Search Behaviour scale, account for students' information gathering during the planning phase of the job process, using social media ("Posted that you were looking for a job in social media such as Facebook, Twitter, LinkedIn." and "Searched social media such as Facebook, Twitter, LinkedIn about possible job leads."). The two items for the modified scale were not considered to be active job search behaviours as these involve the actual job search, sending a CV and talking with prospective employers (Blau, 1994; Saks and Ashforth, 1999). Preparatory Job Search behaviours involve gathering job information and identifying leads (Blau, 1994; Saks & Ashforth, 1999). The internal validity of an updated scale increased from a Cronbach's alpha (α) of .74 to $\alpha = .83$.

Vocational Outcome Expectations Scale (McWhirter and Metheny, 2009)

Outcome expectation, a 12-item measure scale (McWhirter and Metheny, 2009), was used to measure students' vocational outcome expectations. The scale assesses the individual's level of positive expectations with regard to his/her career choice and his/her belief that his/her actions will lead to a positive result. It also reflects Bandura's three types of outcome expectations. Items are specific to outcomes related to the career decision-making process. A 4-point Likert scale with anchors from 1 (*Strongly disagree*) to 4 (*Strongly agree*) measures items such as: "My career planning will lead to a satisfying career for me." "I will be successful in my chosen career/occupation.", "I have control over my career decisions.", "I will get the job I want in my chosen career." A total score is calculated by summing up all the responses. Higher scores indicate more positive outcome expectations. McWhirter *et al.* (2000) reported a Cronbach's α of .83. Metheny & McWhirter's (2013) study reported an α of .93.

Theory/calculation

Results

H₁. Students' career decision self-efficacy is positively correlated with their job seeking behaviours.

Bivariate Pearson product-moment correlation coefficient analyses² showed that students' career decision self-efficacy was positively correlated with their preparatory job seeking behaviours ($r = .x$, $N = 216$, $p < .01$); active job seeking behaviours ($r = .x$, $N = 220$, $p < .01$); and job search intensity ($r = .x$, $N = 222$, $p < .001$).

Hence, the findings support H₁: Students' career decision self-efficacy is positively correlated with their job seeking behaviours.

² Correlations significant at the 0.01 level (1-tailed)

H₂: Students' career decision self-efficacy is a predictor of their job seeking behaviours.

Standard multiple regression was conducted to identify predictors of job search behaviours, i.e. CDSE sub-scales, such as accurate self-appraisal, gathering occupational information, goal selection, making plans for the future and problem solving, were regressed against Preparatory Job Search Behaviours (PJSB), Active Job Search Behaviours (AJSB) and Job Search Intensity (JSI):

- *Self-Appraisal* (Beta of .x, Sig. = x) was found to be a statistically significant predictor of Preparatory Job Seeking Behaviours (Beta of .x, Sig. = x) (see Figure 3: Regression Analysis: Predictors of Preparatory Job Seeking Behaviours);
- *Planning* was found to be a statistically significant predictor of Active Job Seeking Behaviours (Beta of .x, Sig. = x) (see Figure 4: Regression Analysis: Predictors of Active Job Seeking Behaviours).

These findings indicate that career decision self-efficacy and its sub-scales, *planning and self-appraisal*, are the statistically significant predictors of all students' job search behaviours.

Hence, the findings support H₂: Students' career decision self-efficacy is a predictor of their job seeking behaviours.

H₃: Students' vocational outcome expectations are positively correlated with their job seeking behaviours.

Bivariate Pearson product-moment correlation coefficient analyses³ showed that students' vocational outcome expectations were positively correlated with their preparatory job seeking behaviours ($r = .x$, $N = 229$, $p < .01$); active job seeking behaviours ($r = .238$, $N = 234$, $p < .01$); and job search intensity ($r = .x$, $N = 236$, $p < .001$).

Hence, the findings support H₃: Students' vocational outcome expectations are positively correlated with their job seeking behaviours.

H₄: Students' vocational outcome expectations are a predictor of their job seeking behaviours.

Standard multiple regression analysis found that the Vocational Outcome Expectations was the statistically significant predictor of Preparatory Job Seeking Behaviours (Beta of .x, Sig. = x) (see Figure 3: Regression Analysis: Predictors of Preparatory Job Seeking Behaviours), Active Job Seeking Behaviours (Beta of .x, Sig. = x) (see Figure 4: Regression Analysis: Predictors of Active Job Seeking Behaviours) and of Job Search Intensity (Beta of .x, Sig. = x) (see Figure 5: Regression Analysis: Predictors of Job Search Intensity).

Hence, the findings support H₄: Students' vocational outcome expectations are a predictor of their job seeking behaviours.

H₅: Students' vocational outcome expectations are positively correlated with their career decision self-efficacy.

Bivariate Pearson product-moment correlation coefficient analyses⁴ showed that students' vocational outcome expectations were positively correlated with their career decision self-efficacy ($r = .x$, $N = 219$, $p < .01$); and its sub-scales such as: self-appraisal ($r = .x$, $N = 232$, $p < .01$); gathering occupational information ($r = .x$, $N = 232$, $p < .01$); goal selection ($r = .x$, $N =$

³ Correlations significant at the 0.01 level (1-tailed)

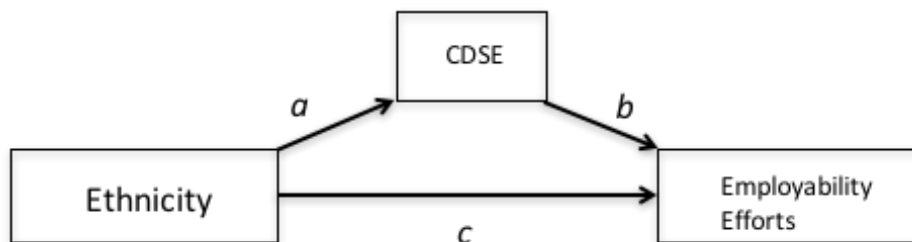
⁴ Correlations significant at the 0.01 level (1-tailed)

231, $p < .01$); making plans for the future ($r = .x$, $N = 233$, $p < .01$); and problem solving ($r = .x$, $N = 232$, $p < .01$).

Hence, the findings support H₅: Students' vocational outcome expectations are positively correlated with their career decision self-efficacy.

H₆. Students' career decision self-efficacy and job seeking behaviours are mediated by students' ethnicity.

The mediation testing using PROCESS coding in SPSS 20 (Hayes, 2012) showed statistically significant results for career decision self-efficacy⁵ being a mediator between all ethnicities and all students' job seeking behaviours. The path diagram, Model 4a⁶ (Stride *et al.* 2015b), is depicted in Figure 4.3 below.



Figure, 4.3: The Path Diagram of CDSE mediating Ethnicity and Employability Efforts (adapted from Stride *et al.*, 2015b)

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Hence, the findings support H₆. Students' career decision self-efficacy and job seeking behaviours are mediated by students' ethnicity.

H₇: The combination of gender & ethnicity moderates students' vocational outcome expectations and their job seeking behaviours

The moderation testing using PROCESS coding in SPSS 20 (Hayes, 2012) showed statistically significant results for the combination of gender and ethnicity as moderators between students' vocational outcome expectancies and their *Active Job Seeking Behaviours* for all ethnicities. The path diagram, Model 2⁷ (Stride *et al.*, 2015a), is depicted in Figure 4.5 below.

⁵ The PROCESS mediation models do not allow for a mediator being dichotomous in SPSS (Stride *et al.* 2015b). Hence it was impossible to test for Ethnicity being a moderator between CDSE and job seeking behaviours.

⁶ The assumptions made (Stride *et al.* 2015b):

- The Independent Variable (Ethnicity) is dichotomous
- The mediator (CDSE) is continuous.
- The DV (variable Y) is continuous and satisfies the assumptions of standard multiple regression.

⁷ The assumptions made (Stride *et al.* 2015a):

- The primary Independent Variable (CDSE) is continuous
- The moderators (Ethnicity and Gender) are dichotomous.
- The Dependent Variable (PJSB, ACJB, JSI) are continuous and satisfy the assumptions of standard multiple regression.

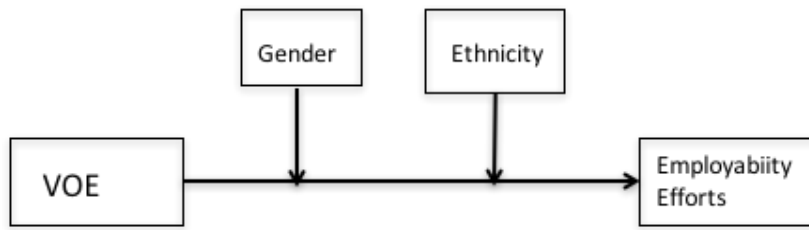


Figure 4.5: The Path Diagram of Gender and Ethnicity as Moderators between Students' VOE and their Employability Efforts (adapted from Hayes, 2012)

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Hence, the findings support H₇: The combination of gender and ethnicity moderates students' vocational outcome expectations and their job seeking behaviours.

H₈. Students' vocational outcome expectations and job seeking behaviours are mediated by students' ethnicity.

The mediation testing using PROCESS coding in SPSS 20 (Hayes, 2012) showed that vocational outcome expectations⁸ were mediated by ethnicity for all students' job seeking behaviours. The path diagram, Model 4a⁹ (Stride *et al.* 2015b), is depicted in Figure 4.6 below.

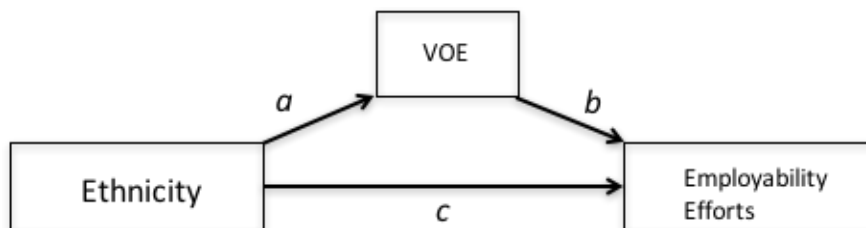


Figure 4.6: The Path Diagram of CDSE mediating Ethnicity and Employability Efforts (adapted from Stride *et al.*, 2015b)

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Hence, the findings support H₈. Students' vocational outcome expectations and job seeking behaviours are mediated by students' ethnicity.

⁸ The PROCESS mediation models do not allow for a mediator being dichotomous in SPSS (Stride *et al.* 2015b). Hence it was impossible to test for Ethnicity being a moderator between VOE and job seeking behaviours.

⁹ The assumptions made (Stride *et al.* 2015b):

The Independent Variable (Ethnicity) is dichotomous

- The mediator (CDSE) is continuous.
- The DV (variable Y) is continuous and satisfies the assumptions of standard multiple regression.

H₉. Ethnicity moderates students' vocational outcome expectations and their job seeking behaviours.

The moderation testing using PROCESS coding in SPSS 20 (Hayes, 2012) showed statistically significant results for the ethnicity as moderators between students' vocational outcome expectations and their job seeking behaviours for *Active Job Seeking Behaviours* for *White* and *Chinese or Other Ethnic Groups*. The path diagram, Model 1¹⁰ (Stride *et al.* 2015c), is illustrated in Figure 4.7 below.

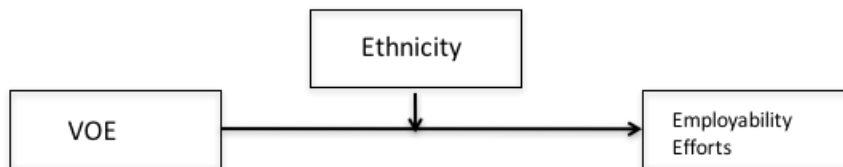


Figure 4.7: The Path Diagram of Gender and Ethnicity as Moderators between Students' CDSE and their Employability Efforts (adapted from Stride, et al. 2015a)

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Hence, the findings support H₉: Ethnicity moderates students' vocational outcome expectations and their job seeking behaviours.

H₁₀. Vocational outcome expectations mediate students' career decision self-efficacy and their job seeking behaviours.

The mediation testing using PROCESS coding in SPSS 20 (Hayes, 2012), Model 4, showed statistically significant results for the vocational outcome expectations as a mediator between students' career decision self-efficacy and students' all job seeking behaviours. The path diagram, Model 4a¹¹ (Stride *et al.* 2015b), is depicted in Figure 4.8 below.

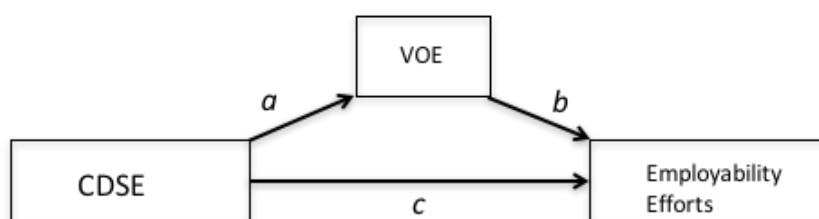


Figure 4.1: The Path Diagram of VOE as a Mediator between Students' CDSE and their Employability Efforts (adapted from Stride, et al. 2015a)

¹⁰ The assumptions made (Stride *et al.* 2015c):

- The primary Independent Variable (CDSE) is continuous
- The moderator (Ethnicity) is dichotomous.
- The Dependent Variable (PJSB, ACJB, JSI) are continuous and satisfy the assumptions of standard multiple regression.

¹¹ The assumptions made (Stride *et al.* 2015b):

The Independent Variable (Ethnicity) is dichotomous

- The mediator (CDSE) is continuous.
- The DV (variable Y) is continuous and satisfies the assumptions of standard multiple regression.

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Hence, the findings support H₁₀: Vocational outcome expectations mediate students' career decision self-efficacy and their job seeking behaviours.

Discussion

RQ1. Are students' career decision self-efficacy and vocational outcome expectations associated with their job seeking behaviours?

SCCT theory recognises the importance of self-efficacy and outcome expectations and their impact on people's behaviours (Lent, 2013). The SCCT literature claims that there are positive relationships between self-efficacy beliefs, outcome expectations and career orientated actions (Lent *et al.*, 1994). Career self-efficacy beliefs were found to mediate between personality traits and job search outcomes (Zimmerman *et al.*, 2012) and were one of the best predictors of job-searching behaviours (Zimmerman *et al.*, 2012; Niles & Sowa, 1992). Zikic & Saks (2009) found that job search (or career) self-efficacy is positively linked to job search intention and job search intention is positively linked to job search intensity. Bandura's (1997a) claimed that individuals possessing high career self-efficacy levels are much more likely to seek positive outcomes for their career goals. Rottinghaus *et al.*'s (2003) meta-analysis of 53 samples with 37,829 participants show a strong relationship ($r=.59$) between self-efficacy and career interest. High self-efficacy has been linked to seeking positive outcomes for career goals (Betz & Taylor, 2001; Betz, 1992; Bandura, 1997a). Ali *et al.*'s (2005) study also confirmed that self-efficacy was an important predictor of students' vocational outcome expectations. Feehan & Johnston (1999) tested 237 high school students and found a statistically significant correlation between career self-efficacy and job seeking behaviours.

The study's findings are consistent with the SCCT literature, confirming that students' career decision self-efficacy were associated with their employability efforts. The study found a positive correlation between the students' that students' career decision self-efficacy was positively correlated with their preparatory job seeking behaviours ($r = .X$, $N = 216$, $p < .01$); active job seeking behaviours ($r = .X$, $N = 220$, $p < .01$); and job search intensity ($r = .X$, $N = 222$, $p < .001$). *Self-Appraisal* (Beta of $.X$, $Sig. = X$) was found to be a statistically significant predictor of Preparatory Job Seeking Behaviours (Beta of $.X$, $Sig. = X$). *Planning* was found to be a statistically significant predictor of Active Job Seeking Behaviours (Beta of $.X$, $Sig. = X$). The study also found that career decision self-efficacy mediated between all ethnicities and all students' job seeking behaviours.

Sheu *et al.*'s (2010) meta-analysis of SCCT's model variables showed that outcome expectations are as important as self-efficacy in predicting interests and goals. They also confirmed that in some cases outcome expectations had larger direct path coefficients than self-efficacy. Morrow, Gore & Campbell (1996) argued that for marginalized groups outcome expectations may be in fact a more powerful predictor of vocational behaviour than self-efficacy beliefs. The results of the current study also confirmed that students' vocational outcome expectations were associated with all their employability efforts. Vocational outcome expectations were positively correlated with their preparatory job seeking

behaviours ($r = .X$, $N = 229$, $p < .01$); active job seeking behaviours ($r = .X$, $N = 234$, $p < .01$); and job search intensity ($r = .X$, $N = 236$, $p < .001$). Vocational Outcome Expectations was the statistically significant predictor of Preparatory Job Seeking Behaviours (Beta of $.X$, Sig. = $.X$), Active Job Seeking Behaviours (Beta of $.X$, Sig. = X) and of Job Search Intensity (Beta of $.X$, Sig. = 000). Vocational outcome expectations also mediated all students' employability efforts which is, again, consistent with the SCCT model (Amstrong & Vogel, 2010). Vocational outcome expectations were positively correlated with their career decision self-efficacy ($r = .X$, $N = 219$, $p < .01$); and its sub-scales such as: self-appraisal ($r = .X$, $N = 232$, $p < .01$); gathering occupational information ($r = .X$, $N = 232$, $p < .01$); goal selection ($r = .470$, $N = 231$, $p < .01$); making plans for the future ($r = .X$, $N = 233$, $p < .01$); and problem solving ($r = .X$, $N = 232$, $p < .01$). SCCT proposes that self-efficacy is positively related to outcome expectations (Morrow *et al.* 1996; Lent *et al.*, 1994).

RQ2. What is the impact of gender and ethnicity on students' self-efficacy, outcome expectations and their job seeking behaviours?

Schunk & Pajares (2001) and Rottinghaus *et al.* (2003) pointed out that there is a need for research on self-efficacy in relation to ethnic differences as most career decision self-efficacy studies come from predominantly Caucasian groups of students. Ethnicity differences in career self-efficacy have been found statistically significant in various studies¹² (Chaney *et al.*, 2007; Peterson, 1993). Gloria & Hird's (1999) study examined 687 undergraduate students (86% White and 14% ethnic minorities) and found Caucasian students to have higher career self-efficacy than mixed group students. However, this might be due to the fact that the percentage of Caucasian students in their sample was much higher than of other groups of students. Chung (2002) additionally explains these findings as a result of the sample being drawn from a Rocky Mountain university in the United States with predominantly White students (95%). Gainor and Lent (1998) studied maths choice intentions for black student and found that male students had higher maths/science self-efficacy expectations than female students. Lent & Shau (2010) and Hackett & Byars (1996) found that career self-efficacy, outcome expectations and career progress of ethnic students (African American women, Hispanic and Asian American) was affected by experiences of ethnic discrimination. Helms & Piper (1994) claimed that a degree to which a person expects or believes that his/her ethnicity¹³ to be a significant factor with regard to his/her career options (Helms & Piper, 1994) was a crucial predictor of a person's vocational behaviour). Gloria & Hird (1999) also believed that students' career choices might be influenced by their ethnic barriers. The SCCT literature often examines gender or ethnicity as a perceived barrier but none of the SCCT studies examined both gender and ethnicity concurrently (McWhirter, 1997). A search conducted on the Sage and ScienceDirect database on 1 June 2017 with search words such as 'gender and ethnicity' AND 'SCCT' or 'gender and ethnicity' AND 'SCCT' AND 'mediate' showed no results, hence, it was concluded that currently there are no studies that examine the mediating or moderating effects of gender and/or ethnicity on self-efficacy, vocational outcome expectations or employability efforts. A study by Lipshits-Braziler & Tatar (2012) investigated gender and ethnic differences in relation to career barriers for 406 university students but used 2-way MANOVA with Gender and Ethnicity as independent variables against their perceptions of personal career barriers. They found that

¹² Chung (2002), on the other hand, who have replicated the original Betz *et al.*'s (1996) study evaluating gender as a moderator of self-efficacy and included ethnicity as another moderator of self-efficacy, examined 165 undergraduate students from a Southern University in the United States with a large representation of Black ethnicity students and found no ethnic group differences in CDSE scores. Betz *et al.* (2005) also reported similar results to Chung (2002).

¹³ They used race instead of ethnicity.

the perception of career barriers and the sense of efficacy was different for men and women and for different ethnic group.

The current study found evidence that ethnicity acted as a mediator and a moderator for students' employability efforts. The combination of gender and ethnicity moderated between students' vocational outcome expectancies and their *Active Job Seeking Behaviours* for all ethnicities. Additionally, ethnicity moderated between students' vocational outcome expectations and their job seeking behaviours for *Active Job Seeking Behaviours* for *White and Chinese or Other Ethnic Groups*. Vocational outcome expectations were also mediated by ethnicity for all students' job seeking behaviours. Vocational outcome expectations also mediated between students' career decision self-efficacy and students' all job seeking behaviours.

Conclusions

This research investigated students' career decision self-efficacy beliefs, vocational outcome expectations and employability efforts. The study also contributes to the research on the relationships between career-self efficacy beliefs and job search behaviours. SCCT authors called for research on self-efficacy in relation to ethnic differences (Chaney *et al.*, 2007; Rottinghaus *et al.*, 2003; Schunk & Pajares, 2001); for studies on self-efficacy for different educational groups and domains (Schunk & Pajares, 2001); ethnic barriers and career decision self-efficacy (Gloria & Hird, 1999); the impact of career barriers on self-efficacy and outcome expectations and the impact of the subjective experience of social class on the career self-efficacy and outcome expectations (Ali *et al.*, 2005); and for SCCT research across all racial-ethnic groups (Flores *et al.*, 2017). Currently, most research into self-efficacy predominantly focuses on uniform samples of Caucasian participants (Chaney *et al.*, 2007, Rottinghaus *et al.*, 2003, Schunk & Pajares, 2001). The only study that investigated career self-efficacy in a multicultural context was by Hackett *et al.* (1992). Zikic & Saks (2009) identified the need for research to identify what job seekers can do in order to improve their self-efficacy. Furthermore, Van Hoye (2013) and Betz & Vuyten (1997) propose that self-efficacy should be examined in further research and embraced by academic career counsellors as to its effect on individuals' job search behaviour. The SCCT literature often examined gender or ethnicity as a perceived barrier but none of the SCCT studies examined both gender and ethnicity concurrently (McWhirter, 1997). The Sage and ScienceDirect database search conducted on 1 June 2017 with search words such as 'gender and ethnicity' AND 'SCCT' or 'gender and ethnicity' AND 'SCCT' AND 'mediate' showed no results, except the recent study by Lipshits-Braziler & Tatar (2012) that investigated gender and ethnic differences in relation to career barriers for 406 university students using 2-way MANOVA with Gender and Ethnicity as independent variables. Hence, this study contributes to the SCCT literature discussion about gender and ethnicity as distal and proximal factors as there are currently no studies that examine the mediating or moderating effects of gender and/or ethnicity on self-efficacy, vocational outcome expectations or employability efforts.

This study also examined the links between vocational outcome expectations and job seeking behaviours. This has not been attempted so far in SCCT research. Constantino *et al.*'s (2011) meta-analysis comment on poor measurement issues in the expectation research. Outcome

expectations are often reported as negative or non-significant as they are most of the time not related to primary research questions. Constantino *et al.* (2011) also found that there is a scarcity of research to support a direct casual relation between outcome expectations and favourable treatment outcomes and manipulation studies involving outcome expectations are “virtually nonexistent“ (p.189). Historically outcome expectations were seen as a variable that had to be controlled during clinical trials rather than an independent variable itself (Constantino *et al.*, 2011). As a result, expectations have been undervalued and there are only a few studies that actually assess expectations as their primary research questions (Weinberger & Eig, 1999). In recent years, a small number of studies have looked at outcome expectations in the organisational context (Fridrich, *et al.*, 2016). Sheu *et al.*'s (2010) meta-analysis of SCCT's model variables showed that outcome expectations are as important as self-efficacy in predicting interests and goals. Morrow, Gore & Campbell (1996) argued that for marginalized groups outcome expectations may be in fact a more powerful predictor of vocational behaviour than self- efficacy beliefs.

Contribution to the Employability in Higher Education Research

The study proposes the SCCT framework as an employability framework for post-1992 university students. It also examines qualitatively students' self-efficacy and outcome expectation beliefs. There are currently no employability models in the literature that address the needs of socially disadvantaged post-1992 university students and that incorporate self-efficacy, gender, ethnicity, perceived social support, socioeconomic status, cultural influences and gender role models, and outcome expectations. SCCT theory maintains that people's behavioural choices are affected by their self-efficacy (“*Can I do this?*”) and beliefs about the consequence or outcomes of performing particular behaviours (outcome expectations: “*If I do this, what will happen?*”) (Lent, 2013). It further recognises that self-efficacy and outcome expectations are a function of person's environment factors such as gender, ethnicity as well as environmental and socioeconomic conditions (Lent, 2013).

Dacre Pool & Sewell (2007) advocate a coherent model of graduate employability in Higher Education. They see employability as a set of skills and competencies, including self-efficacy. Kumar (2007) proposes a SOAR model (an acronym for ‘Self’, ‘Opportunity’, ‘Aspirations’ and ‘Result’) as a way to integrate graduate skills. In Kumar's model ‘Self’ consists of self-assessment, self-efficacy, self-esteem and self-management. Knight & Yorke (2002) see self-efficacy as an important dimension of employability. Daniels *et al.* (1998) and Washington (1999) treat self-efficacy and employability interchangeably by viewing employability as a reflection of a person's belief about possibilities of getting new employment. Van der Velde & Van den Berg (2003) propose that employability is largely dependent on self-efficacy, which has been shown to be positively related to job seeking behaviours (Kanfer *et al.*, 2001). Fugate *et al.* (2004) link strengthening employability skills to a strengthening of efficacy beliefs. There is also a need for career development interventions to address and integrate students' sociocultural context into career services (Gloria & Hird, 1999; Leung, 1995). Gloria & Hird (1999) called for self-efficacy enhancing strategies and for in-depth evaluation of students' barriers in order to expand students' perceptions of possible career options. It is all the more important for students to understand whether and how they integrate their cultural factors and ethnic group expectations into their career decision-making (Metheny & McWhirter, 2013; Gloria & Hird, 1999). Betz & Vuyten (1997) advocate that career counsellors and educators should assess students' self-efficacy in order to be able to have conversations with students about their avoidance of certain career

behaviours. Van Hoyer (2013) proposes that strengthening individuals' self-efficacy beliefs should be part of the employment counsellors' agenda as it increases job-seeking behaviours. However, psychological and social effects of gender and ethnicity and the social-cultural environment are never explored in the coaching effectiveness context. The EBSCOhost Research database search conducted on 8th January 2015 using words such as 'coaching', 'coaching effectiveness' and 'gender', 'race' and 'ethnicity' yielded 0 results.

Apart from current employability models in the literature failing to recognise SCCT environmental conditions affecting students, employability skills and outcome measures have been inconsistent in the literature and existing studies have failed to empirically evaluate changes in young people's employability skills as a result of interventions (Blades *et al.*, 2012). The surveys often do not provide a comparison group and use un-validated scales, hence, there is a need to develop a coherent set of employability skills measures (Blades *et al.*, 2012). Blades *et al.*'s (2012) review of the academic literature finds that employability as a whole is focused on using career-self efficacy (Rothwell & Arnold, 2007) and on generic skills (Van Der Heijde & Van Der Heijden, 2006). Blades *et al.*'s (2012) review of recent employability programme evaluations found that most evaluations included generic quantitative and qualitative measurements of employability that included confidence, problem solving, interpersonal skills, planning, communication skills and self-awareness. Due to differences in job search behaviour measures it is difficult to compare them (Van Hoyer, 2013).

Implications for Practice

Brown & Lent (1996) claim that interventions that address incorrect self-efficacy or outcome expectancy beliefs, reduce perceived barriers to chosen careers, provide action plans to overcome barriers, and help students to develop new experiences and to reframe their past experiences can have a positive impact on their career-related behaviours. There is a need, therefore, for career development interventions to address and integrate students' sociocultural context into career services (Gloria & Hird, 1999; Leung, 1995), particularly for post-1992 universities. It is important for students to understand how they integrate their cultural factors and ethnic group expectations into their career decision-making (Metheny & McWhirter, 2013; Gloria & Hird, 1999). Ethnicity cannot be changed but other mediating variables, such as socioeconomic status, can be manipulated in order to affect the outcomes (VanderWeele & Robinson, 2014). Ethnic students will benefit from examining their family expectations, their beliefs about themselves and from understanding the expectations and pressures from their families and communities (Falconer & Hays, 2006). It will be very useful for them to hear how other students with similar background overcame these career issues (Falconer & Hays, 2006).

Strengthening social support for lower social status students (Lent *et al.*, 2002) should also become an important part of the universities' employability agenda. Students from lower socioeconomic backgrounds would benefit from interventions that increase their social support, strengthen their self-efficacy and indirectly influences their outcome expectations. This might be provided by role models with whom they can identify (Ali *et al.*, 2005).

Hackett & Byars (1996) discussed that women who are not only from ethnic minorities but who are also immigrants are subjected to a double disadvantage. Hence, career services should address their career barrier perceptions via using culturally sensitive coping self-

efficacy¹⁴ strategies aimed to reduce ethnic women's perception of career barriers. It is also important for ethnic minorities to be encouraged to identify and connect to support networks in their environment (Hackett & Byars, 1996). Support networks are an important extra-therapeutic factor in the common factors therapy outcome literature (Duncan *et al.* 2010). Extra-therapeutic factors are considered in the coaching and psychotherapy literature as one of the most important factors in producing behavioural change (Cuijpers *et al.*, 2012; Wampold, 2001; Miller *et al.* 1997; Lambert, 1992). Roehrle & Strouse (2008) found social support to be a statistically significant extra-therapeutic outcome.

It is important to develop career services that are culturally sensitive (Ma & Yeh, 2010; Hackett & Byars, 1996) in order to enhance universities' employability strategies. For example, Ma & Yeh (2010) point out Asian immigrants often have to consider the influence of their family, language barriers and financial hardship and any employability enhancing strategies should be aware of that. These students would benefit from English language support as part of career coaching services (Ma & Yeh, 2010) and from being exposed to mock job interviews (Shea *et al.*, 2007). Chow (1999) reported that fluency of English language is a very important factor when undertaking new career opportunities in a foreign country. Ma & Yeh (2010) found that self-reported English fluency was positively correlated with Chinese students' vocational aspirations ($r=.34$, $p<.001$).

Finally, it is important that career services use different strategies to reach out to ethnic minority students as these students tend to underuse them (Falconer & Hays, 2006). Interestingly, Black or Black British Male students in this study did not respond to any of the interview invitations. Hence, it is important that the universities' employability services develop relationships with Black student organisations (Falconer & Hays, 2006). Falconer & Hays (2006) found that African Americans were reluctant to ask for help or seek career counselling. The African Americans students in their study stated they would benefit most by having career coaches in the same field of study and being exposed to alumni and professionals in their field. African American students also believed that job preparatory courses should be mandatory. Gushue & Whitson (2006) note that career interventions for African American students should focus on overcoming ethnic and cultural stereotypes. These recommendations might also apply Black or Black British students.

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References

¹⁴ The coping self-efficacy is defined a person's perceived ability to cope effectively with life challenges (Chesney, *et al.* (2006).