Planned Happenstance Skills, Emotional Intelligence and Career Decision Self-Efficacy in Gifted High School Students

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Abstract

Previous research has found that in career selection process, an individuals level of confidence in conducting career-related tasks can be predicted from their level of planned happenstance skills. However, gifted students have special characteristics related to their emotional abilities. This study quantitatively investigated the moderating effect of emotional intelligence on the relationship between planned happenstance skills and career decision self-efficacy in gifted students. The respondents were 165 gifted high school students studying in Jakarta. The variables were measured using a research questionnaire that included the scales of Planned Happenstance Career Inventory, Trait Emotional Intelligence Questionnaire Short Form, and Career Decision Self-Efficacy Short Form, adapted to the Indonesian context. The data were analysed using PROCESS macros program from Hayes that contained in SPSS. The results showed no moderating effect of emotional intelligence on the relationship between planned happenstance skills and career decision self-efficacy in the gifted students ($\beta_j = -0.06, t = -0.67, p = 0.49$). The limitations of the study and suggestion for future research are discussed.

Keywords: career decision self-efficacy, planned happenstance skills, emotional intelligence, gifted high school students

Introduction

Choosing a career is an important part of an individuals life, and this is particularly true in Indonesia, where the rate of unemployment is increasing. The population of working people in Indonesia has increased to 121.9 million (out of a national population of 252.7 million) (International Labor Organization, 2015), and the number of high school and college graduates have increased as well (Yulianingsih, 2013). However, unemployment persists as a problem. One common reason for unemployment is skill incompatibility: for example, young job seekers report that they feel hopeless about finding work, because their skills did not match the skills required in their community (International Labor Organization, 2015).

For high school students, careers are a sensitive issue, as they concern their future lives (Fernandes & O Bance, 2015; Santrock, 2014). Fernandes and O Bance (2015) suggested that students with anxiety, lack of sufficient information, lack of confidence and a broad interest in career choices tend to experience career indecision. Gifted students experience anxiety also in their career selection, due to their wide range of interest and multiple talents. Because they can see various possibilities and career options, gifted students tend to have difficulty choosing a career (Maxwell, 2007). Furthermore, according to Greene (2006), although gifted people have high hopes and aspirations for their careers, exhibit involvement in their work (Pyryt as cited in Greene, 2006), and attain career maturity earlier than others do (Kelly & Colangelo as cited in Greene, 2006), these characteristics do not imply that they have a smooth career selection process.

Self-efficacy plays an important role in career selection (Betz, Klein, & Taylor, 1996). As Bandura noted (as cited in Li, Hazler, & Trusty, 2017), personal variables have a more direct influence on career decisions than context variables, such as support systems, culture and socioeconomic status. Taylor and Betz (1983) constructed the variable career decision self-efficacy (CDSE), oriented on Banduras self-efficacy theory. CDSE is defined as the level of an individuals confidence in his or her ability to perform certain tasks related to career decision making (Luzzo, 1993). Aspects of CDSE are derived from the theory of career maturity in the Crites model of career maturity (as cited in Taylor and Betz, 1983). Because the main orientation of this theory is the success of outcomes for education and career, several studies have identified factors related to CDSE (Betz & Luzzo as cited in Betz, Hammond, & Multon, 2005).

Several studies have shown that CDSE is positively associated with career development variables, such as attitudes towards career decisions (Luzzo, 1993), career certainty, career attachment, and career options (Kim, Jang, Jung, Lee, Puig, & Lee, 2014). Negative associations were found for variables such as career indecision (Kraus & Hughey, 1999; Grier-Reed & Skar, 2010), dysfunctional career thoughts (Grier-Reed, as cited in Grier-Reed & Skar, 2010), and anxiety (Robbin, as cited in Luzzo, 1993). Jiang (2014) reported that when individuals are confident in making career choices, they feel less confused. Furthermore, confidence is seen as an ability to be increased to aid the career selection process (Mitchell, Levin, & Krumboltz, 1999; Kim et al., 2014).

One factor affecting CDSE is the ability to recognise, capture and transform an unexpected experience into an opportunity. This ability is known as planned happenstance skill (PHS) (Kim et al., 2014). Chien, Fischer, and Billers study in Taiwan (as cited in Krumboltz, Foley, & Cotter, 2013) measured components of PHS related to the level of confidence in career training, finding that they significantly benefitted career-related features of the personality, such as motivation, time management and self-perception. PHS is oriented towards approaches of action, exploration and learning processes, which occur in different experiences rather than in single career choices (Kim et al., 2014). Bluestein explained that this attitude towards exploration implies that the individual has an open, non-rigid way of approaching new situations and changes, because they benefit and support his or her growth (as cited in Mitchell et al., 1999). Learning experiences are related to the formation of self-efficacy, which serves as a bridge between individual
expectations about ones ability to perform certain tasks and actual behaviors (Kim, Rhee, Ha, Yang, & Lee, 2016). Furthermore, Kim et al. (2016) found that career satisfaction can be achieved, because individuals with strong CDSE can recognise opportunities and tolerate uncertainty. The ability to recognise unexpected events as career opportunities enhances an individuals confidence in his or her ability to make career decisions (Krumboltz et al., 2013).

The unexpected events that a person experiences in his or her career may relate to the persons perception of emotion (Murtagh, Lopes, & Lyons, 2011). Young, Valach, and Collin (as cited in Brown, George-Currain, & Smith, 2003) showed that, according to the action-theoretical approach, careers are built through actions that are taken every day. The process cannot be separated from the role of emotion. Furthermore, emotions appear in every context of events and the dynamics of a person. They play an important role because they can encourage, energise, control, and regulate action, and they can provide orientation and develop career explanations (Young et al., as cited in Jiang & Park, 2012). Individuals with high emotional intelligence have emotional awareness and a better capacity to integrate emotional experiences with their thoughts and actions (Afzal, Atta, & Shuja, 2013). Previous research has shown that the level of individual confidence in the success of career-related tasks relates to the ability individuals have to recognise and understand their emotional states (Brown et al., 2003).

CDSE

Solberg, Brown, Good, Fischer, and Nordin (1995) defined CDSE as the confidence a person has that he or she can successfully perform various career exploration activities, including assessment of his or her ability, to explore personal interests and network with professionals in a field of interest. A high CDSE level indicates that an individual has a positive career attitude (Choi et al., 2012). Not much is known about gifted students CDSE levels (Watters, 2010). However, Zeidner, Shani-Zinovich, Matthews, and Roberts (2005) reported that there is a link between positive attributes such as self-efficacy and ego resiliency, and intelligence. In addition, Greene (2003) found, through a literature study on gifted children, that chance played a role in their career development. Different opportunities represent different possibilities for a person to have relevant experiences (Kim et al., 2014).

Based on the model of social cognitive career theory, having a positive experience related to career activity develops an individuals confidence to achieve his or her desired career (Brown, 2002). However, individuals do not always positively experience situations. For the experience of the individual to have a positive impact, he or she must develop self-confidence, transforming the experience into a learning opportunity (Brown, 2002; Rhee, Lee, Kim, Ha, & Lee, 2016). Individuals who have high levels of PHS engage in exploratory actions, such as asking experts and browsing the internet for information (Kim et al., 2014). Such actions involve indirect interaction with the environment (Ahn et al., 2005), which is associated with the ability to integrate emotions and cognition (Woitaszewski & Aalsma, 2004). In other words, Mayer, Perkins, Caruso, and Salovey (2001) argued that ones emotional intelligence is concerned with how one acts and takes decisions.

PHS

PHS is a concept in the theory of social learning proposed by Krumboltz. Its theory underlies a conceptual framework in career counselling, including how individuals can recognise, create, and transform (change) unexpected events into learning opportunities (Mitchell et al., 1999). Kim et al. (2014) found that PHS is an ability that supports an individuals behaviour of using unexpected events as opportunities rather than obstacles. Those abilities include curiosity (exploring new opportunities to learn), persistence even under difficult circumstances, flexibility about changing attitudes and circumstances, optimism (viewing new opportunities as possible and achievable), and risk taking (Mitchell et al., 1999). Krumboltz (2009) argued that the focus of career counselling should not be on predicting the purpose of a position but on preparing clients to take advantage of existing opportunities.

Emotional Intelligence

Emotional intelligence can be viewed as an ability or a trait. Considering it as an ability allows a focus on actual emotion-related abilities, as measured through tests of maximum performance. On the other hand, seeing emotional intelligence as a trait or perceived ability allows us to measure it through self-report questionnaires. This difference of view lies only in the method of measurement and not in the theory domain (Petrides & Furnham, 2006).

Petrides and Furnham (2006) described emotional intelligence as a personality trait, or a collection of emotional perceptions and traits (emotional perceptions, emotional management, empathy and impulsivity). Using the incremental validity test of the emotional intelligence trait tool, Siegling, Vesely, Petrides, and Saklopske (2015) found that, the conceptualisation of emotional intelligence as the affective dimension of personality exhibits a consistent incremental effect and predicts variation in the relevant criteria in coping strategies and the Big Five personality traits. Having high emotional intelligence can improve an individuals performance (Petrides et al., 2016).

Woitaszewski and Aalsma (2004) explained that gifted adolescents can combine emotions, intellect and creativity against enormous odds that enables larger amounts of successful interactions with the environment. Mayer, Perkins, Caruso, and Salovey (2001) further noted that the combination of such abilities enables gifted adolescents to achieve their goals. Even so, however, gifted adolescents are challenged by their emotional states (Woitaszewski & Aalsma, 2004). Silverman and Golon (as cited in Pfeiffer, 2008) found that gifted individuals tend to have high sensitivity or are easily hurt. In addition, Davis and Rimm (1998) study showed that adolescents with high general cognitive abilities often experienced feelings of guilt, depression, inadequacy and fear.

Using an explanation of the relationship between variables, this study investigates where emotional intelligence affects the relationship between PHS and CDSE in gifted students. It is important to study CDSE in gifted students, due to the influence of CDSE on students career selection, which they will face in the future, and the current lack of research on this topic. The following hypotheses will be tested 1) There is a significant relationship between PHS and CDSE in gifted students; 2)There is a significant relationship between emotional intelligence and CDSE in gifted students;3)There is a significant relationship between PHS and CDSE that is influenced by emotional intelligence in gifted students.

Research Methodology

This study used a quantitative approach to clarify the relationship of CDSE, PHS and emotional intelligence.

Participants

The respondents in this study were 165 high school students in Jakarta (83 male and 82 female) drawn from the 11th and 12th grades, who were identified as intellectually gifted. Their average age was 16.18
years (SD = 0.655, range = 15—17 years old). The characteristics of intellectually gifted people include having an IQ score above average, a high level of creativity, and a high level of task commitment. In this study, the characteristics of giftedness were based on multicriteria of giftedness. The multicriteria of giftedness were an IQ score of 120 or above, CQ score of 110 or above, and Task Commitment Scale (Hawadi, 2002) score of 132 or above. The three scores were obtained using the IST intelligence test, figural creative test (TKF), and tools for the measurement of task commitment administered by psychologists.

**Instruments**

The research instruments were questionnaires measuring CDSE (CDSE-SF), PHS (PHCI), and emotional intelligence (TEIQue-SF).

**CDSE Short Form**

In this study, the CDSE short form (CDSE-SF), constructed by Betz, Klein, and Taylor (1996) and adapted to the Indonesian context by Sawitri (2009), was used to measure the career decision self-efficacy. The CDSE-SF consists of five components: self-appraisal, planning, occupational information, planning, goal selection and problem-solving. These five components are measured in 25 items, for which responses are given on a six-point Likert scale from 1 totally disagree to 6 complete confidence, with higher scores indicating a high level of confidence among the respondents. Based on the calculation resulted, 21 of 25 items have discrimination power above 0.30. The measurement of the reliability of the CDSE-SF with internal consistency yielded a Cronbachs α of 0.901.

**Planned Happenstance Career Inventory**

The Planned Happenstance Career Inventory (PHCI), created by Kim et al. (2014) and adapted by researchers with expert assistance in the field of psychology, is used to measure the ability of individuals to recognize unexpected events as career-related opportunities in this study. PHCI measures five components: optimism, flexibility, persistence, curiosity and risk-taking. It consists of 25 items, for which responses are given on a five-point Likert scale, from 1 totally disagree to 5 totally agree with higher scores indicating a higher level of individual ability to recognize unexpected events as career-related opportunities and transform them in this way. Based on the calculation resulted, 18 of 25 items have discrimination power above 0.30. The measurement of the reliability of the PHCI scale with internal consistency yields a Cronbachs α of 0.901.

**Trait Emotional Intelligence Questionnaire Short Form**

The participants’ perceptions of their capabilities and emotions were measured by the Trait Emotional Intelligence Questionnaire, Short Form (TEIQue-SF), created by Petrides and Furnham in 2001 (as cited in Cooper & Petrides, 2010) and adapted to the Indonesian context by researchers with the assistance of experts in psychology. The TEIQue-SF measures 15 facets, including four subscales of trait positivity: well-being, self-control, emotionality, sociability, as well as two facets contributing directly to adaptability and self-motivation. The TEIQue-SF consists of 30 items for which responses are given on a six-point Likert scale, from 1 totally disagree to 6 totally agree. Based on the calculation resulted, 17 of 30 items have discrimination power above 0.30. The measurement of the reliability of the TEIQue-SF scale and its internal consistency yields a Cronbachs α of 0.849.

**Procedure and Data Analysis**

The research data were collected from students at three high schools in Jakarta. Initially, a psychologist administered an IST, a creativity test (TKF), and a task-commitment measurement tool. After that, the research questionnaires were distributed. The data were analysed using the macro PROCESS by Hayes (2013) that installed in SPSS. Hayes showed that moderated hierarchical regression can be used to see the effects of predictor variables on outcome variables over other variables in a model. In other words, moderated hierarchical regression produces the effect of variable X on variable Y on the interaction or dependence on variable M.

**Results**

**Descriptive Statistics and Correlations**

Table 1 shows the statistic descriptions (means and standard deviations) and correlations of the tested variables.

The correlation test results show that PHS are positively related to CDSE (r = 0.60, r² = 0.36, p < 0.001). The value of the determinant coefficient (R²) was 0.36. This means that 36% of the variance in CDSE can be explained by PHS. In addition, linear equations show that the CDSE variable (Y) will change 0.64 for each unit of change occurring in the variable of PHS. For this reason, Hypothesis 1 is accepted.

Furthermore, the correlation test results show that emotional intelligence are positively related to CDSE (r = 0.36, r² = 0.10, p < 0.001). The value of the determinant coefficient (R²) was 0.10. This means that 10% of the variance of CDSE can be explained through emotional intelligence. Furthermore, CDSE (Y) changes 0.26 for each unit of change occurring in emotional intelligence. Based on the results of this test, Hypothesis 2 is accepted.

**Moderation Effect**

Next, the researchers tested the effects of moderation, related to Hypothesis 3. Prior to the testing of the moderation effect, mean centering was performed. This was done to ensure that the other variables in the sample mean test significance were meaningful and could be interpreted when estimating the conditional effects of the variables X and M (Hayes, 2013).

The results of using the macro PROCESS (Hayes, 2013) to see the effect of moderation (interaction effects) between PHS and emotional intelligence on CDSE are not significant in gifted adolescents (b₁ = −0.06, t = −0.67, p = 0.49). This indicates that there is no significant influence of emotional intelligence on the relationship between PHS and CDSE in gifted students. Therefore, Hypothesis 3 is rejected.

Table 1. Descriptive Statistics and Correlations Among CDSE, PHS and Emotional Intelligence

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
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<tbody>
<tr>
<td>1. CDSE</td>
<td>4.63</td>
<td>.50</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2. PHS</td>
<td>3.87</td>
<td>.47</td>
<td>.60**</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3. Emotional intelligence</td>
<td>3.83</td>
<td>.61</td>
<td>.36**</td>
<td>.32**</td>
<td>-</td>
</tr>
</tbody>
</table>

**p< 0.001**

Table 2. Output of the Moderation Effect Test

<table>
<thead>
<tr>
<th>Coeff.</th>
<th>SE</th>
<th>t</th>
<th>p</th>
</tr>
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<tr>
<td>Constant</td>
<td>0.00</td>
<td>0.03</td>
<td>0.25</td>
</tr>
<tr>
<td>PHS</td>
<td>b₁</td>
<td>0.59</td>
<td>0.07</td>
</tr>
<tr>
<td>Emotional intelligence</td>
<td>b₁</td>
<td>0.10</td>
<td>0.05</td>
</tr>
<tr>
<td>Int_1</td>
<td>b₁</td>
<td>−0.06</td>
<td>0.09</td>
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</table>
Discussion

This study was undertaken to see what role emotional intelligence plays in the relationship between PHS and CDSE in gifted high school students. First, the results showed a significant relationship between PHS and CDSE. This means that gifted students who could recognize, create, and use opportunities as advantages to their career were more confident in their ability to perform tasks related to career decisions. The results of this study support Kim et al.s (2014) finding that individuals with PHS are actively involved in career search activities and feel confident in their career decision making. Krumbolz et al. (2013) found that in career development, individuals are confident if they recognize opportunities that are relevant to their career. For gifted adolescents, the recognition of opportunities is a factor that is equally vital for development as other abilities in the decision-making process (Greene, 2003). In addition, Greene (2006) suggested that, because interests often change during adolescence, exploration and emphases on all possibilities are important in helping students understand what they can do to build their future.

Second, the study found that emotional intelligence significantly and positively correlated with CDSE for the participating gifted high school students. This result was in line with the previous research conducted by Di Fabio, Plazzeschi, Asulin-Peretz, and Gati (2013), which showed a positive correlation between emotional intelligence and a persons level of confidence in his or her ability in the career decision-making process. In addition, the perception of emotions explained 10% of the variation in the level of confidence for making career decisions. Research conducted by Brown, George-Curran, and Smith (2003) found also that individuals who have a good ability to perceive and display emotions that help them in thinking and acting tend to have a high level of confidence in their career decision-making tasks. In addition, the unique ability of gifted students need to combine emotions, intellect, and creativity enables them to achieve their goals (Mayer et al., 2001). Stewart (as cited in Greene, 2005) explained that in career selection, emotional factors characteristic of gifted students needed to be taken into account, so students might avoid indecision, anxiety and fear of failure. In line with that, Greene (2005) said that making decisions is one of the achievements in life related to individual emotional skill.

The results of the test of moderation effects showed no significant influence of emotional intelligence on the relationship between PHS and CDSE in gifted high school students. Although a separate analysis of each influence variable, PHS and emotional intelligence and CDSE showed significant results, the effects of interaction PHS and emotional intelligence showed otherwise. This means that the effects of PHS on the level of confidence in the career decision tasks does not depend on the perception of emotion. An increase in one unit of emotional intelligence has no significant effect on CDSE as a result of changes in PHS. This may be explained by the stronger and more significant influence of the predictor variables of PHS when they are found together. For example, Renzulli (2014) noted that a high level of creativity is a characteristic of giftedness. Osborn (as cited in Taylor, 1970) showed that creativity is closely related to open-mindedness, which is, according to Krumbolz et al. (1996), is what enables PHS. Specifically, creativity and open-mindedness may influence confidence levels in performing career-related tasks.

Limitations and Conclusion

There are limitations to this study. First, it was a cross-sectional study, where data retrieval was done at one time, not over an extended period. Therefore, causal effects cannot be drawn. The next research project will use a different design to clarify the relationship between the three variables. Second, the weakness of the significance of the effect of the moderation of emotional intelligence on the relationship between PHS and CDSE suggests that another factor not measured in this study may have influenced the relationship between PHS and CDSE. Last, the study was conducted at three schools in the Jakarta area. Research including a larger number of gifted adolescents in a wider range of areas may yield different findings. Moreover, to produce a deeper understanding of CDSE in gifted students, the next research should perform a comparison of gifted and non-gifted students.

Despite its limitations, the results of this study help predict CDSE for gifted high school students based on PHS and emotional intelligence. Its findings may be useful for teachers or individuals who want to increase the confidence of gifted students in their ability to perform tasks related to career decisions.

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Conflicts of Interest: There are no conflicts of interest to declare.

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