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To Link this Article: http://dx.doi.org/10.6007/IJARBSS/v14-i4/21304 DOI:10.6007/IJARBSS/v14-i4/21304
Published Date: 16 April 2024

Abstract
Based on the social cognitive career self-management model, the conceptual framework developed for this study aimed at contributing to the important, yet challenging phase of school-to-work transition for young adults who often encounter problems related to indecision and being unable to take affirmative actions required for career development. Predicated on empirical evidence, this study considered that the sub-traits of core self-evaluation (i.e., self-esteem, generalized self-efficacy, emotional stability, and locus of control) are predictors of career indecision. Additionally, career exploration was adopted as the mediator for explaining the mechanism between the independent and dependent variables, as person-environment fit has the potential to be a moderator for describing the inconsistency in the effects of career exploration on career indecision. This study was concluded with a focus on how the practical implications have the potency to facilitate successful school-to-work transition among young undergraduate students, in addition to seeing the positive impact which human resource development (HRD) provides towards effecting a successful transition.

Keywords: Core Self-Evaluation, Career Exploration, Person-Environment Fit, Career Indecision, School-To-Work Transition, Young Adults, Human Resource Development.

Introduction
Career indecision remains an important term and construct of contemporary career development theories, and it is usually considered as a normative developmental phase in the life of young adults' school-to-work transition (Masdonati et al., 2021; Udayar et al., 2020). This issue originated from students' career decision-making process, and then became
widely discussed through the life spectrum of young adults (Osipow, 1999; Xu & Bhang, 2019). The difficulty for young adults to make firm life-changing decisions increases the risk of disconnection between college and real-life events, in addition to having to encounter career-related distress, as this is perceived to hamper employability (Creed et al., 2021; Feldt et al., 2011; Lipshits-Brazier & Gati, 2019). According to Bullock-Yowell et al. (2014) and Chuang et al (2020), students oftentimes encounter challenges when making decisions about their potential or major career paths. An example is that even after young adults have transferred from school to workplace environment, some of them still struggle with their career indecision Sidiropoulou-Dimakakou et al (2012) which have a long-term impact on their personal welfare and career attainment (Gati et al., 2019; Sabates et al., 2017). Therefore, career decision-related challenges are crucial for those young adults who transfer from school to the labour market. As this is not only the stage where they have to learn how to develop and acquire adaptive skills and competencies in their career decision-making, but also a process of socialisation through which they have to fit into diverse work environments as different from their previous life experiences (Akkermans et al., 2023).

Scholars and practitioners of human resource development (HRD) have emphasised that career development which is a domain within the HRD discipline, is not solely focused on workforce in organisations, as it also extends to young adults in colleges and universities (Anjum, 2020; Shuck et al., 2018). With the expertise of HRD researchers and practitioners through learning and development, young undergraduate students develop the capabilities for self-assessment, gain knowledge that prepares them to explore their career options in the present and future, combined with having the insights on how to fit or adapt to the new workplace environment, and being mentally fit to make decisions regarding career prospects (Anjum, 2020; Wong et al., 2019). As it is through the intervention from HRD practitioners that these young minds are taught, coached, and mentored on studying the right subjects which aligns with their talents, and being able to make the right decisions on the future prospect of their careers (Shuck et al., 2018; Simarmata, 2018; Wong et al., 2019). Although young students across various disciplines may be engaged in studies from sciences, technical, medical, humanities, and social sciences, it is however important for them to be provided with basic knowledge of HRD as it relates to career development, both formally and informally (Anjum, 2020; Wong et al., 2019). This ensures that these undergraduate students develop the insights, viewpoints, along with the capabilities required to navigate a challenging future in decision-making about their choice of profession. According to Anjum (2020); Donald et al (2022); Wong et al (2019), HRD is equipped with the capabilities to enhance the scientific and practical knowledge of young undergraduate students, with the aim to develop and interconnect their competencies with real-life events, as this approach provides them with the skills required for making informed choices about their future careers. By integrating knowledge of HRD into the career prospects of young adults, their thought process is developed, as they thereon utilize their abilities for self-evaluation, while exploring the type of career fit for their personality and how to cope in such new environment. Additionally, existing literature suggests that core self-evaluation (CSE) is an important construct in dealing with development tasks during young adults’ transition from their university environment to workplace. Previous research has revealed that people with higher CSE often perform better in their jobs, and are more likely to encounter career success and work-school enrichment, when compared to those with lower CSE (Judge et al., 2009; McNall & Michel, 2017). Although CSE has been found to have a correlation with career satisfaction Holtschlag et al (2019), career orientations (Rodrigues et al., 2019), and career decision self-
efficacy (Jiang, 2015) as a unified construct, little knowledge has been revealed about how independent sub-traits of CSE is able to facilitate decision-making, which is in order to reduce the problems associated with young adults' inability to make decisions about their future career paths (Udayar et al., 2020). Career exploration has been found to possess the capabilities which are required for the effective management of career distress, as this is in the context of its interconnection to young adults’ indecision about their plans for future careers (Park et al., 2017; Praskova et al., 2015). Additionally, through career exploration with support from HRD, there is reduction in the difficulties encountered by young adults graduating from universities, which is relatable to inconsistency and scarcity of information available to them to make career decisions (Wong et al., 2019; Xu et al., 2014). However, studies have also maintained that these young adults become more indecisive when they were able to engage and report more career exploration activities (Downing & Nauta, 2010). As a result of the inconsistency in the outcome from existing literature, it is essential to identify under what condition career exploration is able to have an impact on career indecision (Jiang et al., 2019).

Therefore, to address these research gaps, a review of related literature was conducted in the form of a conceptual paper. According to Gilson and Goldberg (2015), a conceptual paper is explained as a short academic communication which focuses on discussing new insights in a chosen field, with the intention to advance the existing literature on a specific topic. This enabled the study to develop a conceptual framework, and thereby contribute to extant literature in two ways. The first is that this article proposed a mechanism about how core self-evaluation (CSE) significantly influences career indecision through career exploration. This was the first attempt made to develop relationships between these three variables. Precisely, the sub-traits of CSE was utilised separately, in preference to a common latent factor, with the intention to investigate possible differences on career indecision. Secondly, the study was able to propose person-environment fit (P-E fit) which may be able to moderate the relationship between career exploration and career indecision. It is important to state that P-E fit provides a view of the congruence between the students and the environment, as this plays a key role in career exploration and progression from school to work (Lent & Brown, 2013). Taking into consideration the inconsistent outcome between career exploration and career indecision, this conceptual paper provided an explanation on the conditions through which these students who are categorised as young adults could benefit from career exploration in prevailing over career indecision. Lastly, there is also the implications for HRD research and practice, which is due to the role which HRD scholars can play for a seamless transition from school to work among young undergraduate students, as the outcome from such research will provide guidance for HRD practitioners who will have a direct and practical impact on their decision-making process.

Theoretical Framework

The social cognitive career self-management (CSM) model is regarded as an extension of social cognitive career theory, as it focuses on a wide range of adaptive career behaviours that people employ to negotiate both routine tasks and unexpected challenges (such as career indecision) in their career development pathways (Lent & Brown, 2013). The CSM model (as shown in Figure 1) highlights the interplay among the social cognitive variables of self-efficacy, outcome expectations, and goals; contextual supports and barriers; person inputs, such as personality traits and abilities; and the learning experiences which informs self-efficacy and outcome expectations. Self-efficacy refers to the beliefs about an individual's
ability to handle developmental career tasks and challenges (Lent & Brown, 2013). In reference to outcome expectations, it refers to the anticipated (positive or negative) consequences which people encounter as a result of engaging in adaptive behaviours. In the context of goals, it is about the intentions of people, and the ability to performance specific adaptive career behaviours, such as career exploration and decision-making. Furthermore, when referring to self-efficacy and outcome expectations, it is hypothesised and contributes to peoples’ direct actions, in addition to those actions considered as indirect through their goals and objectives. In taking measures (e.g., career exploration), it is then hypothesised to increase the likelihood of favourable outcomes (e.g., career decisiveness). In contrast, when there is the inability to take actions, the possibility for a negative outcome (e.g., career indecision) is encountered. The objective of personality traits is designed to “influence career adaptation through the facilitation (or deterring) of behavioural performances, or by deploying the usage of emotional coping tendencies” (Lent & Brown, 2013, p. 563). For example, while it is affirmed that trait conscientiousness may be able to facilitate career exploration goals and actions, neuroticism/negative affectivity is considered as a irritant of decisional stress. Notwithstanding this, contextual factors is seen as not only being able to directly influence goals, along with actions and outcome, but also have the ability to moderate the relationships between these constructs.

In deploying the use of CSM model, it was within the control of this study to adopt three factors for explaining career indecision. These factors comprise personality, exploratory actions, in addition to contextual variables. Previous studies maintained that CSE is a trait-like variable (Holtschlag et al., 2019; Jiang, 2015). In this study’s context, CSE was conceptualised as one type of personality which possesses the capability to predict career indecision (e.g., career outcome). Based on Lent at al (2017) assertion, positive decisional outcomes (e.g., lessened career indecision) are more likely to originate from active engagement in career exploration and proactive traits. The primary attributes of career exploration which comprises self-exploration and environmental exploration, have been found to be closely linked to career indecision (Denault et al., 2019; Park et al., 2017; Storme & Celik, 2018). In addition to this, contextual variables which forms the career actions or aspirations of university students, have been employed in examining career indecision in the form of social support or obstacles (Brown et al., 2018; Lent et al., 2016). Despite its absence in the model, person–environment fit presents the congruence between person and environment, as studies have maintained its importance and a determinant in the career decision making process (Guan et al., 2021; Kou et al., 2023).

Core Self-Evaluation and Career Indecision
According to Judge et al. (2005), core self-evaluation (CSE) is acknowledged as a higher-order construct which consists of four core traits, which are: self-esteem, generalized self-efficacy, emotional stability (or low neuroticism), along with locus of control. It is about the “core belief system which individuals hold about themselves and how these principles impact their thought processes and worldviews on various issues (Judge et al., 1998, p. 168). For example, previous studies have maintained that young adults with positive CSE have the potential to achieve high performance in their academics, and also become more contented with their life's accomplishments (Debicki et al., 2016). In support of this declaration, Judge et al. (2005) asserted that the decisions made by this category of individuals are oftentimes aligned with their ethical values or moral standards, combined with their goals and ambitions, rather than being subjected to the personal feelings of others or being obligated as a result of having feelings of guilt or being attracted due to the expectancy of an external reward. Besides, while CSE has been identified to have a connection with career indecision Di Fabio et al (2012); Jaensch et al (2015), literature focused on careers have maintained that the core traits of individuals can manifest predictive power on career indecision (Koumoundourou et al., 2011).

In particular, it is possible for low self-esteem to limit an individual's opportunities in encountering positive career transition, which is because of the limitations brought on the person’s behaviour as a result of one’s perceived exploratory attitudes. However, individuals who possesses attributes on self-worth, are most likely found not to experience difficulties in their career transition, such as in decision making, feeling nervous about preferred job, in addition to uncertainties about their future careers (Lin et al., 2015; Niles et al., 2010). Additionally, past studies have revealed that generalized self-efficacy along with other category of self-efficacy have a positive relationship with career indecision (Choi et al., 2012; Udayar et al., 2020). This has also been found to be consistent with the philosophy and principles of CSM (Lent & Brown, 2013), such that persons who maintain higher level of self-efficacy are firmer on their decisions in reference to career pursuit. Further, neuroticism has been identified as of the components of the big five model which scholars in this domain have attributed to have a link with career indecision (Kelly & Shin, 2009; Lent et al., 2019). While empirical evidences have shown that neuroticism is positively related to career indecision (Di Fabio & Saklofske, 2014; Stauffer et al., 2013), there is also the declaration that neuroticism have made the highest contributions to career indecisions, when compared to conscientiousness, openness, extraversion and agreeableness (Smith et al., 2015). Likewise, locus of control is another variable which has been linked to career indecision among young adults’ university students (Taylor & Popma, 1990). In the opinion of Gati et al (2011), while students with a more internalized locus of control are associated with lower levels of career indecision, in addition to having a more externalized locus of control which is considerably associated with difficulties in making decisions over their career prospects (Gati et al., 2011). On account of this, studies revealed that college students with higher CSE may be more likely to experience less indecision when choosing their careers paths. As they have been found to be more inclined towards self-directedness, self-motivation, being committed, in addition to exhibiting self-confidence when making decisions on their preferred career paths (Hirschi, 2011; Neureiter & Traut-Mattausch, 2017). Hence, this study proposed that:

H1: Higher level of self-esteem (H1a), generalized self-efficacy (H1b), emotional stability or low neuroticism (H1c), and internal locus of control (H1d) will have the capability in predicting less career indecision.
Mediating Role of Career Exploration

In scientific and practical context, career exploration refers to the “deliberate or intentional attitude and insights which an individual requires to gain knowledge about available fitting occupations, jobs, and organisations which was previously unknown by the person” (Stumpf et al., 1983, p. 192). This helps in the accurate selection of career paths which enables the individual to progress in his or her chosen field. Previous studies have affirmed that core self-evaluation have a positive connection with career exploration. For example, Neureiter and Traut-Mattausch (2017) revealed in their study that students who possessed a higher level of core self-evaluation, often embark on more career exploration paths. As one aspect of core self-evaluation, self-esteem was identified as a predictor to career exploration (Cai et al., 2015). The study maintained that individuals who are self-motivated and view themselves as being capable and worthy for a chosen career, are more probable to set goals which are challenging, in addition to being able to achieve these objectives. Additionally, neuroticism is considered another aspect of core self-evaluation which has been revealed to negatively impact career exploration. According to Reed et al. (2004), people who possess the trait of neuroticism, are bound to encounter more negative emotions which precludes them from engaging in activities that enables them to gain information about their career pathways, such as behaviours and attitudes. In addition, as a core component of core self-evaluation, locus of control displayed a significant correlation with career exploration. In a study conducted using meta-analysis, Lee (2023) and colleagues discovered that persons who have the belief that they possess the abilities to be in control over whatever happens in their respective lives, are more likely to engage in practices which allows them to explore information related to their career paths. Furthermore, CSM model proposes the belief that individuals with higher self-efficacy are likely to deliberately and diligently undertake activities that support their career exploratory adventure (Lent & Brown, 2013). To acknowledge this assertion conducted in a longitudinal study, Perez-Lopez et al (2019) disclosed that university students who are equipped with the abilities and confidence to engage in activities that are entrepreneurial in nature, exhibited behaviours and attitudes which were affirmed as being exploratory. As a result of this, this study proposed that:

H2: Higher level of self-esteem (H2a), generalized self-efficacy (H2b), emotional stability or low neuroticism (H2c), together with internal locus of control (H2d), possesses the capabilities in predicting more career exploration.

Past studies which employed the use of primary data, revealed that there was a positive connection between career exploration and career indecision. For example, in establishing a career exploration programme, Baker (2002) proposed that possessing deep insight and knowledge on career exploration enables individuals to reduce the difficulties inherent in career indecision, as this is because the individuals are able to acquire the desired knowledge focused on self-development and career paths, and the several ways through which these two can be continuously enhanced. However, in conducting a study which had Eastern culture and among low-wage earning Chinese youths who were immigrants in the United States of America, it was revealed that behaviours which were identified as exploratory significantly reduced career indecision among the participants. In addition to this, Cheung and Jin (2016) in their quasi-experimental study, affirmed the positive impact which career exploration had on individuals’ ability to make decision about their career paths. Likewise, Denault et al. (2019); Park et al (2017) revealed that engaging in career exploration helps in the reduction of career indecisions, while also being able to effectively manage anxieties which emanates from indecisions. According to Lent and Brown (2013), CSM model postulates that individuals
who possesses traits considered to be adaptive, are more likely to encounter less problems with indecisions, which is because they are capable of engaging in activities which are exploratory. Therefore, this study proposed that:

H3: Career exploration will mediate the relationship between self-esteem (H2a), generalized self-efficacy (H3b), emotional stability or low neuroticism (H3c), internal locus of control (H3d), in addition to career indecision.

**Moderating Role of Person-Environment fit (P-E fit)**

Even though several studies affirmed the existence of a positive relationship between career exploration and career indecision, it is however revealed in other research that inconsistency exists between this interconnection. An example is disclosed in a study carried out by Downing and Nauta (2010), which declared that undergraduate students become more undecided or undetermined when they engage in exploration about their careers. The study further revealed that, this may be as a result of unanticipated outcome which originated from the evaluation of career exploration in the past three months. As this is considered a limited time for students to acquire the needed knowledge required for making decisions on their career pathways. Cheung and Arnold (2014) in their study among Chinese university students, posited that the impact which career exploration had on career indecision was less significant over a period of time. This is further replicated by Downing and Nauta (2010), which maintained in the school-to-work transition process, that students can sometimes require adequate time to enable them make informed choices about themselves and their proposed work environment. The similarities in the outcome of these studies may be as a result of failing to observe the contextual factors which need further examination (Jiang et. al., 2019). Consequently, this study was able to bring about a potential moderating role of P-E fit, as this is required for exploring under which conditions the effect of career exploration on career indecision can be reduced or made more visible.

In general, person environment fit focuses on the similarities between individuals and their environments (Van Vianen, 2018). According to Guan et al (2021) and Kristof-Brown et al. (2023), P-E fit focuses its attention on the interconnection between an individual’s traits or qualities, such as abilities, knowledge, values, principles, and disposition, including the elements of the surrounding environment, comprising of factors such as the climate of the organisation, job demands, in addition to behavioural norms in the society. In the context of organisation, P-E fit is largely categorised as supplementary or complementary fit, as this depends on the needs of the organisation and the ability for employees to meet the demands based on their skills and competencies (Muchinsky & Monahan, 1987). Edwards (2008) maintained that there are other types of fit which have been extensively researched by other scholars, such as person-vocation fit, person-organisation fit, and person-job fit. In reference to undergraduate students, P-E fit was reflected by person-major fit (i.e., the extent to which there is compatibility between the students and their chosen fields of study), person-university fit (i.e., how well the principles and morals of the students connects with those associated with the academic environment), and person-society fit (i.e., the level of consistency or conformity between the values of the students and those of the educational institution) (Jiang & Jiang, 2015). Several studies affirmed the critical role which P-E fit plays in the prediction of career and academic outcomes. Based on the claim by Wilkins and Tracey (2014), the compatibility which the individual has on the environment is closely connected with efficiency, satisfaction, determination, and tenacity.
There is the possibility for students to encounter several benefits and challenges during the process of engaging in career exploration. Career exploration could help to enhance individuals' knowledge and self-awareness on what is required for career prospects, becoming exposed to role models and experienced guardians, having the required knowledge about the workplace environment, as these could help to improve their skills in decision making, in addition to strengthening the individuals' capability to have a hold on their careers whenever there is the need to make decisions (Guan et al., 2018). However, in certain circumstances, career exploration does not automatically imply that an individual will be able to make career decisions which are considered to be sound. For example, there is the possibility for undergraduates to encounter or develop hostility when partaking in internships or other exploratory programmes being held in the university. According to Deng and Yao (2020); Jha (2023), when students encounter a discord or incompatibility with the environment, this may bring barrier to their motivations or reduce their self-worth, in addition to the proactive behaviours and attitudes which they may have developed overtime. On the other hand, as declared by Lent et al (2017); Pesch et al (2018), being compatible with the university’s internship programme help individuals to develop the feelings of being a part of the community, as this results in self-confidence which is needed to enhance students' problem-solving skillsets and behaviours. Furthermore, fit perception could also be considered as a type of support which positively impacts an individual's career decision making process (Lent & Brown, 2013). Therefore, this study was able to propose that:

**H4: P-E fit moderates the effect of career exploration on career indecision, such that the effect becomes stronger when students perceive a better P-E fit.**

**Conceptual Framework**

Based on the social cognitive career self-management model (Lent & Brown, 2013), this study suggests the four sub-dimensions of core self-evaluation as independent variables, which comprise self-esteem, generalized self-efficacy, emotional stability, along with locus of control. As displayed in Figure 2, career exploration is deemed to be a mediator used for explaining the significant influence of core self-evaluation on career indecision which is considered to be this study's dependent variable. In addition, there is the introduction of person-environment fit as a moderator for exploring under what circumstances career exploration would be able to decrease or improve career indecision during school-to-work transition among the students.

![Figure 2: Conceptual Framework](image-url)
Implications for HRD Research and Practice
Over the years, HRD researchers and professionals have focused too much on developing workforce and organisations, with a neglect on the careers of young undergraduate students who will fill-up the vacant space vacated by the present employees in the future. For example, Shahriar et al. (2023), Torraco and Lundgren (2020), and Wong et al. (2019) in their study which focused on career choices and decision making by undergraduate students, emphasised that the presence of HRD expertise was absent. The findings from the study revealed the importance for a collaboration between HRD scholars and practitioners, as young undergraduates must be educated and provided with practical knowledge on how to engage in decision making which positively impacts its transition from school to work. Additionally, to assist in the transition from school to work and be able to fit into the new workplace environment, it is the responsibility of HRD practitioners with support from its researchers, to add value to the discourse among university administrators, lecturers, and funders. Another area was the expertise of HRD is mandatory, is to create awareness among the university stakeholders, with the intention to influence policy making related to career development and transition among young university and college students, helping to prepare them for a productive future. Such policies can make career development as a subject to become mandatory among the students, with a major part being practical learning and decision making for career prospects and success. Example being hands on training through coaching and mentoring for developing cognitive skills like critical thinking and logical reasoning.

Conclusion
Employing the social cognitive career self-management model, this study was able to propose a conceptual framework for young adults who are in the transition phase of school-to-work. First, the four sub-traits of core self-evaluation were the study’s independent variables including self-esteem, generalized self-efficacy, emotion stability, and locus of control. As a matter of fact, these four independent elements showed the positive impact on how promotion of knowledge acquisition helps young undergraduate students to become effective in making decisions about their career pathways, as it is a prerequisite for successfully transitioning from the academic environment to the workplace. In addition, this study deployed career exploration as a mediator for explaining the negative relationship which was found to exist between core self-evaluation and career indecision. It is necessary to disclose that when young undergraduate students are able to acquire the needed information and knowledge required for their career exploration, they develop the capabilities and deep insights about themselves and their environment. Additionally, person-environment as a contextual factor was introduced, as it focused on exploring the conditions of the boundary which exist between career exploration and career indecision, resulting in the justification of the diverse results from previous studies.
This current framework made several theoretical contributions to the literature. Although previous studies revealed that core self-evaluation and career exploration can facilitate young undergraduates in making proactive and sound decisions about their careers, there is scarcity of studies which have considered combining these two constructs for prediction of career indecision. Further, the contribution of this study to existing literature focused on connecting
the sub-traits of core self-evaluation separately with career indecision, in addition to revealing the important role of career exploration as a mediator, as this brought about new and deep insights between these interconnections. Limitation in available literature disclosed that it remains blurred, how career exploration may reduce or strengthen the impact on career indecision. In addition, this study drew special attention to the uniqueness of the attribute of person-environment fit, as this is considered a supportive contextual factor for young undergraduates who engage in career exploratory activities that are deemed to be complex. From a pragmatic point of view, career practitioners can put into practice programmes which are focused on developing the knowledge and abilities of young undergraduates, as this enhances their core self-evaluation which enables them to seamlessly transit from school to work environment with less hassles. Interventions directed towards facilitating career exploration activities must therefore consider the compatibility which exists between students and their respective educational institutions, as this helps in the reduction of conflicts considered to be interpersonal in nature. For those categories of young undergraduates with less exposure and who are anticipating how the workplace environment looks like, the university and employers could collaborate and pay much attention to what type of workplace they desire. Through this approach which could also be in the form of internship programmes, a perfect match could be achieved, as these young undergraduates are made to prepare for a successful career in the future. This becomes a win-win situation for the students, universities, and employers, as the educational institutions become proud of their alumni who succeed in their careers for a fulfilled future, while the organisations also benefit as a result of employing the right skills and talents for specified roles. The role of Human Resource Development (HRD) is crucial and can therefore not be undermined. As the universities and organisations could revamp HRD programmes to be in tune with modern reality as it concerns young adults, or have to establish an HRD department in a case when there is none. Human resource development is not solely focused on improving the knowledge and competencies of the workforce in organisations, as it also prepares young adults for the future of the workplace (Rasdi et al., 2022). Such as developing their critical thinking skills and innate talents, as these are required to make informed choices in pursuit of successful careers in the present and future.

References


