

## Understanding Career Decision-Making: Influencing Factors and Application of Krumboltz's Social Learning Theory

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### Abstract

Krumboltz Social Learning Theory is a career counselling theory which believes learning experiences are influencing the career decision making process. This article is a systematic review study, which explores the influencing factors in people career choices, the application of Krumboltz Social Learning Theory in career counselling and the chance event and skills included in the extension of this theory. Electronic database was used to search related reading materials and a total of 10 journals were found. The influencing factors in career decision making process are genetic endowment and special abilities, environmental conditions and events, learning experiences and task approached skills. The findings of this review discuss Krumboltz's Social Learning Theory of career decision making presents a nuanced framework that acknowledges the multifaceted nature of career choices. It emphasizes the role of both inherent and environmental factors in shaping career decisions. The Krumboltz Social Learning Theory can be applied to the various cases for career counselling such as with gifted students, disabilities and nurses burn-out. The chance event gives significant value to the career development and Planned Happenstance Theory provide five skills (curiosity, persistence, flexibility, optimism and risk taking) to response to the event. The results of this review are helpful for counselors and other mental health professionals who interact with families and students. Therapists can use these findings to help their clients create therapy plans that take into account the significance of choosing a career path well.

**Keywords:** Social Learning Theory Krumboltz, Application, Chance Event, Influencing Factors.

### Introduction

Krumboltz Social Learning Theory have been derived from Bandura's 1969 social learning theory in 1976 (Patton & McMahon, 2006). The theory was first developed for career field in 1976 by John D. Krumboltz, with his colleagues Anita M Mitchell and G. Brian Jones in

Stanford University (Patton & McMahon, 2006). Through Bandura researched and studies, he believed that human personality and behaviour was grow by learning experiences, which individuals learns from their life observation, incidents also their life environment and been reinforced to their personality (Sharf, 2016; Manik et al., 2022). Bandura (1969) studies highlighted that human behaviour and personality was grow from three factors which are environment interactions, personal factors (such as memories, thought, beliefs, preferences and self-perception) and also actual behaviour (Sharf, 2016; Schunk & DiBenedetto, 2020). By implement the Bandura's theory to career field, Krumboltz highlighted the importance of observational learning and by doing in career decision making process (Sharf, 2016).

Hesketh and Round (1995) commented that this theory has expressed in details of the process and content of career decision making (Patton & McMahon, 2006; Lent & Brown, 2020). The differences between this Krumboltz Social Learning Theory with the other career counselling theories is, Krumboltz and his colleagues highlights the importance of behaviour (action) and cognitive (knowing or thinking) in career decisions making (Sharf, 2016; Chen & D'Cruz, 2023) and how individuals manage the unexpected issues which related with their career concerns (Walsh et al., 2013). The theory is emphasized the career decision making process was influences by individuals direct and indirect experiences on how they learn about their personality, preferences, learning process and also observations (Patton & McMahon, 2006). Then the decision making was made through their knowledge and skills that they have learned and believed (Patton & McMahon, 2006).

Furthermore, the theory also explains how individuals can change their job easily, learning centre selection, and other career issues that come from unplanned events (Sharf, 2016; Chen & Lappano, 2023). In summary, they have four basics factor that influences the individual career choices and events. The factors are genetic endowment and special abilities, environmental conditions and events, learning experiences and task approached skills (Krumboltz et al., 1976). Genetic influences is something that inherited such gender, abilities, physical appearances or other characteristics on how individuals reacts with music, artistic, athletics or other abilities (Sharf, 2016). Social learning theory teach individuals to focus on the learning, skills and abilities improvement and also emphasizing it career decision making process and procedure (Patton & McMahon, 2006; Huang et al., 2020).

The second factor is environmental conditions and event which refer to planned or unplanned event that will affect the decision of career choices (Patton & McMahon, 2006). Krumboltz on 1979 have listed 12 events that may be the factor for career choices and some of it are, number and nature of job opportunities, technological development, neighbourhood and community influences and also the educational system.

The third factor is learning experiences which divided in two types which are instrumental and associative (Patton & McMahon, 2006). Instrumental can be refer as direct experience which the individuals produce a positive response for their acts on the surrounding. For example an individual may think that he have sense of humour so the thought may act positively or negatively to that person personality (Patton & McMahon, 2006). Associative learning can be referring to what individual observe in their life environment (Krumboltz et al., 1976; Sosa, 2022). Meaning that, the individual may grow up with stereotype that said a fireman got less salary than others or the policeman environment full of bribery. It depends on how the individual response the stereotype, to take it as positively or negatively to the stereotype. This observational learning may be taking into account while making career decision. The last factor in selection of career choices is task approach skills which interact between three factors stated above.

Since the world have rapidly changes with the development of engineering, science and technology, Krumboltz and his friends has upgrade the Social Learning Theory and include the role of chance or happenstance in career development (Patton & McMahon, 2006). In 1999, Krumboltz and his friends expand the Krumboltz Social Learning Theory to Planned Happenstance Theory which include extensive discussion of the role of chance, or happenstance in career development. Later they revisited and expanded the theory as the Happenstance Learning Theory (2009) which includes most comprehensive framework explanation on how to manage a career in a volatile and unpredictable reality (Urbanaviciute et al., 2017; Nur'aini et al., 2020). Krumboltz and his friends emphasizing the practical application and skills in order to achieve client's goals and their own satisfying lives (Patton & McMahon, 2006). The Happenstance Learning Theory explain that career path cannot be predicted but it is draw by planned and unplanned events that commenced at the early of the age (Krumboltz, 2009; Bazos et al., 2020). The role of career counsellor through the Happenstance Learning Theory is to create awareness to individuals to appreciate the new opportunity which coming from unexpected event (Krumboltz, 2009). Besides, Happenstance Learning Theory technique been used to improve people cognitive, emotional and physical towards responding the chance event (Krumboltz, 2009).

### **Objectives**

The objectives of this review are

1. Identify the factors that influence career decision-making.
2. Explore the process and techniques used in applying Krumboltz's Social Learning Theory in career counseling.
3. Examine the role of chance events and skills included in the extensions of Krumboltz's Social Learning Theory.

Since this theory has been developed long time ago, there are upgraded versions of the theory and new elements included to support the theory. This review will discuss on the chance event and elements included in the new version of theory.

### **Methodology**

The systematic review was commenced by using a few key words which related with the objective of this study. A framework has been setup as a guideline to make sure the motive of this study can be accomplish. The framework helps reviewer in the selection of the literature which suitable with the motive of this study.

### **The Search Strategy**

The literatures were searched in November 2018 in SAGE Journals online by using keywords "Social Learning Theory Krumboltz", "planned happenstance" and "happenstance theory". The search of the literatures found in SAGE database was tabulated in Table 1. Adobe Acrobat Reader has been used to store the selected and identified journal. By referring to the Figure 2 below, reviewer has a clear view of finding related and suitable literature to support the motive of this study. The selected key words used in SAGE Journal online database and the database filtered the journal which related with the key words. There was only 374 literatures found and 51 from year 2013 until 2018 were chosen. The literatures chose by reading the title and abstract which related with the objective of the study.

**Inclusion and Exclusion Criteria**

Inclusion and exclusion criteria have been set as tabulated in Table 1 and Table 2. For inclusion criteria, the criteria should have:

1. Been written in English
2. The literature review must the result is either SLTKCDM influencing factors/ process and step for application in career counselling/ the SLTKCDM development of theory.

The exclusion criteria included is the type of literature which is the type of article and also subject area. The literatures was choose from five subject area which are psychology and counselling, education, sociology, special education and psychiatry and psychology.

Table 1

*Inclusion Criteria*

Inclusion Criteria Presented in Order	Particulars	Literature Identified	Remaining Literature
Key Terms	Krumboltz Social Learning Theory	374	374
Year	From Year 2013-2018	51	51

Table 2

*Exclusion Criteria*

Exclusion Criteria Presented in order	Particulars	Literature Identified	Remaining Literature
Inclusion Criteria			49
Article Type	Research Article	49	49
Subject Area	Psychology & Counseling	2	
	Education	3	
	Sociology	2	10
	Special Education	1	
	Psychiatry & Psychology	1	

**Results**

The summary of findings was tabulated in Table 3. It was included author, year of publication, title of journal, sample and findings. From the table 3, literature number 1,2, 3 and 4 the findings was about the influencing factors in career decision making which grounded by Krumboltz Social Learning Theory. For literature number 5, 6 and 7 the finding was about the process of career counselling by using Krumboltz Social Learning Theory. Moreover, the literature for number 8, 9 and 10 the finding was about the development of Krumboltz theory and new elements included in the theory.

Grounded by Social Learning Theory Krumboltz, the main and sub-influential components in career decision making process which founded and discussed in the selected literatures are genetic endowment and special abilities (gender, personal skills and personal

characteristics), environment and condition events (social support, work volition, family and school influences, career prospects, student fees, demography, employment opportunities, initial motivation and mentor support) , learning experience (self-learning from exhibition, mass media and individual beliefs) and task approach skills.

A lot of researches have been made for the application of Krumboltz Social Learning Theory in career counselling. Such as application for gifted student, students with disabilities, burnout nurses, university and high school students. The important notes in the literatures to be discuss by the reviewer.

Due to the development of culture, technology and even career choices, Krumboltz have upgrade his theory with Planned Happenstance Theory Mitchell (1999) and Happenstance Learning Theory in 2009. Chance event have been included to support the theory Planned Happenstance Theory provide five skills to response to the chance event which are curiosity, persistence, flexibility, optimism and risk taking. Studies show that this five skill significant in career decision making process and career maintenance. Besides, Happenstance Learning Theory also provides four ways for career counsellor in helping client for their career development.

## **Discussion**

### *Factors influencing in career decision making process*

Krumboltz Social Learning Theory have been developed to explain why individuals choose certain courses and jobs, why people change jobs or program study in their career path and also explain why individual do different work activities in their life (Noah, 2002). Theoretically, John D Krumboltz and his friends in 1976 have categorized four factors which will influence individual's career decision making process. The four influencing factor categories are genetic endowment and special abilities, environmental conditions and events, learning experiences and task approach skills.

#### *Genetic Endowment and Special Abilities*

Genetic endowments and special abilities can be described as element in the individuals that inherited and sometime could be a barrier for their career opportunity (Zunker, 2015; Buser et al., 2021). Research made for teacher education graduates what is the factor influence teacher education graduates choose teacher as a career (Rots et al.,2014). Research found that personal characteristics are an essential component of the social learning theory of career decision making (Rots et al., 2014; Wu et al., 2020). It includes age and gender whereas study found that female graduates were most likely preferred teacher as a profession with almost 79% of female students compared with male students with only 58%. It is in line with previous research made by Guarino et al (2006), which female is more interest in choosing teacher as their career. Therefore, the result may show that the personal characteristics may influence the career decision making process.

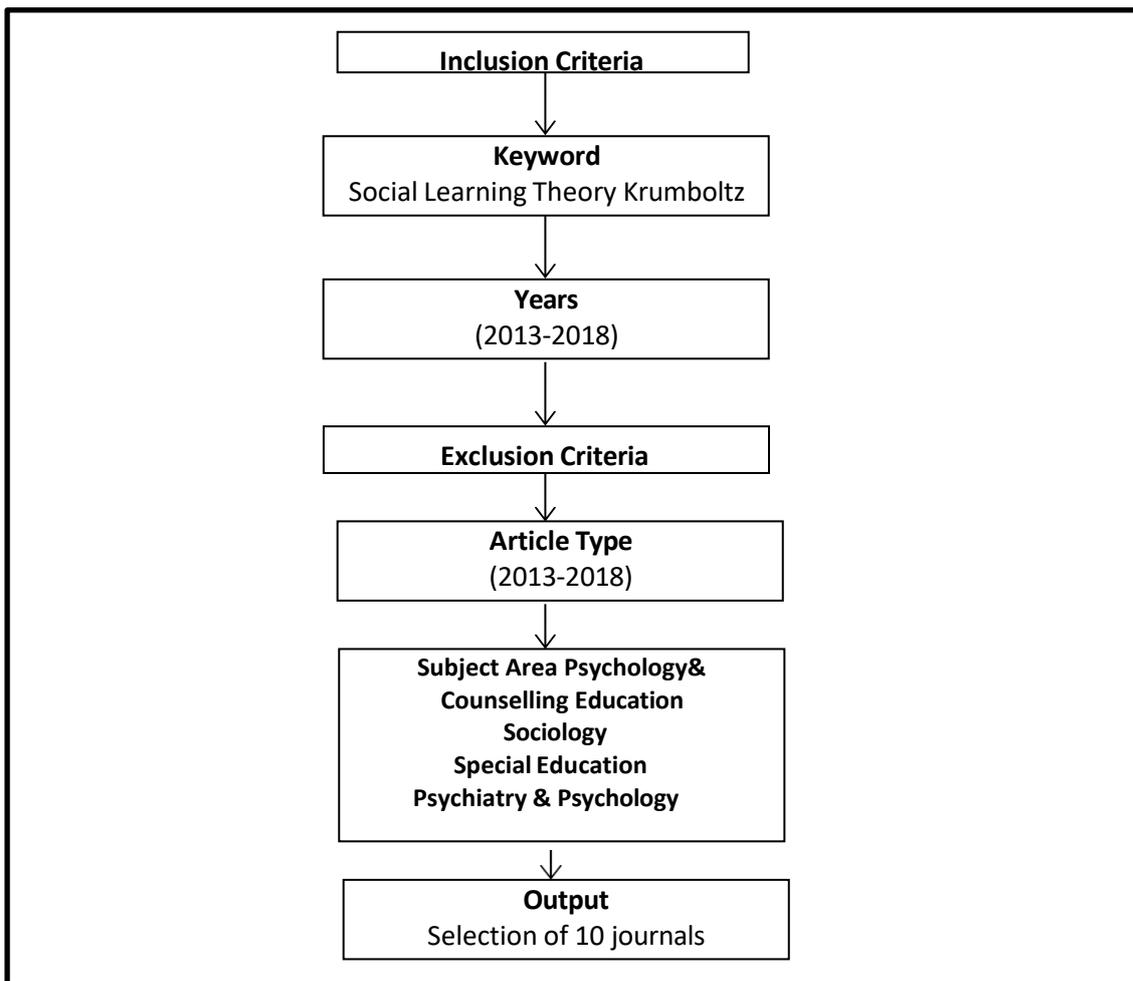


Figure 1: Flow chart of the systematic review.

**Table 3**  
*Summary of Literature Finding*

No	Author (year)	Title of the article	Country	Sample	Relevant Findings
1	Na-Rae Kim, Haram J. Kim and Ki-Hak Lee (2016)	Social Support and Occupational Engagement Among Korean Undergraduates: The Moderating and Mediating Effect of Work Volition	Korea	233 Korean undergraduates	Environmental social support and individual work volition are the influence factors for occupational engagement improvement. Krumboltz Social Learning Theory has included that personal and environment factors are the factor influences in career-related behaviours especially in occupational engagement.
2	Isabel Rots, Antonia Aelterman and Geert Devos (2014)	Teacher education graduates' choice (not) to enter the teaching Profession: does teacher education matter?	Belgium	217 students	Gender, teaching early motivation, mentor support, teacher education preparation, teacher efficacy, learner-oriented beliefs, performance in teacher education and employment opportunities are the factors of why education students chose to be a teacher upon graduation. Based on four influence factors of Social Learning Theory Krumboltz, the factors mentioned above is the factors which lead to choice of education student to become a teacher after graduation
3	Andrius Eidimtas, Palmira Juceviciene (2014)	Factors Influencing School-Leavers Decision to Enrol in Higher Education	Lithuania-		Factors school-leavers decision on their selection of courses in higher education are educational factors (in the family: style of education; at school: recommendations of teachers andb career counsellors), information factors (open days, exhibitions, the mass media), economic factors (study fees, career prospects), other factors (geographical location, ratings, Personal skills and demography).

4	H.V Mukesh, Abhishek S. Rao and Rajashekharan Pillai K. (2018)	Entrepreneurial Potential and Higher Education System in India	-	Social learning theory is a good approach for career decision-making. The factors such as influences from friends, family members and social elements give a positive outcome while making a decision on the career path. The factors present the significant result especially the individual readiness while pursuing study in higher education.
5	Charles P Chen and Joyce Wong (2013)	Career counselling for gifted students	Canada -	For gifted students, the career counselling theory which suitable to use as a guideline during the counselling sessions are Super's theory, Gottfredson's theory and Krumboltz's social learning theory.
6	Charles P. Chen and Janice Chan (2014)	Career guidance for learning-disabled youth	Canada -	Learning disabilities youth facing several issues in career choices. The issues are education performance and result, self and career awareness, capabilities in social skills and self-determination. Krumboltz social learning theory one of the approaches to overcome and facing the issues among disabilities youth.
7	Charles P Chen and Sarah Haller (2015)	The role of career counselling in supporting career well-being of nurses	Canada -	Factors influence nurses in burnout issues are job control and job demand, lack of social support at work, personal factors and job satisfactions and career well-being. Social Learning Theory Krumboltz as an approach to helps nurses from burnout issues.

8	Alexander Rice (2013)	Incorporation of Missouri Chance Into Career Development Theory and Research	Happenstance Learning Theory highlighted the chance event that need to be considered during career decision process.
9	Ieva Urbanaviciute, Antanas Kairys, Kristina Paradnike and Birute Pociute (2017)	Capturing Serendipity in n students Careers: An Evaluation of the Planned Happenstance Career Inventory With Lithuanian Undergraduates Lithuania 1,064	Chance event need to be defined and explored during career development process in career research and counselling. Chance event resulted five skill generated from the Planned Happenstance approach which are curiosity, persistence, flexibility, optimism, and risk taking
10	Boyoung Kim, So Rin Kim, Na Yeon Yang, Huk Yaung, Gyu Young Ha, Joon Young Yang, Bora Lee, and Sang Min Lee (2016)	Longitudinal Korea Relationships Between Planned Happenstance Skills and Life Adjustment and the Moderating Role of Career Barriers 307 Students	Five skills in Planned Happenstance theory were significantly connected with life adjustment. Individual who faces high career barriers adjust well their life when they applied planned happenstance skills.

*Environment Conditions and Events*

Environment conditions and events can be described as influence factor that out of individual’s control such as government policies, social support, work volition, family and school influences, career prospects, student fees, demography, employment opportunities, initial motivation and mentor support. Social support is one of the factors influencing in career decision making process. The social support come in positive ways to the individual’s from people who have a social relationship with them. It is including emotional support (respect, affection, trust and consideration), evaluative support (feedback from family and comparison), and instrumental support (study fees, time, and career prospect) (Kim et al., 2016). They acquire the supports from family, friends, lecturers, mentors and even their colleague. Studies found that students who received supports from family and friends will actively engage in career decision making process especially in career exploration and career preparation behavior (Kim et al., 2016; Dina, & Putra, 2022). Beside, Rots et al (2014) in their study also found that motivation received from faculty, coach and lecturer may influence them to choose teacher as their career for their future. Instrumental support explain the cost that individual’s need to pay for career decisions that they have made (Eidimtas & Juceviciene, 2014; Kundi et al., 2022).

The other subfactor found in the study is work volition. Work volition can be refer as powerlessness in achieve the goal of the career due to some limitations such as poverty, lack

of access, physical disabilities, immigration and also race (Kim et al., 2016). For example people who have high in work volition got no problems in deciding career choices which is suit with their values, interests and needs (Kim et al., 2016; Buhăescu-ciucă, 2023). They also even satisfied with their job and their life because of the freedom in career choices without any constraint faces.

### *Learning Experience*

Eidimtas and Juceviciene (2014) in their study explain information search as one of influencing factors in career decision making process. It can be divided into two types of information process, which is external and internal search. Internal search is a search where individuals get the information by retrieving from their long term memory (Eidimtas & Juceviciene, 2014). Study shows that some of the students have research on what he or she will be in the future. Therefore, learning by themselves by searching the career information may influence their career path. The career path may be changes based on the new information obtained from what they experienced for (Eidimtas & Juceviciene, 2014; Uy, 2020). The career decision making process would be easier process because the students have experience in information needed for their future (Eidimtas & Juceviciene, 2014). Compare with external information, if the person never experiences the career information searching before, individual may found longest times take to search the information because the field of the career information is big and distinguish the useful information (Eidimtas & Juceviciene, 2014). The career information searches are getting from mass media, exhibitions, career website, books, and career counselling, family, friends, relatives, public opinion leaders and also career or education open days (Eidimtas & Juceviciene, 2014; Saputi, & Purwanta, 2021). The experiences face by the students will influence the career decision making process and also the program study selection in career choices.

Rots et al (2014) in their study highlight on learning experienced received may influences the career decision making process. Through their study, the education program graduates face a lot difficulties, challenges, concerns and crises especially during their practical training (Rots et al., 2014; Alebous, 2021). They will experienced and learned a lot during practical training which one step closer to the career choices. Some of them face issues on the self reflection and self-regulated training that's called 'praxis shock' (Rots et al., 2014). 'Praxis shock' or reality shock is a term given to the experience of beginning teacher who is initially enter the field of teaching (Edwards & Nuttall, 2015). The reality shock may influence the new teacher on the feelings of belonging to the profession, capability to deliver the knowledge to the students effectively and the spirits of new teachers to overwhelm their conditions towards the reality shock issues (Edwards & Nuttall, 2015; Wiegerová, & Lukášová, 2021). If they can overcome and deal with the challenges in teacher profession they may continue their goal to become a teacher otherwise, they will find another career suitable with them.

### *Task Approach Skills*

Figure 2 shows the influencing factors for students in school to pursuing their study in higher education. The study shows that each of the factors played an important role in career decision making. The factors are educational factors (style of education among the family members and also recommendations from teachers or career counsellor), information factors (mass media, exhibitios), economic factors (study fees, career prospects) and other factors (geographical location of higher education, personal skills). Other factor in the research

explains on the personal skills which look into capability of the student on how they can deciding in selection of program study that may affect their career choices in the future. The interaction between each of these factors encompasses significant and future-oriented processes of career planning.

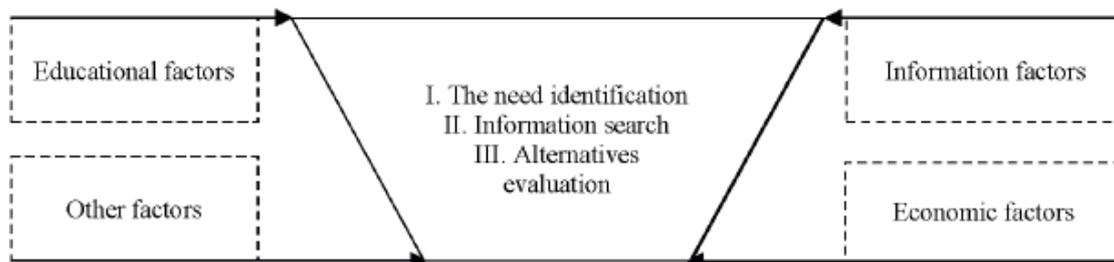


Figure 2 the Process of Study Choice

Each of occupations in this world has their own difficulties and challenges that everyone will faces it. Rots et al (2014); Achdiyah et al (2023) in their research mentioned the importance of social support in order to overcome challenges during learning process. The social support from mentor, lecturer, family and friends gives positive influence to the teachers graduate to chose teacher as their profession and even initial motivation which come before entering the higher education also played an important roles in career decision making process. Therefore, all of three above factors discussed must be interacted between one another to make career decision making process valued and the outcomes is positives to the individuals especially in cognitive, mental process and behavioral response. The task approach skills will represent four outcomes which are self-observation generalisation, world generalisation, task approach skills and action. The task approach skills outcome will see how individuals can cope with the environment, self-belief and predictions about their future (Patton & McMahon, 2006). The fourth outcome is action which includes the activities and planning (training, program, applying job) made by individuals to achieve their goal.

#### *Application of Krumboltz's Social Learning Theory*

Grounded by Social Learning Theory Krumboltz, studies explain the interventions and techniques apply in career counselling. This theory can be applied for various cases such as career counselling for gifted students, disabilities youth and also nurses who's having burn out issues. The case study in the literatures, explain the usage of Krumboltz Social Learning Theory in each of career stages which are career choices, career development and career maintenance. By using this theory in group counselling session, it will give positive outcomes to the client because of the peer support during the session (Chen et al., 2013). Through the session, clients can share any problems, thought and opinions and taking the other people experiences to developed their ideal self. The roles of peers also will beneficial the clients especially in strengthening their career self- efficacy and also job skills.

Counsellor can help the clients to make accurate self-observations, world generalizations, learn new task-approach skills and also action taken from the new development discussed during the session (Chen & Wong, 2013; Maree, 2020). Like gifted students, they are the individuals who have high competences and talents in their performance outcomes. People may stereotype them can do everything on they want to do without having any problems in it. The literature has explained that the gifted students always

think about what they are capable for without thinking about their values and interests. Therefore, the counsellor will help them to find their own interests and abilities in order to get satisfaction in their career choices (Chen & Wong, 2013). Besides, clients are encouraged to find the outside activities that related with their interests and values. This is an effort in order to get the enjoyment through other activities that can reduce the effects of burnout to their personality and it will drive individual's closers towards career well-being (Chen & Heller, 2014).

Besides, having a safe environment and using various cognitive restructuring interventions during the session will also help the gifted students on realizing and adopting the maladaptive generalizations in themselves and how to face with it (Chen & Wong, 2013; Thai et al., 2020). Chen and Heller (2014) in their literature also suggest using reframing technique to help distress nurse to deal with their career burn out and facing their issues without hesitation in order to create more ease and peace in their jobs. Most of the occupations having difference challenges and individuals need to aspects their interest towards the jobs will slowly change and dismissed. Therefore, individuals need to be more flexible to complete several tasks given without depending on job description which written in the contract. Chen and Chan (2014) through their literature for disabled-youth career counselling, they suggested counsellor to encourage disabled youth to acquire early work experiences in order to create learning opportunity. So, they can build up their positive generalizations and improve their job skills to achieve their goals and performance at work.

#### *Chance event in extended Social Learning Theory Krumboltz*

Chance events can be defined as the event that unpredictable and unplanned for the person of who experiences them (Rice, 2013). There is a lot of term used for concept of chance in career development such as happenstance, serendipity, career barrier, unexpected event and chance (Rice, 2013). The good qualities of being unpredictable and unplanned is the unique differences on how people counter the chance event in their life compared with other environmental influences which they have enough time to prepare for them (Rice, 2013). Bestworth and Hansen in 1996 have defined the chance event as the event that were not planned or predictable but had a significant influence to the career (Rice, 2013; Teigen, & Kanten, 2022) and may lead to the positive outcomes (Urbanaviciute et al., 2017). Mitchell et al., in 1999 have highlighted the two important concepts for the chance event. First the chance event cannot be detached from the process of career development (Urbanaviciute et al., 2017). Second, it is important for counsellor to define and explore the chance event so that it would become significant influences in part of career research and counselling (Urbanaviciute et al., 2017).

They have categorized 11 type of chance event (table 4) and some of it are negative chance event will may harm to the individual's who's pursuing the career and also positive chance event that helpful to individual's while choosing the suitable career for them (Rice, 2013). The objective of this theory is to help clients to understand and response easily to the chance events. Krumboltz and friends in 2009 through Happenstance Learning Theory have highlighted specifically how counsellor can encourage clients to response to the chance event. First is by help them to learn from previous experiences. Second is to give awareness to them by preparing themselves for the unplanned events. Third, counsellor can use reframing technique to make the unplanned event as advantages to the client's career development. Finally, counsellor have to remove and block the negative thought that are covering the clients mind and finally counsellor can encourage the clients to do something to

achieve more satisfying lives rather than been stressed in facing the chance events (Rice, 2013).

Mitchell and friends in 1999 through Planned Happenstance Theory have proposed five skills to encounter the chance event and exposed countless opportunity to the individuals in their career development. The five skills are curiosity, persistence, flexibility, optimism and risk taking (Urbanaviciute et al., 2017). Curiosity can be refer as the exploration of the new opportunities, persistence is the one's effort to response the chance event even though facing up with obstacles, flexibility relates to how individual can easily change the attitudes to suit the environment, optimism means looking the new opportunities as a potential and realistic for career growth and lastly risk taking means behaviourally and cognitively response to the opportunity even the outcomes are unclear (Urbanaviciute et al., 2017; Herman et al., 2021). From the literature, studies show that the five planned happenstance skills give a personal strength that affects to career development (Urbanaviciute et al., 2017), a positive behavioural changes while adapting the new work environment (Kim et al., 2016), career satisfaction (Kim et al., 2016), career and life adjustment (Kim et al., 2016), academic major satisfaction (Urbanaviciute et al., 2017) and positive career outcomes for those still learning in the academic institutions (Urbanaviciute et al., 2017).

Table 4

*Categories of Chance Event From Betsworth and Hansen (1996)*

Type of chance event	Description
Professional or personal connections	Relationships with employers, friends, professors, advisors, or colleagues produced information about jobs, informal recommendations to employers, invitations to join a specific program or position, and job offers
Unexpected advancement	The resignation, firing, or death of a previous worker and the subsequent selection or promotion of the participant into the vacated position
Right place/right time	Job opportunities arose at a time when participants were best able or prepared to take advantage of them
Influences of marriage and family	Events related to family. Commonly: (a) participants discussed the influence of their partners' careers on their own choices, including lifestyle, occupation, homemaking, and nonwork activities; and (b) participants discussed changes in their relationships that altered their career paths, such as the illness or death of a partner or divorce
Encouragement of others	Significant others provided encouragement for participants to acquire education and experience, set higher goals, or pursue a new field
Influence of previous work/volunteer experience	Past volunteer or work experiences allowed participants to develop talents and interests, gain necessary qualifications, or acquire experience in new areas of interest
Military experiences	Military service experiences influence participants' career paths
Temporary position became permanent	Participants' tenure in jobs that they initially viewed as short term, evolved into long-term tenure due to personal choice (position was interesting or challenging) or job change (position became permanent or full-time)
Obstacles in original career path	Obstacles (e.g., lack of jobs, financial strain, illness, discrimination) hindered participants from pursuing their original career goals
Influence of historical events	Participants' career development was influenced by historical events, such as the Great Depression and World War II
Unintended exposure to interest area	Events that reflect the unexpected manner by which participants become interested in their subsequent fields (e.g., "I happened to visit an animal hospital and became interested in veterinary medicine")

**Limitation**

In summary, the objective of the systematic review is to explore and understand the Krumboltz Social Learning Theory influences factor, application and how to response chance event with the extended theory. This systematic review is based on worldwide countries and not specifically focusing in Malaysia view. The research on Krumboltz Social Learning Theory in Malaysia career development is scarce. Besides, the systematic review also not really explore on the extension of Krumboltz Social Learning Theory which are Planned Happenstance Theory (1999) and Happenstance Learning Theory (2009). Based on reviewer readings and observations, the extension of the theory is more empirical and comprehensive for career counselling. More research need to be done to explore the both theories and how it significant to career counselling. Besides, the research also needs to be done in Malaysia populations. Reviewer sees and believes the potential of Social Learning Theory and its extended theory will beneficial and significant to the Malaysians career development.

**Conclusion**

Based on the three objectives discussed above, we can see a clear view what Krumboltz Social Learning Theory is all about. The systematic review discussed the concept of the theory, influencing factors in career development process and also the theory application in real life situation. Krumboltz Social Learning Theory have been discussed worldwide on their application may be used in various multicultural and each of career stages (career choice, career development and career maintenance)

**Declaration of Conflicting Interests**

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