



INFORMAL WORKPLACE LEARNING AND EMPLOYABILITY: THE  
MEDIATING ROLE OF COMPETENCY DEVELOPMENT AMONG FINANCIAL  
SECTOR EMPLOYEES IN BHUTAN.



MANJU SHREE PRADHAN

A Thesis Submitted to the Graduate School of Naresuan University  
in Partial Fulfillment of the Requirements  
for the Doctor of Philosophy in Business Administration

2022

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Thesis entitled "Informal workplace learning and Employability: The Mediating Role of Competency Development among Financial Sector Employees in Bhutan."

By Manju Shree pradhan

has been approved by the Graduate School as partial fulfillment of the requirements for the Doctor of Philosophy in Business Administration of Naresuan University

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### ABSTRACT

Banking institutions, which essentially control the financial sector in developing countries like Bhutan, face a dynamic and competitive environment due to rapid global connectivity. While technological innovations are creating more opportunities to deliver financial services, employees need to constantly learn and develop their skills to meet changing demands. Therefore, it is becoming increasingly important to address informal learning in the workplace when they do not have time to attend formal training programmes. The aim of the study is to examine the impact of Informal Workplace Learning on employability, taking into account the mediating role of Competency Development.

The study uses a quasi-explanatory sequential mixed method. The study surveyed five banks in Bhutan with 512 respondents and interviewed 10 sector heads using the semi-structured interview method to answer the research question and test the hypothesis. Structural equation modelling and thematic analysis were used to analyse the two types of data.

The analysis of the data showed that informal workplace learning has a statistically significant impact on employability ( $\beta=0.30$ ) and that Competency Development fully mediated this relationship ( $\beta=0.13$ ). However, learning goal

orientation and self-directed learning orientation did not influence the relationship between informal workplace learning and competency development. It can be concluded that employees in the Bhutanese banking sector practise informal workplace learning and that this contributes to the development of competencies, which in turn improves employability.



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# CHAPTER I

## INTRODUCTION

This chapter presents an overview of Informal Workplace Learning and its effect on Competency development with outcomes specifically referring to employability, via their competences. This chapter is set forth under the following headings:

1. Research Background
2. Statement of problems
3. Research Question
4. Research Objectives
5. Significance of the Study
6. Scope of the Study
7. Definition of Terms
8. Chapter Summary

### **Research Background**

The world we live in is characterized by constant change in virtually all areas. The phenomenon of superstructure organizations, global connectivity, and the computer-driven world has led to a change in careers and learning. New technologies, social media, the diffusion of sensors, communications, and processing power into everyday objects has led to creation of new forms of organization structures, increased global interaction, and increased demand in the ability to interact with data, multitask, and flexibility. As a result, professionals engaged in such work continuously confront these situations and therefore, require augmenting and extending their competencies. Consequently learning has become pervasive throughout the workplace (Boud, & Middleton, 2003; Eraut 2010)

These changes in work life present challenges to workers of all ages (Lemmetty, & Collin, 2020). This requires employees to be competent not just for providing a competitive edge to its organization but also to be prepared for changing

job requirements or employer (McClelland, 1973; Rowold, & Kauffeld, 2008). However, competence cannot be changed without the transformation of knowledge in an individual. According to several studies conducted over a decade, report that 80 – 90% of learning at work occurs informally (Hashim, 2008; Moore & Klein, 2019; Pb, 2019; Rowold, & Kauffeld, 2008; Sadeghi, 2019). Only 20% to 30% of what is learned in formal education is transferred to the workplace in a way that improves performance (Ley, Lindstaedt, & Albert, 2005).

The roots of informal learning extend from educational philosophers John Dewey, Kurt Lewin and Mary Parker Follett to theorists Malcolm Knowles, Wenger, and other subsequent researchers. This section explores the background of the relationship between informal workplace learning, competence development and employability.

Researchers and organizations have shown a growing interest in workplace learning and competence (Brandao, Borges-Andrade, Puente-Palacios, & Laros, 2012). Several studies have examined how workplace learning and development affect learner competencies and which methods are most prevalent and effective.

A well-known study in this area that has contributed to our body of knowledge about the importance of informal workplace learning for competence development comes from Lave, & Wenger (1991), who showed that learning is embedded in active participation in everyday work experiences in a variety of occupations. These studies have shown that formal learning is only a small part of workplace learning. Only 20 percent of learning comes from formal training and development programs.

Instead, employees learned by, networking, modeling, effective leadership and reflecting on their work environment (Lave, & Wenger, 1991; Watkins & Marsick, 1992). Further organizational work experience Boud (1993), was also identified as a base of Informal learning. Subsequently, self-directed learning Garrison (1997) was also identified as an informal learning technique. However, these studies do not demonstrate the development of competencies exclusively. Rather most of these studies refer competencies as a component of informal learning attribute and never exhibit the types of competencies developed because of informal learning. They simply refer it as generic knowledge, skill and attributes.

Nevertheless, there has been few studies that has identified the importance of informal learning in the development of competencies through learning methods such as; “cognitive learning strategies” , “heuristic rules” , learning to think and work, real work situations and planned on the process embedded in social contexts (Eraut, Alderton, Cole, & Senker, 2000). Most studies, such as those by Wenger (1998a), Watkins, & Marsick (1992) and M. Eraut (2004) argue that informal learning in the workplace is primarily through discussions and teamwork both inside and outside the organization. An important aspect in this context is the social relationship in the workplace for feedback and support.

Other work experiences have also been identified as a strong source of employee learning leading to competency development. This is because they provide opportunities to try out skills and behaviors that matter (Poell, Van Dam, & Van Den Berg, 2004). Similarly, Illeris (2004b) has also stated that competencies can be developed through the informal learning process, such as the acquisition of KSA’s (knowledge, skills, and attitudes). Feedback mechanism in a coaching process has also been identified as supporting self-directed learning and the development of competencies (Ley, Lindstaedt, & Albert, 2005).

The studies conducted in the early 20<sup>th</sup> century emphasized more on two learning strategies that can be categorized as cognitive and behavioral. The strategies such as reflection, critical thinking, and extrinsic reflection is referred as cognitive strategies and self-directed learning, learning from experience, networking, feedback and mentoring are referred as behavioral strategies (Brandão, Borges-Andrade, Puente-Palacios, & Laros, 2012). Academics of this era argue that the use of these strategies is positively associated with the acquisition of knowledge, skills, and attitudes. However, these studies have exclusively examined competencies, such as general competencies and domain-specific competencies. However, most of these studies focused only on the development of professional competencies (Boyatzis & Boyatzis, 2008). They only focus on the knowledge and skills required to perform a task. This gives rise to the need to study the holistic competencies.

The dynamics and flexibility of the labor market have brought employability to the forefront of career research (Blokker, Akkermans, Tims, Jansen, & Khapova, 2019). Employability means the continuous fulfillment, acquisition, and creation of

jobs through optimum use of one's competencies (Heijde & Van Der Heijden, 2006). One way to adapt a company's activities to the rapidly changing adversity of demand in the environment is to increase employee employability. This includes improving competencies (Maria & van der Heijden, 2001).

A renowned case study by Dale and Bell (1999) found that informal learning is part of everyday activities and that everyday activities support learning, leading to the development of skills and knowledge (competencies) and improved employability. Some of the recognized studies such as those by (Froehlich, Segers, Beusaert, & Kremer, 2019; Gerken, Beusaert, & Segers, 2015; Lecat, Beusaert, & Raemdonck, 2018; Liu, 2018; Van Der Heijden, Boon, Van der Klink, & Meijs, 2009) also state that employability is improved through informal learning. Informal learning, such as supervisor interaction, networking, and learning the value of work, showed a strong relationship with employability (Van Der Heijden et al., 2009).

Research conducted by Gerken et al. (2015) also showed that social informal learning is related to employability. Learning from others was found to enable workers to develop occupational expertise and to be able to anticipate, optimize, and respond (flexibility) to change in advance (D. Froehlich, Beusaert, & Segers, 2015; Dominik E Froehlich et al., 2019; Gerken et al., 2015).

However, most studies have only examined the social aspect of informal learning and its relationship to employability. This shows that there is a dearth of research in self-learning and learning through feedback and its relationship with employability. (B. Van Der Heijden et al., 2009; van der Rijt, van de Wiel, Van Den Bossche, Segers, & Gijsselaers, 2012). Second, the proposed study considers four employability competencies, namely professional expertise, personal flexibility, anticipation/optimization, and corporate sense (B. Van Der Heijden et al., 2009). Most of the studies conducted so far have often focused only on anticipation/optimization, occupational expertise, and personal flexibility (D. Froehlich, Beusaert, Segers, & Gerken, 2014; Gerken et al., 2015). This allows us to get an overall view of workers' competencies in relation to their employability.

While we have a solid theoretical basis for believing that informal learning affects employability, previous studies have not tested causal relationships. (Cortellazzo, Bonesso, Gerli, & Batista-Foguet, 2020; Dominik E Froehlich et al.,



2019). It is also suggested that the study be replicated in a setting characterized by different labor market conditions to assess the generalizability of the results in a different context (Cortellazzo et al., 2020).

Another important theme in this area is skills development and employability enhancement. These approaches are influential in this area because the central belief of current career theory is that employment security promises are being replaced by employability skills in the so-called "new careers" (De Vos, De Hauw, & Van der Heijden, 2011). In this regard, promoting employability of workers is seen as an outcome of skill development.

Although competence is a fuzzy and multifaceted concept, it has traditionally been understood as underlying characteristics of people that indicate patterns of behavior or thinking that can be generalized across a wide range of situations and endure over long periods of time (Klemp, 1980). It is derived from characteristics such as knowledge, skills, self-concept, and motives (McClelland, 1973). It is the ability to consistently produce the results (the valued outcomes of behavior) necessary for the most efficient and effective achievement of the larger organizational goals (Gilbert, 1996). This is evident through the behavior of individuals at work (Richard E. Boyatzis, & Boyatzis, 2006).

However, in most studies that link competencies to employability, it is conceptualized as competency development, which is synonymous to learning and development. Forrier, & Sels (2003), for example, refer to competency development as the activities undertaken by the organization and the employee to maintain or improve the employee's functional, learning, and career competencies. It involves an integrative approach of development activities involving both the organization and the employee (Heijde, & Van Der Heijden, 2006). Moreover, most studies have examined competencies and employability from an organizational perspective (De Vos et al., 2011; Serim, Demirbag, & Yozgat, 2014). Consequently, the literature lacks a deeper insight into the role of individuals in the process of competency development. Most studies have focused on employee learning and employability (Liu, 2018). Although organizations agree on the importance of employees' self-directed behaviors, there is a lack of in-depth analysis on whether competency development initiatives (informal learning) lead to improved competencies (Heijde, & Van Der Heijden, 2006).



Moreover, most of the studies conducted in this area have never examined competence as a mediating variable between informal workplace learning and employability. At most, the mediating role of competencies between human resource development activities and banking sector effectiveness has been studied (Otoo, 2019). Therefore, there is a lack of empirical data on the nature of competencies developed and their impact on the employability of financial institutions in Bhutan.

### **Informal Workplace Learning in Public Sectors**

Despite extensive theoretical consideration of the concept of workplace learning, scholars have noted a lack of empirical research to support theoretical assumptions, particularly in relation to the public sector with its highly educated and skilled workforce (Sadeghi, 2019; Visser & Van der Togt, 2016). Most of the academic literature and studies conducted in this area tend to over-rely on the private, health, and education sectors (Colognesi, Van Nieuwenhoven, & Beusaert, 2019).

However, private, and public organizations differ significantly along several dimensions. In contrast to the commercial sector, it is argued that employees in public sector organizations, particularly service sector organizations like the financial sector, often have considerable autonomy in making decisions about how to prioritize and organize their work. They often receive minimal feedback from supervisors and peers. In addition, they often find themselves in an increasingly stressful and highly political environment due to diminishing resources.

Thus, there is a lack of empirical research on competencies developed through informal means and employability of employees of financial sector in Bhutan. The financial sector is an increasingly important component of the global economy and Bhutan is no different from other countries. The rapid growth and development of the financial sector can be matched with effective and efficient human capital development. The financial sector in Bhutan is undergoing a transformation and is expected to efficiently fulfill the role of an intermediary of resources in the economy (Castellanos, & Sahoo, 2010). With the growing competition in the financial sector, the need to acquire new knowledge and keep up with the changing demand has become even more important.

The financial sector, especially the banking sector, has the largest number of employees compared to all other service sectors, so for this study we need to examine employees in the service sectors. Banking institutions, which essentially control the financial sector in developing countries like Bhutan, face a dynamic and competitive environment due to rapid global interconnectedness. Further technological innovations create more opportunities to deliver financial services, therefore employees must continuously learn and develop their competencies to meet changing demands (Castellanos, & Sahoo, 2010).

This was evident from the Covid 19 scenario in Bhutan where it was clear that employees in banks frequently encountered changes in the form of working from home and increased digitized transactions, which also led to a high volume of enquiry calls. As a result, banks had to create a new department called "Command Call Center" (Subba, 2020). Therefore, such sector becomes a perfect place to study Informal Workplace Learning where they do not have the time to attend formal training programs in such situations.

The country's skill base is extremely narrow, and only slightly more than half of the population can be considered educated. Bhutan relies heavily on foreign labor, not only in specialized fields but also for semi-skilled and unskilled jobs. Although the number of foreigners working in government service has declined over the years from 50 percent in 1980 to 11 percent in 1995, but they continue to account for about 40 percent of all private sector jobs and about 70 percent of all jobs in sectors such as mining and quarrying (NSB, 2017).

Many workers today do not have the opportunity to participate in formal training and rely mostly on informal learning opportunities in the workplace. These learning opportunities are usually embedded in their work and help maintain or improve their employability (Dominik E. Froehlich et al., 2019). In addition, the high cost of formal learning programmes is a concern for many organizations.

With this in mind, this study focused on the outcomes of employees' informal workplace learning. More specifically, human resource planners, planning officers, and researchers want to know if there is a relationship between informal workplace learning, competence development, and employability. In addition, this study seeks to

determine whether it is worthwhile to send employees to formal development programs.

### **Statement of Problems**

The need for adult vocational education or workplace learning has arisen due to rising costs and the unpredictable market. Whenever companies face budget constraints, training and development funds are the first to be withheld as a cost-cutting measure. Formal training comes at a huge cost, not only in terms of monetary value but also in terms of the time an individual must spend on learning away from work.

The scenario is no different in Bhutan. Annually, Nu 216.7 million is allocated for human resource development and management services and Nu 5 million for workshops and coaching for managers. However, now that the government is reprioritizing its planned projects, most of these activities have been canceled and the budget has been diverted to the possible savings pot (Kuensel, 2020). Moreover, most staff do not have full access to formal training programs.

Consequently, Bhutan relies heavily on expatriates. In 2001, an extensive survey of 100 private sector organizations was conducted by the Ministry of Trade & Industry (MOLHR, 2010). Although the survey is somewhat older, its findings are still relevant to the private and corporate sectors. The report also indicated that the financial services sector is likely to be liberalized soon and more domestic and international players will enter the market. Therefore, there is a strong need to develop professional manpower in this sector (MOLHR, 2010). Seven years after the identification of the need and requirements for skilled manpower, the survey of establishments still revealed that about half (49.7%) of the employers or establishments surveyed experienced difficulties in finding skilled manpower (NSB, 2017).

This indicated that despite several deliberations the country still has dearth of skills. Almost all the development policies and plans of Bhutan has identified immense need of competency development, yet none of the development plans have acknowledged the significance of Informal Workplace Learning at work in

developing competency (MOLHR, 2010). In fact, the concept of competency development and Informal Workplace Learning in Bhutan is at an infant stage.

Over the decades, there have been several studies that have examined the role of informal learning in competency development (Brandão et al., 2012; Crouse, Doyle, & Young, 2011; Haemer, Borges-Andrade, & Cassiano, 2017; Hashim, 2008; Nyhan, 1998; Paloniemi, & Hager, 2006; Pb, 2019; Rowold, & Kauffeld, 2008; Sadeghi, 2019; Takase et al., 2015; Yamazaki et al., 2018). However, previous studies have focused on the process of learning rather than what is learned (Dominik E. Froehlich et al., 2019; Gerken et al., 2015; B. Van Der Heijden et al., 2009). Moreover, most studies linking informal learning and employability largely focus only on social learning. Socially acquired knowledge may not always be accurate, which may lead to lower occupational competence. Therefore, the social approach to learning alone is not sufficient to measure functional or occupational competence (Drejer, 2000; Dominik E. Froehlich et al., 2019). Moreover, informal learning and competence development have rarely been studied directly.

However, although there are sound theoretical reasons to believe that informal learning affects employability, these studies are unable to test reverse causal relationships. Most research on informal and incidental learning is qualitative case studies that focus on the types and nature of informal and incidental learning (B. Van Der Heijden et al., 2009). Reverse causality is possible in that individuals with high employability skills are more likely to seek learning opportunities to remain employable in the long term (Dominik E. Froehlich et al., 2019). Therefore, structural equational modelling analysis will pave the way for future studies examining reverse causality.

Moreover, the (long-term) impact of informal learning on career and employability is not considered at all. Moreover, companies today cannot guarantee the career success of their employees through lifetime employment (Cortellazzo et al., 2020). Instead, workers must create their own career success by pursuing lifelong employability, i.e., the continuous fulfillment, appropriation, or creation of work through the optimal use of their competencies (Dominik E. Froehlich et al., 2019).

Further, there appears to be no clear research on the mediating role of competency development in the relationship between informal workplace learning and

employability. A review study conducted by Woldman, Runhaar, Wesselink, & Mulder (2014) examined 909 empirical research papers. They concluded that not a single study focused on both the antecedents and outcomes of competency development, with results specifically related to performances of employees via their competencies. In the absence of theoretical underpinning, there are hardly any empirical studies on competency development. At best there are case studies or hypotheses on developing competencies through organizational learning (Proff, 2005; Sadeghi, 2019). Further the most common method used in this type of research have been interview studies (Eraut 2010). Therefore, the current study employs a mixed method approach to gain valuable insights and validate the quantitative findings.

One of the strengths of this study is that it does more than just measure learning motivation, as opposed to Decius, Schaper, and Seifert (2019). Rather, this study aims to identify the relationship between learning patterns and self-reported competence development by analyzing the causal relationships between these two variables. This methodological idea adds to the literature in this context, as intention only measures awareness of the need for development and improvement in the workplace (Tannenbaum, Beard, McNall, and Salas, 2010). Learning, on the other hand, requires specific activities to build knowledge.

Finally, there is no prior studies pertaining to informal workplace learning and employability in Bhutanese context. Research in Bhutan has mostly been conducted in the field of competency mapping and formal training need assessments (Blackman, O'Flynn, & Mishra, 2010; Wangchuk & Wetprasit, 2019). Thus, indicating the requirement of such studies. Further, this study is essential for Bhutan, as the value of informal learning and competence development has yet to be fully realized and it also has great opportunities for developing policies in financial sectors.

There is enough claim in the literature to indicate the relation between informal learning and competence as well as several studies indicating employability to be influenced by competence. Studies also indicate an overarching relation between informal learning and employability. But all studied in isolation. However, this gap in particular has not been investigated clearly in the existing literature.

Because of this gap, a study is needed to develop a framework that focuses on the role of competence as a mediating variable in the relationship between informal workplace learning and employability in Bhutan's financial institutions. With the aim of holistic informal learning attributes and reverse causal analysis. Moreover, to the researcher's knowledge, this study is the first of its kind to employ an explanatory sequential mixed method.

### **Research Question**

The study intends to investigate the impact of Informal Workplace Learning, on employability with the mediating role of Competency Development. The research questions are as follows:

#### **Main question:**

Does Informal Workplace Learning Influence Self-Reported Competency Development and Employability among Financial Sector's Employees in Bhutan?

#### **Sub Questions:**

1. Does Informal Workplace Learning Influence Self-Reported Competency Development?
2. Does Self-Reported Competency Development Influence Employability?
3. Does Competency Development mediate the relationship between Informal Workplace Learning and Employability?
4. Which of the personal characteristics: Learning Goal Orientation and Self-Directed Learning Orientation moderate the relationship between informal workplace learning and Competency Development?
5. Are there any differences in employee's functional characteristics (Designation), age, gender and experience and their involvement in Informal Workplace Learning and competency development?

### **Research Objective**

#### **Main objective**

To examine the effect of Informal Workplace Learning on Self-Reported Competency Development and Employability of employees of Financial Institutions in Bhutan.



**Sub objectives:**

1. To examine the effect of employees' Informal Workplace Learning on Self-Reported Competency Development.
2. To examine the effect of Self-Reported Competency Development on Employability.
3. To identify the mediating role of Self-Reported Competency Development between Informal Workplace Learning and Employability.
4. To investigate the significance of personal characteristics: learning goal orientation, and self-directed learning orientation as moderators on relation between Informal Workplace Learning and competency development.
5. To identify the employee's functional characteristics (designation), age, gender, experience, and their nature of involvement in Informal Workplace Learning and competency development?
6. To develop a model of Employability enhancement using the competencies acquired from Informal Workplace Learning.

**Significance of the Study**

**1. For the financial institutions**

This study will help financial institutions understand the informal learning techniques of their employees and how they affect their competencies. It will also help employers minimize their training cost in terms of time and money. By not requiring employees to take time away from work, resources will be used for activities that are of more immediate importance to the individual organization. It also helps financial institutions better understand their employees' employability competence.

This helps with strategic workforce planning.

This will not only help with job design, but also with succession planning and internal job postings. The study will also help financial institutions adopt best practices by identifying effective informal learning techniques and better understanding the competencies of their employees. Finally, this study can be an interesting starting point for professionals who want to implement competency development policies in their organizations.



## **2. For the employees individually**

For employees this means no longer having to return to universities or institutes, as many of them are skeptical of "theoretical school knowledge" as opposed to the practical skills of their jobs. Moreover, education also means a decrease in income (Illeris, 2003). Moreover, this study will help them to shape their own career success by recognizing their employability. It will help workers to recognize their individual career potentials. Because nowadays, employability is the key factor for employees who need to protect their values in the modern career era characterized by a rapidly changing labor market, artificial intelligence and multitasking. Improving employability means self-development, flexibility and continuous development of competencies that make them less vulnerable in the complex labor market.

## **3. For the relevant Stakeholders**

The Ministry of Labor and Human Resource Management, which is also the planning and regulating body in enhancing synergy of HRD plans/program and developing critical skills/ capabilities of workforce in different economic sectors have identified the importance of developing skills and competencies through formal training programs (Policy & Planning Division, 2020). Owing to the ever-changing organizational function and the need to update and upgrade skills has become twice as much important. However, there is no formal research done in identifying alternatives to formal training programs. Thus, this study intends to inform both the regulatory authorities and policy developers about the alternative employee development options.

## **4. For the academics and readers**

This study aims to present the relationship between informal learning, competence, and employability with empirical evidence. Thus, scholars and readers can support their arguments with empirical evidence, theories, and frameworks. Because managers' strong interest in competency development has not been fully translated into academia, a gap has emerged between theory and practice (De Vos et al., 2011).

## **Scope of the Study**

In today's competitive world, financial service-based industries play a prominent role in the arena. Banking industry is one of the leading service-based industry and has a high rate of growth in all respects, it concentrates towards the development of the various stakeholders who is involved with them. However, the risks for the financial sector are on the increase in Bhutan (World Bank, 2019). There is a need to bolster prudential development strategy, which ultimately hinges on the development of human capital.

Therefore, this study will include all five commercial banks in the capital (Thimphu) of Bhutan including their branches. Namely, Bank of Bhutan, Bhutan National Bank, Druk Punjab National Bank, Tashi Bank, and Bhutan Development Bank Ltd. The study will include all employees of these financial institutions to examine the differences in informal workplace learning, competency development, and employability. All employees working on desk above 18 years with work experience of zero to 21 years. It excludes support staff such as security guards, cleaners, and janitors.

## **Definition of Terms**

### **Informal Workplace Learning**

Informal workplace learning (IWL) is extracurricular behaviors or activities to acquire knowledge and skills that take place outside of a formally established learning context. IWL is characterized as self-directed, it involves some action and doing and is not purely pedagogical, it does not take place in a formal learning environment, and one must have the intention to learn or improve. This means that it cannot be accidental. (Cerasoli et al., 2018).

### **Experience/ action**

Means that when an individual gain experience because of daily activities they perform at work (Tannenbaum et al., 2010).

### **Feedback**

Is the recognition that employees receive because of a work they have done, either by the result of work itself or by other individuals.

### **Reflection**

Means that employees think about how well they could perform by reflecting on their past experiences (Tannenbaum et al., 2010).

#### **Intent to learn**

When an individual is aware that they must learn and develop their knowledge (Tannenbaum et al., 2010).

#### **Competence**

Competence is a set of attributes, inclusive of KSA's (Knowledge, Skills, and Abilities) that can be measured which results in superior performance at work.

#### **Competency Development**

Competency Development is defined as development or beneficial change in the level of competencies of an individual (De Vos, De Hauw, & Willemse, 2015).

#### **Personal Competencies**

"Personal competencies are defined as human abilities that include the ability to learn, adapt to change, willingness to be creative, willingness to develop oneself, willingness to deal with stress, and the ability to take action and demonstrate self-confidence" (Naim, & Lenka, 2017).

#### **Professional Competencies**

Professional Competencies are defined as the KSAs an employee needs to do his or her job effectively. These competencies vary according to the professional role and vision of the organizations (Kuijpers, 2003).

#### **Social Competencies**

It is defined as the behavior that a person shows when interacting with another person (Schumaker and Hazel, 1984).

#### **Personal Characteristics**

Refers to skills, personal characteristics, and interests related to informal workplace learning.

#### **Learning Goal Orientation (LGO)**

It is described as a person's intention to participate in all activities that have the goal of developing. People with LGO often use their previous performance as a standard to measure their current performance (Choi, 2009).

#### **Self-Directed Learning Orientation (SDLO)**

Self-Directed Learning Orientation is described as a learning style in which one learns voluntarily and independently. Those who are self-directed learning oriented often recognize challenges and use them as opportunities to learn on their own (Raemdonck, Gijbels, & Van Groen, 2014).

### **Employability**

The ability that enables an individual to sustain in their jobs or help them find new jobs within or outside their organization is known as employability (B. I. Van der Heijden et al., 2018).

### **Occupational Expertise**

Refers to the specialization one needs in order to perform the job tasks, sometimes it is also referred as technical competencies.

### **Anticipation and optimization**

Means to prepare and adapt to future changes and strive for the best possible results personally and creatively.

### **Personal Flexibility**

Is defined as an individual's ability to adapt to any changes that occurs in the internal or external environment

### **Corporate Sense**

Corporate Sense is defined as identifying self with the goals of the organization and being able to share the responsibilities of the organization.

### **Financial Sector**

Financial sector are institutions that provide financial services to business and retail customers. This sector comprises of institutions such as banks, insurance companies, and investment companies. However, the banking sector is examined in this study. Bhutan's financial sector consists of five commercial banks and three non-banks, one pension fund, and two insurance companies.

## **Chapter Summary**

In summary, due to constant change in terms of global interconnectedness and the phenomenon of super structured organizations, change has become ubiquitous and professionals working in this field must constantly expand and update their

competencies to ensure their employability. Despite extensive theoretical consideration of the concept of workplace learning, scholars have noted a lack of empirical research to support theoretical assumptions, particularly in relation to the public sector with its highly educated and skilled workforce (Sadeghi, 2019; Visser, & Van der Togt, 2016).

Moreover, formal education comes at a huge cost, not only in terms of monetary value, but also in terms of the time individuals must spend learning alongside their work. The scenario is no different in Bhutan. Annually, Nu 216.7 million is allocated for human resource development and management services and Nu 5 million for workshops and coaching for managers. However, now that the government is reprioritizing its planned projects, most of these activities have been canceled and the budget has been diverted to the possible savings pot (Kuensel, 2020). In addition, most employees do not have full access to formal training programs. Therefore, the literature indicates that there is a link between informal learning and competence, and several studies indicate that employability is influenced by competence. Studies also indicate an overarching relationship between informal learning and employability. But all studies are isolated. However, the mediating role of competency development in particular has not been clearly elaborated in the existing literature.

Therefore, this study aims to examine the impact of informal learning in the workplace on employability by considering the mediating role of Competency Development. This study will help financial institutions to better understand the employability of their employees. The study will also help financial institutions adopt best practices by identifying effective informal learning techniques and better understanding the competencies of their employees. In addition, this study will inform regulators and policymakers about alternative workforce development options. Finally, it is intended to add to the extensive literature available to researchers and readers.



## CHAPTER II

### LITERATURE REVIEW

This chapter delves into the literature of the study and substantiates the development of hypotheses and the theoretical framework for the study. The chapter is presented in the following outline:

1. Theoretical Background
2. Hypothesis of the Study
3. Conceptual framework
4. Chapter Summary

#### **Theoretical Background**

A theory is a coherent set of constructs (or variables) formulated in terms of propositions or hypotheses that specify the relationship between variables (typically in terms of magnitude or direction) (John W Creswell, & Creswell, 2017).

This section explains the use of various theories used to explain the relationship between informal workplace learning, competency development, and employability. It also elaborates on, the use of social cognitive theory and Kund Illeri's theory of learning at workplace to explain the relationship between the three variables. Several other theories are also mentioned that are related to either informal learning, competency development, or employability.

#### **1. Social Cognitive Theory (SCT) (Albert Bandura 1960)**

Social cognitive theory (SCT) was originally developed as a social learning theory in the 1960s by Albert Bandura. It was later developed into SCT in 1986. Social learning theory explains that people learn through the social processes of observing, imitating, and modelling the behaviour of others. SCT, on the other hand, includes determinants of learning that were neglected in its predecessor theory: Cognitive elements important to the learning process, such as thoughts (e.g., anticipated outcome expectations) and feelings (e.g., fears), are also considered Bandura, Evans, & Huberman (1988).

SCT has four key concepts: Observational Learning (Modelling), Triadic Reciprocal Determinism, Self-Efficacy, and Learning Orientation. These aspects of social cognitive theory are particularly relevant to this study. They include: developing competencies through modelling mastery, strengthening people's beliefs in their abilities so that they make better use of their talents, and improving self-motivation through learning orientation systems that can be linked to improving employability (Bandura, 1988).

*Observational Learning (Modelling)*: social cognitive theory holds that people learn by observing the behavior of others (models). Modeling is widely used with good results to develop intellectual, social, and behavioral competencies (Bandura, 1988). The term modeling covers a wide range of psychological adaptation processes, including observational learning, imitation, and identification (M. E. Brown, Treviño, & Harrison, 2005). The method that produces the best results includes three main elements: first, the appropriate skills are modeled to teach the basic competencies. Second, participants are guided in their practice. Third, they are helped to apply their newly learned skills in work situations in a way that will lead to success.

In spite of the fact that Bandura has connected this concept in developing a formal training program, but at the same time he too states that individuals learn and perfect effective ways of behaving under life like conditions (Bandura, 1988) (Boud, & Middleton, 2003). Therefore, it can be actualized similarly in terms of informal learning conditions as well. This has been proved by several researches in informal learning literature.

Hashim (2008) in his empirical study found that learning from others lead to developing communication, managerial and professional competencies. Studies have shown that observational learning, particularly in the form of employee-led workplace learning has proved powerful in developing innovative work behaviour, which is also characterized as behavioral competencies (Cheetham, & Chivers, 2001; Middleton, Hall, & Raeside, 2019).

The second step which Bandura alludes to as applying the newly learned skills, through guided practice, has been researched colossally in terms of “informal feedback” driving to competence development and informal feedback driving to



employability (De Vos, De Hauw, & Van der Heijden, 2011; Farr, 1993; Dominik E Froehlich, Segers, Beusaert, & Kremer, 2019; Gerken, Beusaert, & Segers, 2015; Mulder, 2013; Takase, Yamamoto, Sato, Niitani, & Uemura, 2015; B. Van Der Heijden, Boon, Van der Klink, & Meijs, 2009). Further, Compeau and Higgins (1995) found behaviors modelling to be viable in creating competencies through advancement of self-efficacy. SCT assumes that the acquisition of knowledge and skills occurs through "active mastery experience," i.e., direct experience of skills or tasks, and "mastery modelling," i.e., observational learning from role models (Middleton et al., 2019).

*Social Learning Theory and Employability:* Applying the principles of Bandura's (1977) social learning approach to understanding career development, it is clear that career and occupational role models are an important factor in the career choice process. This theory states that an individual is likely to express interest in a particular occupation or career path if he or she has observed a model (a person from whom he or she learns through observation) who is successful or excels in his or her occupational field. The effects of observational learning either increase or decrease an individual's aspirations and expectations to enter a particular career field, as well as their assessment of their own ability (self-efficacy) to develop the competencies and perform the tasks required in their career or job.

*Triadic reciprocal determinism:* The interactions between social and cognitive factors of learning as determinants of behaviour are known as 'reciprocal determinism' (Bandura et al., 1988). It is a causal model called 'triadic reciprocal causality' that emphasizes the three groups of factors that interplay, interact, and influence each other. These are: 1) cognitive and other personal factors such as values, goals, and beliefs; 2) environmental factors; and 3) behavioral factors.

This triadic model of reciprocal determinism explains that behaviour is shaped and controlled either by environmental influences or by internal dispositions. Individuals have intrapersonal or innate characteristics such as biological strengths and weaknesses and values that influence behaviour (Bandura, 1989). Internal and external feedback from the environment in turn influence people's thoughts and feelings. Reciprocity occurs when someone takes an action and it has an effect on the environment (Bembenutty, White, & DiBenedetto, 2016). In this model of reciprocal

causation, behaviour, cognition, and other personal factors, as well as environmental influences, act as interacting determinants that influence each other in both directions (Bandura et al., 1988).

He notes that the different sources of influence are not of equal strength, nor do the reciprocal influences occur simultaneously (Bandura & Walters, 1977). This triadic model explains that individuals are not exclusively dependent on their environment, but are able to manipulate, react, and influence their environment. For example, in an empirical study of accounting firm, Kusaila (2019) found that informal learning is very important for those who are at the beginning of their careers to develop their competencies and that learning usually occurs through feedback and review processes.

Similarly, the concept of reciprocal determinism has led Compeau, & Higgins (1995) to develop a theory that considers the interactions between social and cognitive factors of learning as behavioral determinants specifically related to competence development. One of the major assumptions underlying social cognitive theory is that individuals are competent and active agents whose actions can influence their development, learning, and behaviour (Bandura, & Walters, 1977).

*Self-Efficacy*: Human competence requires not only skills but also a belief in one's ability to use those skills well (Bandura, 1988). This is referred to as self-efficacy, which is the personal belief that a task or goal can be successfully achieved within a given framework. SCT states that self-efficacy arises from mastery of experiences, vicarious experiences, social beliefs, somatic states, and emotional states. Self-efficacy is a concept in SCT that deserves special attention, particularly in relation to learning and skill development (Middleton et al., 2019).

Self-efficacy is not considered alone at SCT. Rather, its strength lies in highlighting the complex nature of learning processes in which self-efficacy is interwoven, the interrelationships of self-efficacy with cognitive, emotional, and environmental factors, and their ongoing influence on one another (Carillo, 2010). This self-belief contributes significantly to the employability of employees. People with the same skills may perform poorly, adequately, or exceptionally, depending on whether their self-beliefs of efficacy enhance or detract from their motivation and problem-solving efforts (Bandura, 1988). Therefore, it can be stated that employees'

beliefs about their competencies can have a profound effect on the career paths they take (Bandura, 1988).

This concept has been proven by various studies relating self-efficacy and informal learning such as Yoon, Han, Sung, and Cho (2018) who found that informal learning increases self-efficacy. Further studies based on university students employability, indicate that self-efficacy foster employability and informal learning specifically they found that problem based learning had a significant positive effect on students' self-efficacy and the development of employability (Yao-Ping, Chen, & Ho, 2018). Further self-efficacy has also proved to be a strong and positive antecedent of competence (Compeau, & Higgins, 1995; Shih, 2006).

*learning orientation:* Another concept that is important is learning orientation. Learning orientation is the mindset that motivates the development of self-confidence (rather than self-confidence as an outcome) based on existing skills, knowledge, and abilities. Those who exhibit a learning orientation actively seek challenges and learning opportunities to acquire new skills and knowledge (Bandura, & Walters, 1977). In this study, the concept of learning orientation helps us understand why people indulge in self-initiated informal learning, and it also helps us understand why some people develop high competencies and obtain better employment opportunities compared to others (Maurer, Wrenn, Pierce, Tross, & Collins, 2003; Raemdonck, Tillema, de Grip, Valcke, & Segers, 2012; van der Heijde, 2014). People with a learning orientation are more likely to develop their skills and abilities (Maurer et al., 2003). Because self-efficacy also plays a role, research has found that people who believe they can learn and develop are more likely to learn (Maurer et al., 2003).

SCT or SLT is a valuable theoretical framework to address informal learning, competency development, and employability (Bandura, 1988, 1989; Bembenuddy et al., 2016; Carillo, 2010; Compeau, & Higgins, 1995; Middleton et al., 2019; van der Heijde, 2014; Yao-Ping et al., 2018). In particular, social learning theory has been used extensively to examine organizational social practice and the creation of behavioral competence. The results also show that interactions and practices in a combination of multiple situations lead to the development of competencies (Lu, & Lee, 2016).

Bandura's Organizational Application of Social Learning Theory Bandura (1988) also shows that the stronger people's self-directed learning drives and competencies, the more career options they consider possible for themselves and the better they prepare themselves educationally for various occupational activities. Social learning theory is not only concerned with learning but attempts to describe how a set of social and personal competencies can develop from the social conditions in which learning occurs.

The application of social learning theory to this study using four key concepts can be succinctly explained as follows: The concept of observational learning states that individuals learn to develop intellectual, social, and behavioral skills by observing the behavior of others (Bandura, 1988). The concept of reciprocal determinism considers the interactions between social and cognitive factors of learning as determinants of behaviors specifically related to competence development (Compeau, & Higgins, 1995). However, the concept of self-efficacy is not considered alone in SCT. Rather, its strength lies in highlighting the complex nature of learning processes in which self-efficacy is interwoven. This self-belief plays a critical role in improving the employability of employees. People with the same abilities may perform poorly, adequately, or exceptionally, depending on whether their self-belief of efficacy enhances or detracts from their motivation and problem-solving efforts (Bandura, 1988). In addition, Bandura notes that workers' beliefs about their competencies can have a profound effect on the career paths they take (Bandura, 1988).

Finally, individuals who are learning-oriented are more likely to want to develop their skills and abilities (Maurer et al., 2003). Because self-efficacy is related to learning, individuals who believe they can learn and develop are more likely to be learning-oriented (Maurer et al., 2003). Therefore, this theory is applicable in the proposed study to determine the effects of informal learning, competence development, and employability.

## **2. Theory of learning at workplace and Competency Development**

To clarify workplace learning processes and outcomes, a comprehensive theoretical framework is needed to describe and understand workplace learning. Research that is both theoretically underpinned and practically relevant to the field of

work-based learning is quantitatively limited (Poell et al., 2004). Although various learning theories such as that of (Wenger, 1998b), which focuses only on the social aspect of learning, or that of self-directed learning by (Garrison, 1997), which focuses on the learner's self-direction, ignoring the environment in which he lives, it is not comprehensive. The synthesis between the social aspect of learning and the cognitive aspect is missing (Poortman, Illeris, & Nieuwenhuis, 2011).

Thus, Illeris (2003) believes that learning includes not only a social dimension, but also a cognitive and an emotional dimension. His theory builds on the basic constructivist approach originally developed by Piaget, expanded with relevant concepts from Wenger (1998a) and Mezirow (1991), and developed based on long-term learning research projects in adult and vocational education (Illeris, 2004a, 2004b).

The theory of workplace learning is developed by combining internal psychological and external interactional processes. When an individual links newly acquired knowledge to his or her experiences, it is an internal psychological process. Piaget and Cook (1952) also state that the outcome of what one learns always depends on what one has already learned. Learning involves three dimensions - the cognitive dimension of knowledge and skills, the emotional dimension of feelings and motivation, and the social dimension of communication and cooperation (Illeris, 2004b). This theory reflects to some extent the SCT of (Bandura, 1988).

However, some findings indicate that not all the learning dimensions are considered important equally. Mainwaring (2012) found that participants in her study expressed a positive value for each of the dimensions of learning. Perhaps, they expressed the highest value for content dimension of learning. This was followed by social dimension of learning and the participants expressed the lowest value for the emotional dimension of learning. Nevertheless, Illeris (2011) stresses the importance of emotional function in learning. He states that emotions can often distort or enhance the learning. This indicates that though people value the emotional dimension of learning the least. The fact that learning includes individual's attitudes (emotions, motivation, interest, presence of mind) to the intended learning cannot be denied (Illeris, 2011).



On the other hand, the external interaction process explains the social interaction between the learner and his learning environment. This process leads to impulses for the internal appropriation process, which takes place along the content-stimulating dimensions of learning. This study is concerned with both direct social interactions with work colleagues or customers and other stakeholders in other banks, as well as indirect interactions via social media. The influence of the social environment on informal learning has been demonstrated in several empirical studies. For example, Poortman et al. (2011) found that a high workload usually has a negative influence on learning and a pleasant social atmosphere usually has a positive influence.

On the flip side, Illeris' theory has also been used to examine formal training programs and their applicability. The results seem to show a discrepancy between the learning content and the motivation of the participants who took part in it. Another finding is that the interaction dimension in the learning program is downplayed, which also leads to poor learning outcomes (Nguyen, 2007). Thus, both cognitive and emotional functions and their interaction depend crucially on the interaction process between the learner and the social, cultural, and material environment. These two interaction processes can barely be planned or structured in advance. Therefore, they take place informally, as people learn from the experiences they have in their daily work (Watkins, & Marsick, 1992).

The theory also describes the development of functionality, sensitivity, and sociality—all of which together are indubitably the basic elements of what is called competence. Poortman et al. (2011), in their study *Apprenticeship: from three-dimensional learning theory to practice*, demonstrated the development of professional competence and general knowledge competence. Other studies also show that people who have a high incentive dimension (mental energy and motivational forces required for engagement in learning) tend to have higher competencies. This concept is described by Cheetham, & Chivers (2001) and they refer to it as meta-competencies. The interaction dimension also promotes the development of individuals' social competencies, which are the skills, abilities, and knowledge of individuals that are applied in various forms of social interaction (Illeris, 2003, 2004b, 2011; Nguyen, 2007; Poortman et al., 2011).



Perhaps Illeri's (2003) theory of workplace learning was also used to develop an understanding of 'learning related to occupational competence' and 'learning related to occupational adaptability'. This demonstrates the generalizability of the theory and its applicability to both formal and informal learning environments.

### **2.1 Theorizing Components and dimensions of a learning pattern**

This section contains an integrative literature review Torracco (2005) and presents it in two sections. The first section reviews various theories of informal learning and the second section provides an integrative review of empirical studies in the field of informal learning.

### **2.2 Definitions of Informal Workplace Learning (IWL)**

Although there is no universal definition of the concept of informal workplace learning, Jacobs, & Park's (2009) conceptualization is often cited, which speaks of "the numerous ways through which employees learn in organizations." This definition highlights the wide range of workplace learning patterns and suggests that workplace learning is a synthesis of different types. In this study, however, the researcher focuses exclusively on informal workplace learning. The study looks at workplace (informal) learning, defines it, and distinguishes it from formal workplace learning. When researchers used the term informal learning in the original studies, this study refers to it as IWL unless informal learning was examined in the context of the workplace.

According to Watkins, & Marsick (1992), IWL can be defined as a self-directed form of learning as opposed to formal learning-it occurs in less formal learning environments. IWL involves the pursuit of understanding, knowledge, or competence acquisition (Livingstone, 2001). It can take place in planned or unplanned ways, although the degree of planning and organization in terms of learning context and learning support is usually low. Moreover, it is often caused by work activities and personal interactions in which learning is not the primary goal (Kyndt, Dochy, & Nijs, 2009).

Dale, & Bell (1999) define informal learning as that form of learning that takes place in the work context, relates to an individual's performance in the performance of his or her job and/or employability, and is not formally organized by

the employer in a program or curriculum. It may or may not be recognized by the various stakeholders, and it may or may not be specifically encouraged.

According to Lohman (2005), informal learning is defined as learning activities initiated by workers in the workplace that require physical, cognitive, or emotional effort and lead to the development of expertise and skills.

It appears that the characteristics of IWL frequently cited in the literature are that informal learning is "integrated into daily routines," is "triggered by an internal or external impetus," is "not very conscious," is "incidental and influenced by chance," is "an inductive process of reflection and action," and is "associated with the learning of others" (Watkins, & Marsick, 1992).

However, even though IWL is not always conscious, awareness is necessary to distinguish informal learning from incidental learning (Watkins, & Marsick, 1992). Therefore, Cerasoli et al. (2018) define IWL as:

*...Informal learning behaviors (ILB) are non-curricular behaviors and activities that serve to acquire knowledge and skills and take place outside a formal learning context. Such activities are predominantly self-directed, intentional, and field-based. Informal learning behaviors are not curriculum-based, discrete, or linear.*

### **2.3 Dimensions of Informal Learning**

The IWL literature has several dimensions. Watkins and Marsick (1992), for example, also speak of incidental learning. They describe it as learning that occurs unintentionally as a result of another activity, whereas informal learning may be planned or unplanned, but the learner is usually aware that learning is occurring. This form of informal learning places emphasis on the intentions associated with learning (Watkins, Marsick, Wofford, & Ellinger, 2018). M. Eraut (2004). On the other hand, there is another type of learning known as "non-formal" learning. According to Michael Eraut, most of the non-formal learning can be explained by the difference in the level of learning intention. In addition, there is another phenomenon known as implicit and deliberative learning. Reber (1993) defined implicit learning as learning that occurs intentionally and explicit learning as learning that occurs

unintentionally and where the learner is often unaware that it is occurring. (M. R. Eraut, 2000).

Eraut introduces yet another category of learning that lies between implicit and conscious learning. This type of learning is called reactive learning. Learning that occurs in response to time, e.g., learning that occurs immediately. M. Eraut (2007) introduces the dimension of time as another factor in the literature on informal learning. He explains that it is called reactive learning when learning occurs in the midst of events without reflecting on what is learned. Deliberative learning, on the other hand, is planned within a specific time frame and tasks are designed so that learning can take place. Here he points out that we can learn from events or interactions, but the learning does not have to happen simultaneously.

Eraut's work is mainly concerned with the timing of learning, primarily discussing how time affects the retention of knowledge and memory. However, missing from his work is the impact of social approaches to learning. He uses the term "non-formal learning" as opposed to informal learning. This is because he argues that informal learning includes aspects such as the dress code, social difference and behaviours.

Hashim (2008) developed an approach to workplace learning based on the concept of self-directed learning activities. Hashim highlights three components: learning from others, self-taught learning, and workplace learning as useful elements for engagement. Although the model is learner-centered and includes important elements of IWL, it omits other components such as seeking feedback. In contrast, Crouse et al. (2011) conceptualizes informal workplace learning as learning through work and interaction with others. However, the model neglects the importance of self-directed learning and learning from feedback. (Kwon & Cho, 2017) use a three-factor model to conceptualize informal learning in the workplace. Namely: learning with others, self-experimentation, external scanning.

(Yamazaki, Toyama, & Putranto, 2018) on the other hand used Kolb(1984) experiential learning theory and conceptualize informal learning with; feeling, thinking, reflection and acting. But this model is largely concerned about learning from experience and it excludes, other learning component such as learning from other, learning from feedback and self-directed learning.

Similarly (Sadeghi, 2019) focuses only on two aspects of informal learning at work. That is self-learning and learning from informal guidance. Pb (2019) also highlighted the importance of learning through experience. Likewise, (Colognesi, Van Nieuwenhoven, & Beusaert, 2019) emphasizes the importance of social networking and feedback in continuous learning and development of employees.

However, these approaches discussed above misses the central component of informal learning at workplace. Which is according to Tannenbaum, Beard, McNall, and Salas (2010, p. 306) informal learning has to be learner centered, self-directed and the learner has to have an intent to learn and all these learning takes place outside a formal learning environment.

Based on this, the model proposed by Tannenbaum et al.,(2010) has been used for this study (Tannenbaum et al., 2010). This model consists of four components: experience/action, feedback, reflection, and intent to learn. The author concluded that all four components of informal learning must be included in order to measure complete learning process.

Based on an extensive literature review and the critical role of informal learning and employee development (Colognesi et al., 2019; Hashim, 2008; Kwon & Cho, 2017; Nyhan, 1998), this study decides to use the model of Informal Workplace Learning developed by (Decius et al., 2019). The model includes the four components of informal workplace learning: experiential learning, feedback, reflecting, and intent to learn. The four components are closely related and are related to each other. For example, people receive feedback from friends and acquaintances, and by reflecting on it, an intention to learn is formed, which leads to a learning experience (Decius et al., 2019). These four components are explained in more detail based on theories and empirical studies

#### **2.4 Informal Workplace Learning (IWL) in Banking Sectors**

Informal workplace learning is becoming increasingly vital in human resource development (HRD) practice and research as it calls forth to skills development and enhances employability. This change can be observed in many organizations, including Banking Sectors. Although the Banking Sector is highly formalized and standard work processes have to be followed. Evidence from the literature shows that employees in the Banking Sector who face complex work

situations or organizational changes engage more in informal learning (Choi, 2009; Siriphat & Wedchayanon, 2017).

For example, Mitchell, & Livingstone's (2002) empirical study suggests that employees who work in the Canadian Bank store continue to rely heavily on collective and individual informal learning practices to complete their daily work, adapt to the introduction of new processes and technologies, and manage stress Mitchell and Livingstone (2002). Furthermore, Siriphat, & Wedchayanon (2017) conducted a similar study in the Thai banking sector and confirmed that employees practice informal learning when faced with challenging situations that require high skill discretion, through social interaction with supervisors and work colleagues. Choi (2009) also found that most mid-level managers in the Korean banking sector engaged in informal learning. The consequences of informal learning were the accomplishment of work-related knowledge and skills and individual development. Similar results were also found in Austrian banks (D. Froehlich, Segers, & Van den Bossche, 2014).

## **2.5 Conceptualization of Informal Learning in Empirical Studies**

A review of the literature revealed that there are four main variables that define Informal Workplace Learning: Learning from Experience, learning from Feedback, learning from Reflection, and Intention to Learn. Informal behavior is non-curricular and highly experiential; it occurs in the workplace outside of formal learning contexts, through observing, asking questions, practicing, and so on (Cerasoli et al., 2018). In other words, informal learning is highly unstructured and does not have a set of skills that must be excelled. Rather, it is self-initiated, intrinsically driven, individually controlled, and focused on achieving goals that the learner sets for themselves. The individual variables of informal learning in the workplace are discussed with reference to empirical studies.

*Feedback:* Feedback is an imperative activity and source for learning (Dominik E. Froehlich, Beausaert, & Segers, 2017). (Colognesi et al., 2019; Lecat, Beausaert, & Raemdonck, 2018) found that exchange of feedback with colleagues and with the principal led to enhancing informal learning of newly qualified teachers and simultaneously feedback fostered teachers' learning and individual work behaviour. Dominik E. Froehlich et al. (2019) also confirm the importance of proactively seeking feedback as a trigger for social informal learning in their study of large Dutch and



German corporations. Liu's (2018) study of Chinese workers also found that supervisor feedback was positively associated with more frequent learning activities. Schuermann, & Beusaert's (2016) study states that supervisor oversight and feedback are important to ensure proper learning.

Furthermore, Takase et al. (2015) examined nurses' informal learning methods and concluded that most experienced nurses preferred learning through feedback. Similarly, Kyndt et al. (2009) examined learning conditions for non-formal and informal learning and what learning conditions staff felt were present and found that feedback was one of the most used methods of informal learning. Hoekstra, Brekelmans, Beijaard, & Korthagen (2009) found that peer feedback and reflective dialogues enhanced teacher learning. Doornbos, Simons, & Denessen's (2008) study of Dutch police also found that peer feedback was positively associated with more frequent learning. In addition, feedback from managers has been shown to lead to informal learning (M. Eraut, 2004).

*Experiential learning:* Experience is the foundation and catalyst for learning. The effects of prior experience influence all learning and learners actively construct their own experiences (Boud, 1993). This has been proven by several empirical research, such as, Pb (2019) study of managers states that density of work experiences were strong predictor of competence development. Liu (2018) study also indicates that practices like giving opportunities to make decisions on their jobs promoted employee learning and facilitated employability. Based on Kolb (1984) experiential learning Theory Yamazaki et al. (2018) studied informal learning styles among managers and concluded that managers preferred acting over thinking and reflecting. Yoon et al. (2018) also show that experiential learning in workplace influences employee engagement with the organization.

Correspondingly Haemer et al. (2017) also point out that experiential learning in the form of intrinsic and extrinsic reflection benefits various professions, ultimately leading to professional development. Consistently Kwon and Cho (2017) have exhibited self-experimentation to spur job involvement. Besides, Takase et al. (2015) demonstrates that nurses learning through practices and self-reflections were significantly correlated with competence development. Similarly Cunningham and Hillier (2013) closely conveys that, middle managers found job enlarging and job



enrichment to be useful informal learning activities when tied the learning to specific applications. Crouse, Doyle, and Young (2011) too center on learning by doing the job and conclude that learning by doing the job was the strongest facilitator of informal workplace learning. Brandão et al.'s (2012) study among bank managers shows that extrinsic and intrinsic reflection contribute most to competencies.

Likewise, Boud and Middleton (2003) also signifies specifically on learning from experience. Their research unfolds different patterns of learning from experience such as, Mastery of organizational Process, Negotiating the political, and dealing with the atypical. Paloniemi, & Hager (2006) also found that competence is developed mainly through workplace learning (e.g., problem solving) and the use of knowledge and skills acquired in other areas of life. Finally, real work situations have been shown to play an important role in informal learning and competence development compared to formal learning (Nyhan, 1998).

*Reflection:* Learning through reflection means looking back at one's practice, reflecting on unresolved issues identified during reflection, and giving oneself feedback that guides the individual's future behavior (M. Eraut, 2004). Reflection allows individuals to rebuild their experiences, analyze and make sense of them, and develop a very personal understanding of those experiences (Bulman et al., 2012; Knipfer et al., 2013). Such understanding helps individuals revise their frame of reference and change their own behavior to better cope with future events.

As a result, effective learning takes place. This is supported by several empirical studies, such as a study by Takase et al. (2015), which examined the relationship between workplace learning and self-reported competency development. They found that most workers with less than five years of work experience learned through reflection. Overall, learning through reflection was statistically significant. Similarly, Haemer et al. (2017) also found that people who work in teams tend to reflect more both intrinsically and extrinsically. However, it appears that workplace design also plays a large role in influencing intrinsic and extrinsic reflection.

After all, if you have frequent contact with your colleagues, you are likely to receive feedback, and this can contribute to intrinsic reflection. Here, one can relate to the feedback received on past performance. At the same time, the work environment also influences external reflection (Haemer et al., 2017). Also, in a study

conducted by Brandão et al. (2012) in Brazilian banks, extrinsic and intrinsic reflection had the greatest influence on the development of competencies amongst the financial managers.

*Intent to Learn:* learning intent is also a significant aspect of informal workplace learning. It can be classified according to the degree to which it is purely incidental (unintentional or accidental) or occurs through conscious deliberation (intentional). Clearly, learning can be implicit, incidental, or unconscious (Marsick & Volpe, 1999). However, Noe et al. (2010) argues for a definition of informal learning in organizations that includes conscious action and doing (i.e., learning is not passive, and it requires an action). This is consistent with other areas of organizational behavior; for example, most theories of motivation in the workplace highlights on conscious, goal-directed behavior to the exclusion of accidental or unconscious learning drives (Donovan, 2001). Thus, the difference between informal learning and incidental or implicit learning is the presence of learning intent, and conscious direction.

Thus, one can see that there are similarities to incidental/implicit learning in that both occur in organizations and are not formally controlled. However, incidental, unconscious, implicit, and accidental learning lacks the critical, conscious, and purposeful nature of informal learning behaviors.

Learning intention can be defined as the realization to develop and improve one's KSA's (Tannenbaum et al., 2010). Learning intention has been distinguished between intrinsic learning intention and extrinsic learning intention (e.g., studies have shown that both intrinsic and extrinsic intent positively affect job performance (Cerasoli, Nicklin, & Ford, 2014). Though these two forms of learning intent go together, however they should be studied and measures separately as they have different effects on competency development.

This difference is seen in terms of functionalization. When performance is measured using qualitative factors, there are stronger correlations with the intrinsic intent; and when performance is measured quantitatively, the extrinsic component contributes more (Cerasoli et al., 2014). In a study conducted by Yoo, Han, and Huang (2012) they found a strong relationship between intrinsic intent and e-learning. However Extrinsic intent was not related to use e-learning. Similarly,

Amabile, Hill, Hennessey, & Tighe (1994) found that workers are less motivated to achieve higher salaries and recognition in their careers. Intrinsic intention, on the other hand, could lead to better persistence, performance, and satisfaction in a variety of tasks in different domains than extrinsic intention.

## **2.6 Framework of Inform Workplace Learning (IWL)**

There are few frameworks that exist in literature that address informal workplace learning. This section presents six components that at least partially address IWL's definitional criteria.

Bell, & Kozlowski's (2008) active learning model includes the three main components of learning: Exploratory learning, error encouragement learning and emotional control. This means the learning takes place through exploration and experimentation, by making mistakes and by being able to control their emotions (Decius et al., 2019). Although the model is learner-centered and includes important elements of IWL it lacks the important component of IWL definition that is feedback and learning intention that are part of IWL definitions (Cerasoli et al., 2018; Watkins, & Marsick, 1992).

Hashim (2008) postulates a way to informal workplace learning based on the idea of self-directed learning activities. Hashim highlights three components: learning from others, self-taught learning and learning on the job as conducive elements for engagement. The omits components such as soliciting feedback, which is an important aspect of IWL despite being a self-initiated learning model (Watkins, & Marsick, 1992).

Similarly, Noe, Tews, and Marand (2013) focuses on three aspects of informal learning at work. That is meaningfulness, safety, and availability. This approach also ignores the reflection and the feedback approach which is a must to measure IWL according to the definition of Cerasoli et al. (2018) and (Watkins, & Marsick, 1992)

Kwon, & Cho (2017) used a three-factor model to conceptualize IWL. Specifically, learning from others, self-experimentation, external scanning. However, this model also ignores important aspects of IWL. Learning from others emphasizes seeking feedback, learning intention (self-experimentation), and the

reflection aspect. These approaches to IWL have been shown to be important (Marsick, & Volpe, 1999).

Finally, the Octagon model developed by Tannenbaum et al., (2010), modified by Decius et al., (2019) is used for this study because this model states that learning does not have a fixed process and the learning cycle can start and end at any point. Further the model assumes that all the learning components are interrelated, and it complements each other. The components of IWL includes Experience/action, feedback, reflection, and intent to learn.

This model is different to the approaches of Bell, & Kozlowski (2008), Hashim (2008), Sadeghi (2019), and (Kwon, & Cho, 2017), however it is consistent with the definition of (Cerasoli et al., 2018). Moreover, due to its dynamic nature, it is the only approach amongst the three approaches that considers the characteristics of IWL characterized by an internal or external jerk, as well as randomness and influence by chance (Watkins, & Marsick, 1992).

The dynamic model of Tannenbaum et al. (2010) was further modified by (Decius, Schaper, & Seifert, 2019). They differentiated the model by dividing the four components of the model into two factors. The Octagon model of (Decius et al., 2019) is adopted in this study as it follows the conceptual arguments offered by the workplace learning literature and provides a clear conceptualization of the construct. The section below explains the eight components of the model in detail.

*Experiencing/action* means that the worker takes an action in relation to a task at work and thereby has a (new) experience at work (Tannenbaum et al., 2010). Decius et al. (2019) divide experience/action into the two factors of trying out and applying one's own ideas and model learning. This idea is based on the classification of informal learning techniques identified by (Noe et al., 2013): Learning from self, learning from others.

Trying and applying one's idea is called learning by doing, which is based on learning from oneself. Model learning, in the sense of Bandura's (1986) social cognitive theory, on the other hand, is described as learning from others by observing their behavior and adapting the observations to one's own behavior. Model learning is also mentioned by Lohman (2005) as an informal source of learning.

However, Decius et al. (2019) do not include "the use of manuals, non-interpersonal sources such as reading journals or handbooks, and surfing the Internet," which is consistent with Eraut (2011). In this study, however, this is considered under the construct of trying out and applying one's idea.

*Feedback*: is the recognition the employee receives because of a previous performance, either from the task itself or from others. Getting feedback goes parallel with talking to others and working with others. This type of information exchange with colleagues and supervisors has been identified as informal learning activities by (Colognesi, Van Nieuwenhoven, & Beusaert, 2019; Lohman, 2005). Decius et al. (2019) categorized feedback into direct feedback and vicarious feedback. Direct feedback can be directly related to the employee's work performance, or it can be vicarious, such as when more experienced employees report critical work processes and the results of their past actions. Thus, they divide feedback into direct feedback and vicarious feedback. Decius et al. (2019) elucidated the feedback as a proactive seeking behavior that the individual himself seeks. In this way, they deliberately exclude passive feedback that, for example, a supervisor expresses without being asked about an individual's job performance, since the employee cannot influence this - although this can also be a learning stimulus (Decius et al., 2019).

*Reflection* means that the employees think about their past performance and think about how well they could have done it (Tannenbaum et al., 2010). Lohman (2005) and Kolb (1984) consider reflection as an important action in informal learning activity. Decius et al. (2019) use Schon's (1983) idea, cited in (Decius et al., 2019), and divide reflection into: anticipatory and subsequent reflection. Anticipatory reflection in this model is, explained as, anticipating new obstacles in performing a task to adjust to dynamic work environment. Whereas subsequent reflection refers to reflecting after a task is performed.

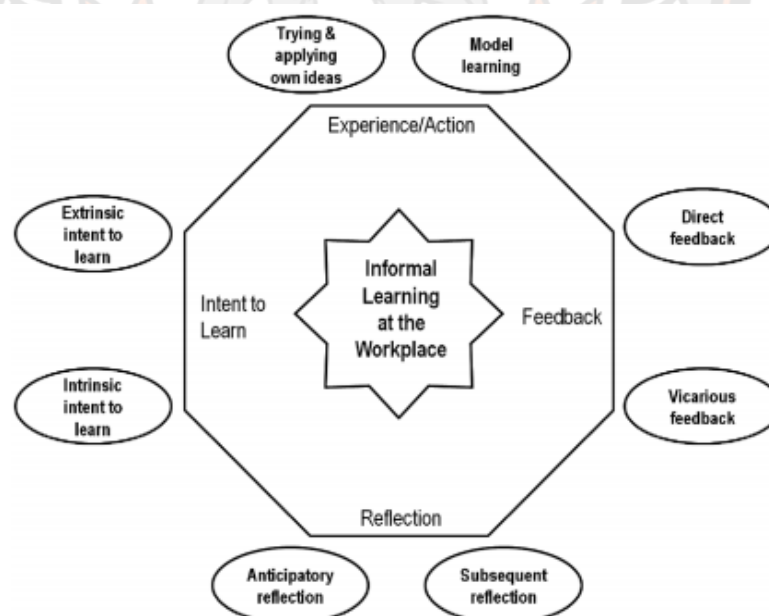
*Intent to Learn* is described as the consciousness needed to develop and improve in the workplace and to acquire competencies related to work (Tannenbaum et al., 2010). Decius et al. (2019), following self-determination theory, distinguished learning intention into intrinsic learning intention and extrinsic learning intention (Decius et al., 2019). Research show that intrinsic and extrinsic intent



contribute significantly in terms of improving work performance (Cerasoli et al., 2018). The two forms of intent to learn are considered separately by Decius et al. (2019) because their influence on performance differ.

In informal learning context, the model also assumes that these two components are different and do not necessarily go along. An employee may have a strong interest in his or her personal growth within the context of the work assignment without seeking a higher position in the organization - just as another employee may advance his or her own career ambitions without an interest in personal growth. The model assumes that it is important to distinguish between intrinsic and extrinsic motives to understand informal workplace learning better (Decius et al., 2019).

The holistic octagon model of informal workplace learning by Decius et al. (2019) (see Figure 1), therefore, consists of these eight factors: Trying & applying own ideas, Model learning, Direct feedback, Vicarious feedback, Anticipatory reflection, Subsequent reflection, Extrinsic intent to learn, and Intrinsic intent to learn.



**Figure 1 Octagon model of Informal workplace learning (IWL)**

**Source:** Decius et al., 2019



### **3. Competencies**

Several researchers refer the word competence as fuzzy concept. Competence and Competency have often been used interchangeably. Cheetham refer to the conceptualization of competence and competency as a ‘thorny issue (Cheetham, 2000). The dictionary defines the word "competence" as the state of being reasonably adequate or suitable. Attempting to draw a fine line between words such as capability, capability, capacity, competence, competence/ competencies is indeed more tedious and perplexing (Chouhan, & Srivastava, 2014)

Most often, however, competencies are often equated with competency development. Competencies are a set of attributes that enable better performance. Competency development, on the other hand, refers to the activities undertaken by the organization and the employee to maintain or improve the employee's functional, learning, and career competencies (Forrier, & Sels, 2003). However, competency development is also defined as a positive change or enhancement in the level of individual competencies (De Vos et al., 2015). hence, it can be said that it is an individual learning process through which one’s competencies are developed (Kock, Gill, & Ellstroem, 2008).

#### **3.1 Definitions of competence**

It was noted that competencies should be understood as a set of attributes that enable better performance rather than a set of behaviors, and that development should target the underlying competencies rather than the behavioral level. Consistent with this view, competency development aims to strengthen a person's ability to act competently in a range of situations (Ley, Lindstaedt, & Albert, 2005).

In the early 1970s, David McClelland (1973), a professor at Harvard University, wrote a seminal paper, "Testing for Competence Rather than Intelligence," that caused a stir in the field of industrial psychology. He proposed the concept of competence to challenge traditional assessment criteria that had emphasized intelligence assessment in the higher education system. His topic provided a conceptual framework that gave rise to many subsequent studies in different fields

such as teacher education, vocational training, business management, and human resource development (Spencer, 1993).

In recent years, many meanings and new labels for the terms competence and competency have developed in common usage (Chouhan, & Srivastava, 2014). The definition of competencies varies yet enrich the description of competency leading to the development of the theory.

Klemp (1980) defined competence as "an underlying characteristic of a person that leads to effective and/or superior performance at work.

Hogg (1993) In a government review of vocational qualifications, the definition of competence was expanded to include: 'The ability to apply knowledge, understanding and skills to meet the standards required in employment. This includes problem solving and adapting to changing requirements.

According to Spencer (1993), competencies are defined as: 'an underlying characteristic of an individual that is causally related to criterion-related effective and/or superior performance in a job or situation'. An 'underlying characteristic' means that the competency is rooted in an individual's personality and can predict behaviour in a variety of situations and work tasks. 'Case-related' means that it causes or predicts behaviour and performance. 'Criterion-related' means that competence predicts who will do something well or poorly, as measured against a specific criterion or standard.

Gilbert (1996) defined competence as the state of being competent, i.e., having the ability to consistently produce the results (the valuable outcomes of behavior) required for the most efficient and effective achievement of the larger organizational goals. Bartram, Robertson, & Callinan (2002) state that competencies are a set of behaviors that are important for achieving desired outcomes or results.

R. Boyatzis, & Boyatzis (2008) define competence as an ability or capability. It is a set of related but distinct behaviors organized around an underlying construct that we call "intention." The behaviors are alternative manifestations of intention that are appropriate in different situations or times.

Sanghi (2016) defines competence as skill and the standard of performance achieved, while 'competency' refers to the behaviour by which it is achieved. Thus, the plural of each word yields two different meanings - competencies

and competences are not the same. Competencies refer to the range of skills that are performed satisfactorily, while competencies refer to the behaviour used in performing them competently.



**Figure 2 Interfere between Competence and Competency**

**Source:** Sanghi, 2016, p. 16

The Royal Civil Service Commission (2019) defines competency as a group of observable, measurable, and highly interrelated attributes, including knowledge, skills, and abilities (KSAs), that result in the behaviors required to effectively perform a particular job to contribute to the success of the organization. Competencies can be technical or behavioral in nature. Technical competencies are referred to work related knowledge used by professionals at work. while behavioral competencies refer to way of how they apply that knowledge.

Although the meaning and definition of competence is still controversial (Chouhan, & Srivastava, 2014). For this study, the definition proposed by RCSC (2019) was adopted, which states that competencies are a set of observables, measurable, and highly interrelated attributes, including knowledge, skills, and abilities (KSAs) that lead to the behaviors required to perform a particular activity effectively. Competencies conceptualized in this way are something that people do and that can be observed. Thus, competencies are fundamental characteristics of people that demonstrate behaviors or ways of thinking that can be generalized across a wide range of situations and persist over long periods of time.

### **3.2 Conceptual Approaches to Competency and Competence**

This section compares different approaches/models of competence. Chung-Herrera, Enz, & Lankau (2003) state that a competency model is a tool that identifies knowledge, skills, abilities, and behaviors required for effective

performance in an organization. It is designed to help an organization achieve its strategic goal by promoting human resource capabilities and competency modeling, emphasizing on behavior rather than personality traits.

### **3.2.1 The behavioral approach: The US Tradition**

Behaviorists describe competence as the "skills, personal characteristics, or behaviors that lead to better performance and therefore it makes competence input-oriented." Cheetham and Chivers (1996) refer to behavioral competencies as personal competencies. White (1959), cited by (Deist & Winterton, 2005), describes personality traits associated with better performance and high motivation as behavioral competencies. Similarly, White defined competence as an "interaction of individuals with the environment." Later, McClelland (1973) followed this approach and developed tests to predict competence as opposed to intelligence. He then called the quality underlying superior performance "competence."

Thus, competence includes skills beyond intellectual abilities, such as social skills, self-regulation, and self-awareness. Competence differs from personality classifications because competencies are centrally behavioral, and competencies can be learned and developed, unlike personality and intelligence, which are innate talents (Deist & Winterton, 2005).

It was the researchers from the United States of America, especially in the field of management, who focused heavily on behavioral approaches. The behavioral approach paved the way for the development of the iceberg model (McClelland, 1973), approaches to competence and empowerment. Richard Boyatzis has made several contributions to the behavioral science approach to competence, most notably the management competence model. This model identifies a set of behaviors that are likely to be relevant to other occupational areas and gives valuable protocols for specifying behavioral competence.

### **3.2.2 Emotional intelligence competencies, social intelligence competencies and Cognitive intelligence competencies**

Similarly, (Spencer, 1993) in his study showed the use of Job Competence Assessment (JCA) methodology developed by McClelland's. he displayed it by analyzing 650 jobs to develop generic competency models. In their

study they identified five different types of competencies namely: self Traits, self-concept, knowledge, and skills.

In the job competencies approach developed by McClelland, the analysis starts with the person in the job, makes no presuppositions about what traits are required to do the job well, and uses open-ended behavioral interviews to determine what traits are associated with success on the job (Spencer, 1993).

Likewise, Boyatzis Richard E (2009) consider emotional, social and Cognitive intelligence competencies to be behavioral approach. Richard Boyatzis and his company Mac Bear studied more than 2000 managers over 41 different types of companies he used a job competency approach to study the behaviour of effective managers. His generic model consisted of 21 generic competencies which was categorized in to two: threshold competency and differentiating competency. Threshold competencies are the competencies any job needs to have such has Knowledge, skills and abilities. Differentiating competencies are those competencies that differentiates outstanding from average such as; emotional intelligence, social intelligence and systematic thinking.

Extending this approach to the domain of behavioral competencies allows for accurate observation, measurement, and development of human talent and the domain of emotions. For example, Ramo, Saris, and Boyatzis (2009) and Trivellas, & Drimoussis (2013), respectively, found that emotional competencies and personality traits are valuable predictors of job performance. Moreover, competencies appear to be stronger explanatory variables of performance than the global personality traits. O'Meara, Knudsen, & Jones (2013) also suggest that emotional competence promotes positive outcomes.

In the field of management, behavioral competencies have been shown to impact job performance compared to functional competencies (O'Meara et al., 2013; Ramo et al., 2009). However, personal competencies are often neglected in formal development programs because they are not an official aspect that can be formally assessed (Cheetham, & Chivers, 2001).



### 3.2.3 The Competency Iceberg

In 1973, former Harvard psychologist and behavioral scientist David McClelland, considered the founder of the competence movement, published the seminal article 'Testing for competence rather than intelligences'. While agreeing that intelligence is a valid predictor of academic success, he argued that traditional intelligence tests are too far removed from practical outcomes and are not good predictors of job performance or success in life. McClelland instead argued that assessing a person's competence predicts his or her job performance.

Competency measures were developed as an alternative to traditional tests of cognitive intelligence because they were considered poor predictors of job performance (Deist, & Winterton, 2005). The competency approach observes successful and effective performers to identify how successful performers differ from less successful ones. For example, the use of competency-based performance management or competency-based compensation (Ashkezari, & Aeen, 2012).

Competence is comparable to an iceberg that has one-ninth of its surface above the water and the rest remains below the surface in the sea. It has some visible components (e.g., knowledge and skills) and other behavioral elements that are not so visible (e.g., attitude, character traits, thinking style, self-image, motives, organizational aptitude, etc.) (Royal Civil Service Commission, 2019).

There are five categories of competence characteristics according to (Sanghi, 2016; Spencer, 1993).

1. Motives - the things that a person constantly thinks about or wants and that cause him to act. Motives "drive, direct, or choose" behaviour toward certain actions or goals and away from others.

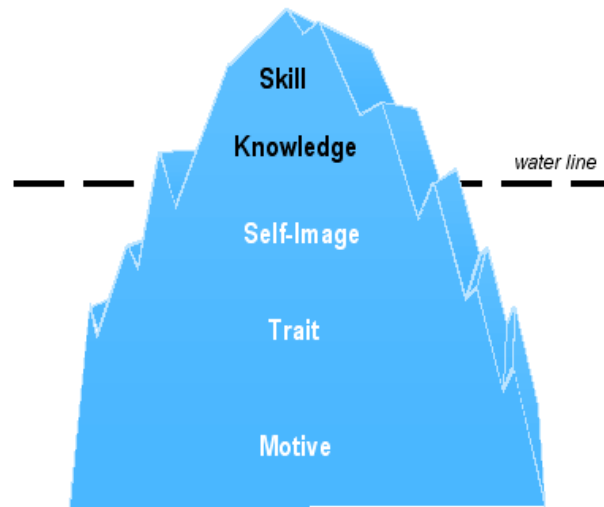
2. Traits - Physical characteristics and consistent responses to situations or information.

3. Self-concept/self-image - a person's attitudes, values, or self-image.

4. Knowledge - Information a person possesses in specific content areas.

5. Ability - The ability to perform a specific physical or mental task





**Figure 3 Competency Iceberg**

**Source:** Sanghi, 2016

This model of competency iceberg has been used very extensively by organizations to improve the performance of its Human resource as well as to assess their performance (Ashkezari, & Aeen, 2012; RCSE, 2019).

In short, the behavioral approach to competence focuses primarily on measuring the competencies of individuals from a behavioral perspective. Boyatzis Richard E. (2009) considers the competencies Emotional Intelligence, Social Intelligence, and Cognitive Intelligence as a behavioral approach. Similarly, Spencer (1993) and McClelland (1973) identified five categories of competency characteristics: Motives, Traits, Self-Concept, Knowledge, and Skills as fundamental characteristics responsible for superior performance in the workplace or in any situation. Other managerial behavioral competencies such as (self-confidence, sensitivity, proactivity, persistence) have an impact on effective performance (O'Meara et al., 2013; Ramo et al., 2009). However, this approach neglects the functional component, i.e., the KSA's required to effectively perform. The functional competency approach therefore focuses on the KSA's that is needed for an occupation.

### **3.2.4 The Functional Approach: The UK Tradition**

Due to shortfalls in skills training in the UK, the government introduced a competency-based qualifications framework in the 1980s to create a nationally consistent system of work-related qualifications. This led to the creation of the UK National Council for Vocational Qualifications (Moolman, 2017). The UK has developed occupational standards that cover all major occupational areas. These occupational standards provide a structure for development based on competencies and also provide the basis on which occupational qualifications can be assessed (Cheetham, & Chivers, 1996). This approach views competencies from the perspective of work expertise outcomes. Thus, rather than measuring academic performance to assess competency, it assesses performance on the job.

Most of the early British research was dominated by functional competencies. Task-related competencies were valued most and competencies that focused on personal development were valued least (Hogg, 1993). In a government review of occupational skills in 1996 (Deist, & Winterton, 2005), the definition of competence was expanded to include: "The ability to apply knowledge, understanding and skills to meet the standards required in employment. This includes problem solving and adapting to changing demands. Similarly, Hlaoittinun, Bonjour, & Dulmet (2007) also focus on the functional view. Here, the focus is on the mechanisms of mobilizing competencies in the work context.

However, this model has been heavily criticized for not being tested in a professional setting (Cheetham, & Chivers, 1996). This is not surprising because the functional approach focuses on assessing competence based on whether certain tasks are performed effectively. Therefore, this approach tends to disregard the personal competencies that trigger them.

### **3.2.5 The Job Competence Model**

The model of professional competence developed by (Mansfield, & Mitchell, 1996b) is often closely associated with the British Occupational Standards and recommended in the guidelines for NVQ assessors. It could be seen as an attempt to move beyond a description of competence and take a broader view. The occupational competence model differs from previous models in

that it is based on a description of the outcome's individuals need to achieve rather than the skills and knowledge they need to have.

Mansfield and Mitchell (1996b) divided them into two groups: those based on inputs and those based on outcomes. Input-based occupational competencies are based on what people need to be or acquire, and outcome-based models are based on the results individuals need to achieve rather than the skills and knowledge they need to have (Mansfield, & Mitchell, 1996b)

The job competency model of (Mansfield & Mitchell, 1996b) has four key components in the job role that reflect the complexity of the job. These are:

1. Being able to meet with the technical requirements specific to occupation such as producing manufacturing items, processing information, or treating illness.
2. The contingency management component is about the competencies that will be required when things go wrong and when planning must be done.
3. Managing diverse work activities is about striking a balance and coordinating a range of different and potentially conflicting activities to achieve objectives.
4. Managing the work environment interface includes a component consisting of the skills needed to manage complex work situations with various stake holders.

Though this model is effective it lacks to identify the ranges of competencies required in managing certain tasks, and it also fails to identify the role of cognitive and ethical competencies (Cheetham, & Chivers, 1996). Mansfield and Mitchell (1996b) also note that the boundaries between contingency management expectations and technical outcomes are quite fluid.

Some jobs have a high percentage of competency management compared to specific technical outcomes. For example, Human Resources Lo, Macky, & Pio (2015) found that job success requires a broader range of HR attributes than the HR literature claims. Cheetham, & Chivers (1996), in their review of occupational

competency models, argue for the role of the environment in personal effectiveness, but failed to link these two aspects and include personal competencies in the model.

The functional approach of competency is mainly focused on identify the skills required to perform a specific job. The U.K. National Council for Vocational Qualifications defines functional competencies as the ability to apply knowledge, understanding, and skills to meet standards required in employment. These include problem solving and adapting to changing demands. Similarly, Mansfield, & Mitchell (1996b) model of occupational competencies refers to functional competencies as the ability to meet technical demands, cope with the unexpected, manage multiple work activities, and interface with teams and tasks. Both functional approaches focus on the basic skills required for the job. Therefore, this approach reduces competence to mere skills. This theory can be described as merely meeting certain standards, ignoring the need for flexibility and responsibility. It is also disconnected from the academic perspective.

### **3.2.6 Holistic models of Competencies:**

The behavioral and functional approaches to competence and competency respectively, each had their own particular strengths, there was no reason to view them as incompatible. Over time, there have been several models that have integrated these two competencies. These are known as a coherent whole: a competency model that encompasses competencies (Garavan, & McGuire, 2001).

The following section analyzes the development of the holistic approach to competence. First, the concept is examined as seen by Bloom et al. (1956), (Cheetham, & Chivers, 1996), and then Delamare Le Deist, & Winterton (2005).

The taxonomy of Bloom et al. (1956)

More than 64 years ago, Bloom et al. (1956) developed a taxonomy of learning outcomes for use by academics. They distinguished between three domains of educational activities, namely, cognitive, affective, and psychomotor activities. The domain of cognitive activities refers to knowledge, the domain of affective activities refers to attitudes, feelings, and emotions, and the domain of psychomotor activities refers to the physical or manual skills that a person performs (Furst, 1981). Scheetz's (1989) study of the development of clinical competence in

nursing students showed that students who participated in summer internship programs achieved higher levels of clinical competence.

The study concludes that the summer internship was important in helping students enhance skills in problem solving, application of theory to practice, and psychomotor performance. Later, this taxonomy was revised by various cognitive psychologists, curriculum theorists, and curriculum researchers. This approach combines the behavioral approach of Boyatzis Richard E. (2009) emotional competencies and cognitive competencies, which Bloom called cognitive and affective. It also combines the functional approach to competence, specifically the professional competence model of (Mansfield & Mitchell, 1996), which Bloom labeled psychomotor.

#### Holistic competence model of Chivers (1996)

The holistic model of competence is perhaps best represented by Cheetham, & Chivers (1996), who reflect the unity of competence and the difficulty of separating cognitive, functional, and social dimensions in practice. However, it is very difficult to represent reality in a model. The model consists of four core components of competence:

##### Functional competence.

1. Personal or Behavioral competence.
2. Knowledge/cognitive competence.
3. Values/ethical competence.

the core components illuminate that the competencies are interdependent and related. Cognitive competence is defined as the ability to use the knowledge effectively (Cheetham, & Chivers, 1996). Whereas functional competence is described as the ability to perform or execute a job/task effectively to achieve certain outcomes (Cheetham, & Chivers, 1996). Behavioral competence is defined as the ability to use observable behaviors in work-related situations. Values/ethical competence is known as the ability to take informed decision and having a knowledge of professional and personal value.

The four overarching competencies are called metacompetencies. They are communication, self-development, creativity, analysis, and problem solving. Metacompetencies help improve other competencies (Deist, &



Winterton, 2005). Cheetham, Chivers (1996) also believe that these same metacompetencies are generally applicable to most occupations because they are basic requirements. Each of these core competencies are composed subsets see Figure 4.

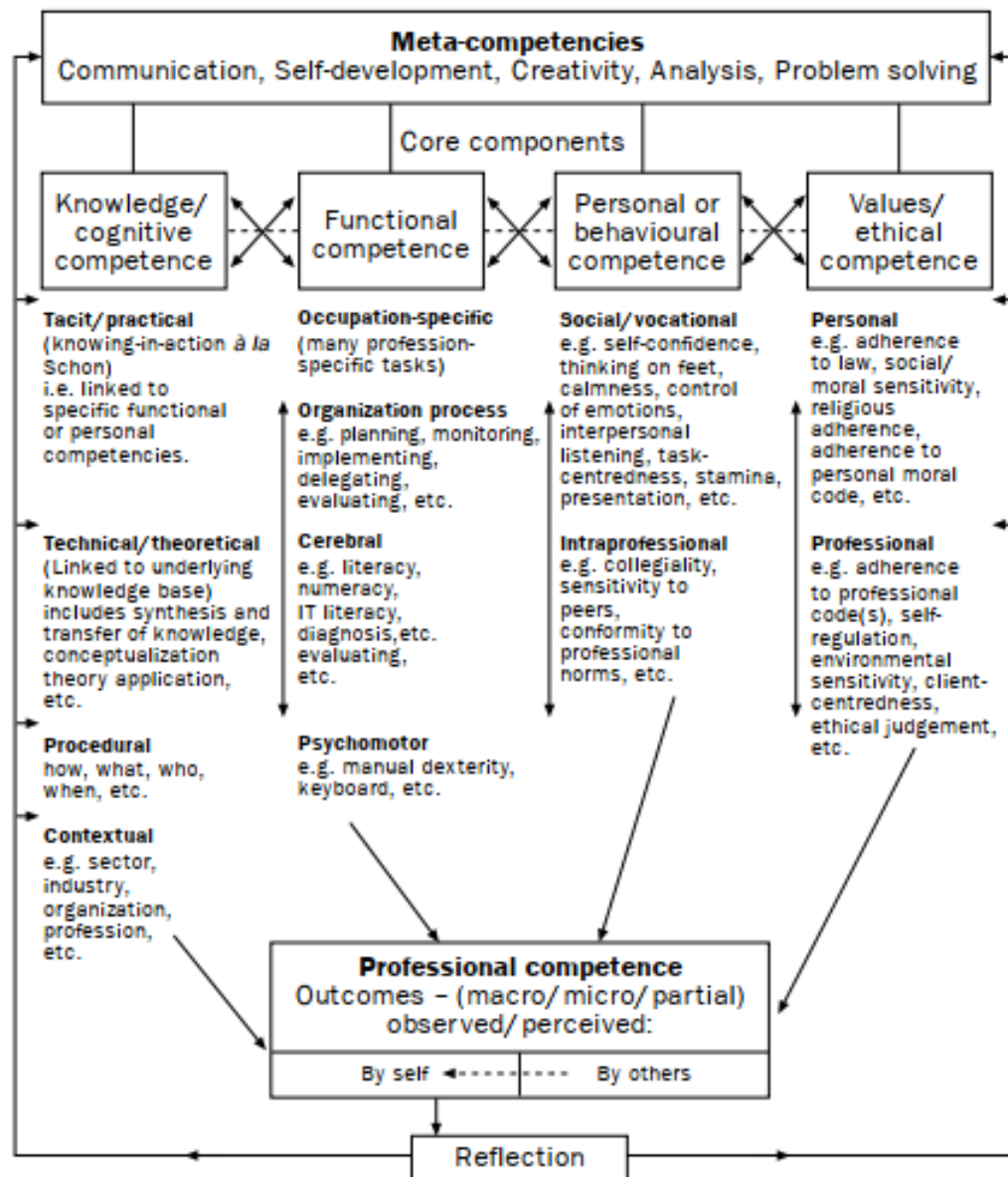


Figure 4 Professional competence model

Source: G. Cheetham, & Chivers, 1996



This holistic model by Cheetham, & Chivers (1996) states that the metacompetencies, the four core components, and their various constituents all work together to produce specific "outcomes." They identified two types of outcomes, macro, and micro. When a general goal or objective is achieved it is known as macro-outcome. For example, most of the customer complaints are solved. Whereas micro-outcomes refer to outcome of specific task or activity.

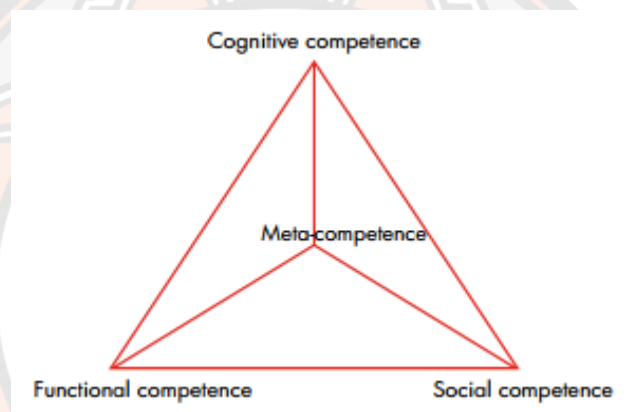
This model combines the behavioral approach of Boyatzis (2009) Emotional intelligence competency, cognitive intelligence competency and social intelligence competency and Spencer (1993) motive, traits, self-concept to develop personal or behavioral competence and meta competence. The concept of job specific outcome of UK National Council for Vocational Qualifications and (Mansfield, & Mitchell, 1996a) job competency model is reflected in the component of knowledge and functional competency (Cheetham, & Chivers, 1996). Further Cheetham and Chivers (2001) empirical study found that formal professional development programs were not enough and emphasize the vital role played by various range of informal workplace learning mechanisms. This statement has been further studied and proved that learning from workplace leads to development of holistic competency (Beckett, 2008; Müller-Frommeyer, Aymans, Bargmann, Kauffeld, & Herrmann, 2017).

Several studies have noted that Holistic Competence recognizes the interactive complexity of practice: that professionals work in open, dynamic systems and therefore have an obligation to adopt a "conceptual framework" that integrates key elements of the practice situation (Beckett, 2008; Drisko, 2015; Gracy, 2018; Mueller-Frommeyer et al., 2017). Therefore, this study chose Cheetham and Chivers' (1996) holistic model because unidimensional competency frameworks are inadequate and measure competency holistically to provide a complete understanding.

Cheetam, & Chivers' holistic competency model has been modified and developed by many researchers such as Deist and Winterton (Multidimensional Model) and Hogan, & Warrenfeltz (The Domain Model of Managerial Competencies).

The Tetrahedron of Delamare Le Deist, & Winterton (2005)

Cheetham, & Chivers' (1996) holistic occupational competency model was further developed by (Deist, & Winterton, 2005). The researchers identified three output competencies, namely cognitive competence (knowledge), functional competence (skills), and social competence (behaviour and attitude), that are required for functioning in specific occupations. They called their holistic approach to competency a tetrahedron, shown in Figure 13 below. They depicted metacompetencies as "an overarching input that facilitates the acquisition of output competencies at the base of the tetrahedron" (Deist, & Winterton, 2005).



**Figure 5 Tetrahedron of holistic competence**

**Source:** Deist, & Winterton, 2005

Based on this analysis, (Deist, & Winterton, 2005) argue that a holistic typology is useful for understanding the combination of knowledge, skills, and social competencies required for specific occupations. The competencies required for an occupation include both conceptual (cognitive, knowledge and understanding) and operational (functional, psychomotor, and applied skills) competencies (Deist, & Winterton, 2005). The competencies more associated with individual effectiveness are also both conceptual (metacompetencies, including learning to learn) and operational (social competencies, including behaviors and attitudes).

In Deist, & Winterton's (2005) tetrahedron, the first three dimensions, cognitive, functional, and social competencies, are fairly universal and are clearly consistent with the work of Blooms, Cheetham, & Chivers (1996) and (Mansfield, & Mitchell, 1996). Thus, knowledge (and understanding) are captured by cognitive competence, skills by functional competence, and behavioral and attitudinal competencies by social competence. Metacompetency is represented as an encompassing input that facilitates the acquisition of other competencies at the base of the tetrahedron, like Cheatham and Chiver's holistic model. Perhaps the tetrahedron does not include the values and ethics dimension.

However, several authors such as Steadman, Eraut, Cole, and Marquand (1994) and Renders (2014) have accentuated the role of ethics within general professional competence. These authors have stated that ethics must be included in professional standards to ensure the credibility of those standards. Therefore, while this model helps to measure competence holistically, as stated initially, it lacks the identification of ethics and values competence. However, this study adopts the holistic approach of Cheetham, & Chivers (1996).

The domain model of managerial competencies (*Hogan, & Warrenfeltz, 2003*)

The domain model of management competencies assumes that all lists of competencies can be divided into four major components: intrapersonal skills, interpersonal skills, business/technical skills, and leadership skills (Hogan, & Warrenfeltz, 2003).

*Intrapersonal skills* refer to the construct of "core self-evaluations," that is, "the basic conclusions or evaluations that individuals have about themselves." Some key characteristics that comprise the construct of core self-evaluations, an important component of intrapersonal skills, are Core self-esteem, generalized self-efficacy, internal locus of control, self-control, and emotional stability/emotional skills/emotional intelligence, integrity, and resilience (R. Boyatzis, & Boyatzis, 2008).

*Interpersonal skills* deal with initiating, establishing, and maintaining relationships with various people such as subordinates, peers, and superiors. They are fundamental management skills and a predictor of managerial performance and effectiveness.

*Business skill*: also referred to as technical skills, are defined as cognitive skills and technical knowledge needed to do the job. These include planning, monitoring budgets, forecasting costs and revenues, reducing costs, setting strategies, evaluating performance, conducting meetings, and organizing reports.

*Leadership Skills*: Leadership is about the ability to influence, motivate, and direct individuals and groups to achieve the organization's goals, mission, or vision. It involves interpersonal influence, persuasion, goal setting, and team building and is critical to the success or failure of organizations.

In the domain model of management competencies (Hogan, & Warrenfeltz, 2003), it is postulated that all management competencies can be categorized into four main skills: intrapersonal skills, interpersonal skills, leadership skills, and business skills. However, this model focuses specifically on managerial competencies and cannot be applied as a general model to different levels of positions. In addition, the model lacks career, and mentoring skills, which have been identified as important competencies for effective leadership competencies (Asumeng, 2014). Therefore, this study sticks to adopting Cheetam, & Chivers' holistic competency model. It is generic and can be applied to different occupations and work positions.

**Table 1 Theorizing Competencies**

<b>Conceptual Approach to Competency</b>	<b>Models developed by Authors</b>	<b>Conceptualization of competency</b>
The behavioral approach: The US Tradition	1.The competency Ice Berge (David McClelland, 1973) 2. The generic Behaviour Approach (Boyatzis 1982) 3.Emotional intelligence (Solovey and Mayor 1990)	Behavioural competence (Threshold competencies, differentiating competencies, Traits, skills, knowledge, motives, self-concept)
The Functional Approach: The UK Tradition	Job Competence Model (Mansfield & Mitchell, 1996)	Functional Competence (Occupational standards, knowledge and skills to perform a job)
Holistic models of Competencies	1. The taxonomy of (Bloom et al. 1956) 2. Holistic competence model of (Chivers 1996) 3. The Tetrahedron of (Delamare Le Deist and Winterton 2005) 4. The domain model of managerial competencies (Hogan & Warrenfeltz, 2003)	Functional Competence, Cognitive competence, Behavioral competence, meta competence and values and ethics competence. Intrapersonal skills, Interpersonal skills, Business skills, Leadership skills

**Source:** Developed by the Researcher

### **3.3 Theoretical Model of Competency Development**

Although several competency taxonomies exist, there is no clear framework or overarching theory for it (Deist & Winterton, 2005). Furthermore, unidimensional competency frameworks are insufficient to measure competency holistically. Therefore, Cheetham and Chivers' (1996) holistic model assumes the existence of four basic competency components (cognitive, functional, behavioral, and values and ethics); each of these components has constituent competencies that

form an integral part of them, with the difference that they interact with each other; for example, effective performance of functional competencies requires behavioral competencies or vice versa. The theory also emphasizes that metacompetencies are required to enable and acquire these competencies.

Cognitive competence is described as the possession of required work-related knowledge and the ability to use that knowledge effectively. Functional competence is the ability of an individual to effectively perform a set of work-related tasks to achieve specific outcomes. Behavioral competence is described as a person's ability to exhibit appropriate, observable behaviors in work-related situations (Cheetham, & Chivers, 1996).

On the other hand, Deist and Winterton's (2005) multidimensional model distinguishes four main components of competencies: conceptual/cognitive, operational, social dimension/attitudes, and metacompetencies. The conceptual/cognitive component of competence encompasses the underlying knowledge and understanding that a person possesses and applies to his or her work. The operational component is the functional aspect of competence, while the social component deals with appropriate social behaviors and the work attitude dimension. In line with G. Cheetham, & Chivers (1996), the metacompetencies refers to the enabling and acquisition of other content competencies. The model assumes that the cognitive, operational, and social competencies are universal, i.e., generic, and that a person must possess them to be effective at work.

The conceptual, operational, and social capabilities of the multidimensional model correspond to the cognitive, functional, and personal values or ethical aspects of the holistic model (G. Cheetham, & Chivers, 1996, 2001) Both models develop other skills called "meta-quality", that is, "creativity, mental agility, balanced learning ability" and "meta-skill", that is, "ability to acquire other skills". (Asumeng, 2014). In this sense, both holistic and multidimensional models consider these capabilities to be comprehensive.

By combining the two models and based on the extensive literature review. In this study, the three most important competencies, namely personal, professional, and social competencies, are assessed. These three competencies are considered in this study because these competencies have been identified as necessary



competencies for continuous employee development (Naim, & Lenka, 2017; Siriwaiprapan, 2004). Feedback from bank employees working in various Indian banks and review of literature on employee competencies in banking organizations also indicated that professional/cognitive competencies, personal/self-relational competencies, and social/communication competencies are the most important competencies required of bank employees and are critical to their employability (Naim, & Lenka, 2017; Otoo, 2019; Salman, Ganie, & Saleem, 2020).

Personal competencies are human skills that include the ability to learn, adapt to change, the willingness to be creative, the willingness to grow, the willingness to deal with stress, and the ability to take action and demonstrate self-confidence. It is assumed that personal competencies are important for all employees, regardless of their role or position (Abraham et al., 2001). This component captures the aspects of metacompetencies as described in the models of (Cheetham, & Chivers, 1996) and (Deist, & Winterton, 2005).

Therefore, professional competence is essential for effective performance in today's knowledge-based economy where employees need to deal with difficult situations. Technical competence is defined as the knowledge and skills employees need to succeed in their work (Naim, & Lenka, 2017; Rowold, & Kauffeld, 2008). These depend on the tasks and roles of the employee and depend on the company's goals and functional roles (Kuijpers, 2004).

The construct professional competencies, thus combines the cognitive and functional competency aspects of holistic model of (Cheetham, & Chivers, 1996). The terms professional competencies and functional competencies are often used interchangeably (Hashim, 2008). Also, the conceptual and operational competencies from the multidimensional model of Deist and Winterton (2005) together constitute the professional competencies.

Social competence is the ability of employees to communicate and cooperate on their own, without the need for external emphasis. For example, networking, teamwork, and conflict management are aspects of social competence (Rowold, & Kauffeld, 2008). Deist, & Winterton (2005) also describe social competence as a dimension of social behaviors and work attitudes. Orpinas also states that social competence depends on a person's age. Therefore, he defines "social

competence" as "a person's age-appropriate knowledge and skills to function peacefully and creatively in his or her community or social environment" (Orpinas, 2010).

Given the complexity of social interaction, social competence is the product of personal and cultural values associated with a wide range of cognitive abilities, emotional processes, behavioral skills, social cognition, and interpersonal relationships (Orpinas, 2010). Similarly, Cheetham, & Chivers' holistic model states that all four competencies interact and are interrelated (G. Cheetham, & Chivers, 1996). As a result, both models focus on social ability, showing that it influences human behavior.

Therefore, based on the combination of the two theories (Cheetham, & Chivers, 1996; Deist, & Winterton, 2005) and the existing literature (Naim, & Lenka, 2017; Otoo, 2019; Rowold, & Kauffeld, 2008; Salman et al., 2020), the competencies that capture the actual change in individual competency levels were identified: personal, professional, and social competencies. In this sense, the model considers knowledge (*savoir*), skills (*savoir-faire*), and knowing how to be (*savoir-etre*) from the French approach Vargas-Halabí, Mora-Esquivel, & Siles (2017), similarly to knowledge, skills, and attitudes from the North American approach KAS (Le Deist, & Winterton, 2005).

**Table 2 Literature overview for Conceptualization of Competency Development**

<b>Variables</b>	<b>Studies</b>
Professional competency development	(De Vos et al., 2011); (Kuijpers, 2004); (R. E. Boyatzis, Stubbs, & Taylor, 2002); (Forrier, & Sels, 2003); (Siriwaiprapan, 2004); (Cheetham, & Chivers, 1996); (Hashim, 2008); (Rowold, & Kauffeld, 2008); (Sadeghi, 2019); (Pb, 2019); (Yamazaki et al., 2018); (Naim, & Lenka, 2017); (Deist, & Winterton, 2005)
Personal Competency Development	(Civelli, 1998); (R. E. Boyatzis et al., 2002); (Cheetham, & Chivers, 1996); (De Vos et al., 2011); (Kuijpers, 2004) ; (Forrier, & Sels, 2003); (Vázquez, 2014); (McLeish, 2002); (Naim, & Lenka, 2017) ; (Otoo, 2019); (Qiao, & Wang, 2009)
Social competency Development	(Hashim, 2008); (Kuijpers, 2004); (Rowold, & Kauffeld, 2008); (Sadeghi, 2019); (Civelli, 1998); (Otoo, 2019); (Qiao, & Wang, 2009); (R. E. Boyatzis et al., 2002); (Cheetham, & Chivers, 1996); (Deist, & Winterton, 2005); (Forrier, & Sels, 2003)

**Source:** Developed by the Researcher

#### **4. Employability**

The concept of employability was introduced around 1955. But it was only in the late 1990s the concept of employability was empirically studied. Employability has been studied from different perspectives and at different levels in a variety of educational disciplines, such as education, psychology, and career theory, business administration, human resource development, human resource management, (Qiao, & Wang, 2009; Thijssen, Van der Heijden, & Rocco, 2008). In this context, people often talk about 'lifelong employability' rather than 'lifelong employment' as the new protection in the labor market (Forrier, & Sels, 2003).

A critical guideline of modern-day profession theories is that in the so-called 'new careers' the promise of employment security is replaced by employability (De Vos et al., 2011). Historical analysis shows that the subject of employability

study has transformed over the period. It emerged at the macro level in the postwar period, where it aimed to activate disabled and disadvantaged groups in the labor market in response to labor demand. In the 1980s, employment was taken up at the meso level aimed at increasing the in-house flexibility to achieve competitive advantages. Very recently a personal micro lever (De Vos et al., 2015) was the focus of employment research (Maria, Van Der Heijden et al., 2018).

Employability has been examined from an organizational perspective (Gerken et al., 2015; B. Van Der Heijden et al., 2009) and from an individual perspective (De Vos et al., 2011; Fugate, Kinicki, & Ashforth, 2004; Nelissen, Forrier, & Verbruggen, 2017). At the individual level of analysis, employability has been examined primarily from three perspectives. Fugate, & Kinicki (2008) proposed a dispositional approach to employability that identifies a set of characteristics, including work- and career-related openness to change, proactivity, and resilience, that "predispose workers to proactively adapt to their work and career environments.

A competency-based approach (Heijde, & Van Der Heijden, 2006) includes occupational expertise, the ability to anticipate, prepare for, and adapt to change, and switching between jobs and employers, which is also known as a competency-based approach. Finally, the third perspective focuses on perceptions of employability, which (Blokker et al., 2019; Cortellazzo et al., 2020; De Cuyper et al., 2014) is defined as "individuals' perceptions of their ability to obtain and retain employment" (Rodrigues, Butler, & Guest, 2019).

Definitions and synonyms at the individual or worker level abound (Fugate et al., 2004; Gerken et al., 2015; Heijde, & Van Der Heijden, 2006). They all emphasize a variety of career aspects of (potential) workers, but all refer to employment as an outcome. Some examples of these career aspects are occupational anticipation and optimization (Dominik Emanuel Froehlich, & Liu, 2018; Gerken et al., 2015; B. Van Der Heijden et al., 2009), flexibility (Dominik Emanuel Froehlich, & Liu, 2018; B. Van Der Heijden et al., 2009; Vos, Hauw, & Willemes, 2011), enterprise sense (Dominik Emanuel Froehlich, & Liu, 2018; Gerken et al., 2015), career competence, and balance (Dominik Emanuel Froehlich, & Liu, 2018; Heijde, & Van Der Heijden, 2006; Vos et al., 2011).

Dominik Emanuel Froehlich, & Liu (2018; B. I. Van der Heijden et al., 2018), on the other hand, divided the individual perspective of employability into two approaches: input-based and output-based. The input-based approach to employability focuses on knowledge, skills, and attitudes or more generally competencies to assess employability, also referred to as the competency-based approach (Fugate et al., 2004; B. Van Der Heijden et al., 2009; B. I. Van der Heijden et al., 2018). The outcome-based approach focuses on employability indicators, such as individual workers' perceptions of their chances of obtaining or retaining a job and achieving a new position in the labor market or transitioning between different positions in the labor market (De Cuyper, & De Witte, 2010; Nelissen et al., 2017).

Also known as perceived employability. The outcome-based approach measures workers' perceptions of their ability to obtain and keep a job or transitions between functional position as indicators of employability (Blokker et al., 2019; De Cuyper et al., 2014; Rothwell & Arnold, 2007). Blokker et al. (2019) define perceived employability as "an individual's perception of employment opportunities with the current or another employer.

The advantage of an input- or competency-based measurement approach over more output-based approaches is that it measures individuals' career potential and allows researchers to unravel the importance of different components to gain more insight into their interrelationships and how workers can make progress in improving their employability (B. I. Van der Heijden et al., 2018). On the other hand, Rothwell, & Arnold (2007) note that using a competency-based approach risks confounding employability per se with its attitudinal antecedents, such as willingness to learn new skills. Moreover, this perspective is also broader in scope and potentially encompasses key elements of the other two approaches (Vansteenkiste, Verbruggen, & Sels, 2013). Perhaps it measures perceptions rather than actual employability.

Many researchers have studied the individual perspective of employability and used different approaches to measure it. B. I. J. M. van der Heijden (2001) used an eight-item scale to measure employability with phrases such as 'What is the probability of transitioning to. ...' In each case, the type of transition on the dashed line was: 'another job in the same field as the employee's current job; another job in a different field than the employee's current job; a higher-level job in the employee's



own organizational unit; a higher-level job in the employee's own organization or company; a higher-level job outside the employee's organization or company; an equivalent job in the employee's own organizational unit; an equivalent job in the employee's own organization or company; or an equivalent job outside the employee's organization or company.' The outcome-based approach measures only perceived employability.

Based on the literature review, most European studies (Cortellazzo et al., 2020; De Cuyper et al., 2014; Rothwell, & Arnold, 2007) have used the (output-based) four-item scale developed by De Witte (1992), which measure the perspective of individual in terms of their confidence in finding a new job.

Whereas (De Vos et al., 2011; Dominik Emanuel Froehlich & Liu, 2018; Gerken et al., 2015; B. Van Der Heijden et al., 2009) views employability as an individual capability and attitudes (input based). Such as Occupational anticipation and optimization, personal flexibility, corporate sense, occupational expertise, and balance. Similarly Lysova, Jansen, Khapova, Plomp, & Tims (2018) adopted (Fugate, Kinicki, & Ashforth, 2004; Heijde, & Van Der Heijden, 2006) six items scale, and measured only two most important dimensions of employability, namely, occupational expertise and personal flexibility. Further more, (De Vos et al., 2011) also used only two dimension of employability: occupational expertise and personal flexibility.

This indicates that most of the studies focusing on input based approach of employability has used variations of variable. Not all studies have used all the five variables. Most of the studies uses only two dimension, occupational expertise and personal flexibility (Lysova et al., 2018) to study employability.

All employability conceptualization examined in this study deal with competency identification at the individual level. There is general consensus that individuals need competencies that help them both obtain and retain employment (Heijde, & Van Der Heijden, 2006). It is very common in a workplace to use competency-based approaches in employability. Employability is defined as a multidimensional process that evolves over time in most of the Competency-based approaches (Forrier, & Sels, 2003; Heijde, & Van Der Heijden, 2006).



Competence-based approaches to employability, for example, have emerged from literature focused on worker's learning and development that takes place in workplace (Blokker et al., 2019; De Cuyper et al., 2014; Forrier & Sels, 2003; D. Froehlich et al, 2014; Heijde & Van Der Heijden, 2006; McQuaid & Lindsay, 2005; Moolman, 2017; Peeters, Akkermans, & De Cuyper, 2020; Rodrigues et al, 2019). Such approaches to employability focus on identifying and developing KSA (knowledge, skills, and attitudes) that contribute to development of one's competencies and superior performance. This concept of employability will be explained in more detail with the help of various theories. Before doing so, however, it is important to define employability, as the concept of employability has been used in various contexts and formats for over a century (McQuaid, & Lindsay, 2005).

**Table 3 Overview of Literature for Conceptualizing Employability**

<b>Variables</b>	<b>Studies</b>
Occupational Anticipation and Optimization	(Dominik Emanuel Froehlich, & Liu, 2018; Gerken et al., 2015; B. Van Der Heijden et al., 2009),(Lysova et al., 2018)
Flexibility	(Dominik Emanuel Froehlich, & Liu, 2018; B. Van Der Heijden et al., 2009; Vos, Hauw, & Willemes, 2011), (Lysova et al., 2018)
Corporate Sense	(Dominik Emanuel Froehlich, & Liu, 2018; Gerken et al., 2015),
Occupational expertise	(Dominik Emanuel Froehlich, & Liu, 2018; Heijde, & Van Der Heijden, 2006; Vos et al., 2011).
Balance	(Dominik Emanuel Froehlich, & Liu, 2018; Heijde, & Van Der Heijden, 2006; Vos et al., 2011).

**Source:** Developed by Researcher

#### 4.1 Defining Employability

The concept of employability continues to be applied in a variety of contexts and to both employed individuals and job seekers (Roemgens, Scoupe, & Beusaert, 2019). For this study, the context of the employed is adapted.

Civelli (1998) defines employability as the ability of an individual or organization to use or apply a set of skills and knowledge in new or different areas of the organization. McLeish (2002) also defines employability as an individual's ability to find a job, keep a job, and move between jobs and/or industries when necessary. However, Forrier, & Sels (2003) use the term movement capital instead of employability. These authors define movement capital as: 'individual skills, knowledge, competencies, and attitudes that influence a person's occupational mobility opportunities.

Another frequently cited definition of employability in the workplace learning literature is that of Heijde, & Van Der Heijden (2006), which defines employability as the continuous fulfillment, attainment, or creation of work through the optimal use of competencies. These competencies refer to a person's knowledge, skills, and abilities required to perform various tasks and responsibilities within a job, as well as their adaptability to changes in the internal and external labor market. Similarly, Rothwell, & Arnold (2007) define employability as "the ability to keep the job you have or get the job you want." Blokker et al. (2019) also identified movement capital as a predictor of employability.

In addition, Peeters et al. (2020) introduce the term employability capital as a variation of the term movement capital to emphasize that the competencies identified for employability not only help individuals successfully change jobs, but also help them keep a job.<sup>1</sup> However, existing definitions largely suggest that individuals' competencies, attributes, and behaviors determine employability. Moreover, all researchers involved in this study unanimously acknowledge that mobility has become central to our understanding of career development (Blokker et al., 2019; Forrier, & Sels, 2003).

Concepts such as Protean career Fugate et al. (2004) and Boundaryless career DeFillippi, & Arthur (1994) refer to careers as dynamic. Employees themselves must take responsibility for moving between different

positions in different organizations. Such a dynamic career requires workers to deal with change frequently. Therefore, competency-based approaches to employability are well established in workplace learning research. Moreover, the competency-based approach, also known as the input-based approach, measures individual career potential and allows researchers to identify the importance of different components to gain more insights into their interrelationships and how workers can make progress in improving their employability (B. I. Van der Heijden et al., 2018).

Therefore, this study adheres to Heijde, & Van Der Heijden's (2006) definition of competence as "the ability to continuously perform, acquire, or create work through the optimal use of competencies."

#### **4.2 Theoretical Conceptualization of Employability**

This section focuses on the rich literature on competency-based approaches to employability in the context of workplace learning. They all consist of several competency dimensions. Various competency-based approaches are discussed in detail.

Boundary Less Career De Fillippi, & Arthur (1994)

The authors do not use the term employability here but refer to it as "boundless career." They distinguish three types of competencies to measure employability: Know-why, know-how, and know-whom competencies (DeFillippi, & Arthur, 1994). The know-why component involves a person's reflection on his or her goals and motivation and awareness of personal and organizational values and interests. It answers the question of why? The Know-How competencies refer to a person's knowledge, skills, and abilities needed to be successful in his or her career and workplace. Know-How competencies reflect a person's social capital.

This includes building professional networks that provide employment. Careers today have become boundryless DeFillippi, & Arthur (1994) in the sense that more boundaries are crossed during career advancement (e.g., professional, departmental, and organizational) than in the traditional career path.

Protean Career (Hall, 2004; Fugat et al., 2004; Laura Cortelazo et al., 2019)

The idea that careers are no longer tied to just one employer, or even to one job with the same employer, was termed Protean Career by Hall (1976 cited as

in Thijssen, Van der Heijden, & Rocco, 2008). The word Protean is derived from Proteus (ancient Greek god of the sea), who could transform into any form when needed. Protean careers refer to careers that are driven by individuals rather than organizations and are driven by intrinsic values rather than extrinsic motivation. Hall (2004) was the first to describe that career choices are made based on individual attitudes that are personal and driven by self-actualization. This contrasts with the traditional career path where one moves up the hierarchy as one's salary increases.

Protean careers are determined by employees' personal values (Fugate et al., 2004). Looking at the person-centered factors, three component dimensions are defined: Career Identity, Personal Adaptability, and Social and Human Capital. Career identity refers to how one identifies oneself in the context of one's career. It refers to a person's personality traits, self-concept, motive, and career motivation. Fugate et al. (2004) and Hall (2004) make an explicit connection between the concept of career identity and Defillippi and Arthur's Know-Why. The second dimension Personal Adaptability describes how a person adapts to a new environment. It includes competencies such as locus of control and willingness to learn.

The final dimension is created by combining social and human capital. Again, this reflects an explicit link of know-how to human capital and know-how to social capital. Social capital is described as the ability to maintain social networks. Human capital refers to knowledge, education and experience that enhance people's opportunities for career advancement.

#### Movement Capital (Forrier et al., 2009)

The model of capital movement is based on two assumptions. The first is that personal strength increases the ability to overcome challenges. The second assumption is that personal strength leads to increased employment radius. Following the framework of Fugate et al. (2004), Forrier and her colleagues Forrier, Sels, & Stynen (2009) identify four dimensions of what they call movement capital. Namely, human capital, adaptability, self-awareness, and social capital. Forrier et al. (2009) distinguish between social and human capital from Fugate et al. (2004) and Hall (2004). Human capital is explained here as knowledge and skills that enable a person to perform a job. Several studies have identified occupational expertise as the most

important human capital for improving employability. DeFillippi, & Arthur's (1994) reflections on expertise can be found here.

The second dimension of movement capital is adaptability. It refers to the ability to adapt to a new environment or a new job. It can be related to the personal adaptability of (Fugate et al., 2004). Self-awareness is related to career identity (Fugate et al., 2004) and refers to self-identity or know-why (DeFillippi, & Arthur, 1994). It is explained as the knowledge of one's motive that leads to improved employability because the person already has an idea of his or her strengths and motives. Social capital here is similar to DeFillippi and Arthur's (1994) know-whom. It refers to the ability to build a social network to improve employability. This model has many similarities with the Protean career of Fugate et al. (2004) and at the same time the model also has great similarities with the model of DeFillippi and Arthur (1994).

Competence based approach (Van Der Heijde, & Van der Heijden, 2006)

The application of the competency-based method is commonly referred to as the input-based approach. This model consists of five dimensions, namely occupational expertise, anticipation and optimization, personal flexibility, corporate sense and balance. Occupational expertise refers to knowledge and skills that are specifically required to perform a task in a particular field. It also includes social recognition by key authorities. Unlike other authors, Heijde, & Van Der Heijden (2006) have two forms of adaptation: anticipation and optimization. Anticipation refers to preparation for changes in the future work situation and optimization refers to passive adaptation to change. Basically, this means the willingness to anticipate and adapt to change.

Corporate sense is described as recognizing self with the goals and objectives of the organizations and finally balance refers to compromising between the opposing interest of organization and at personal level.

The occupational expertise component has similarities to DeFillippi, & Arthur's (1994) know-how and Forrier, & Sels' (2003) and Hall (2004) human capital. The component corporate sense and Balance are new and have not been adopted by previous models. The model proposes that an output-based approach measures individual career potential and disentangles the meaning of the different



components to gain insight into their interrelationship and how workers can make progress in improving their employability (De Vos et al., 2011).

#### Career Competencies (Akkermans et al., 2013)

Similar to Heijde, & Van Der Heijden (2006), they define career competencies as knowledge, skills, and abilities needed to improve employability that can be influenced and developed by the individual. However, their study is based on DeFillippi, & Arthur (1994) and includes three dimensions of career competencies. Reflective career competencies, communicative career competencies, and behavioural competencies. Reflective competencies are defined as long-term career plans based on one's motivating goals and passions, and reflection on one's abilities, such as deficits and strengths, in relation to one's personal career.

Communicative career competencies refer to the skills of networking and expanding networks and making contacts. Akkermans, Brenninkmeijer, Huibers, & Blonk (2013) also include self-profiling, which is the way an individual presents him or herself in society. Finally, behavioral competencies are defined as an individual's ability to seek employment opportunities within and outside of one's organization. This includes actions such as looking for ways to improve one's skills and opportunities, which is also referred to as career control.

#### Holistic Approach of Romgens et al. (2019)

This theory is based on the movement capital of Forrier, Sels, and Stynen (2009). This theory also has several relevance to all previous competence-based employability concepts. Therefore, this can also be referred as holistic model of employability. This model consists of five dimensions of employability which summarizes all the other frameworks of competence-based employability. The five dimensions are:

1. Human capital: alludes to the knowledge, skills, and abilities required to perform an organizational task. It corresponds to DeFillippi, & Arthur's (1994) know-how, Fugate et al.'s (2004) social and human capital, Forrier et al.'s (2009) human capital, and Heijde, & Van Der Heijden's (2006) occupational expertise. Combining the perspectives of all authors, it is clear that human capital not only includes an occupation-specific component, but also includes metacompetencies



and generic competencies. This also includes Akkermans et al. (2013) behavioral competencies for career.

2. Reflection on self and organization refers to the ability to recognize one's position in the organization as well as awareness of one's motives, characteristics, goals, and motivation. This is like DeFillippi, & Arthur (1994) know-why, Fugate et al. (2004) career identity, Forrier et al. (2009) self-awareness, and Akkermans et al. (2013) reflective career competencies. In addition, it also includes Heijde and Van Der Heijden's (2006) corporate sense of purpose and interest in organization.

3. Lifelong learning and (active/passive) flexibility: refer to willingness and ability to learn and adapt with the changes. It refers to being adaptable to new career. It is similar to Heijde and Van Der Heijden (2006) anticipation and optimization and Akkermans, Brenninkmeijer, Huibers, and Blonk (2013) behavioral career competencies.

4. Social Capital: All most all the framework includes social capital as dimension of employability except (Heijde & Van Der Heijden, 2006). Though they refer to it under occupational expertise by mentioning that occupational expertise also means social recognition by key figures. It also is similar to what Akkermans et al. (2013) call it as communicative career competencies.

5. A Healthy work life balance: Heijde and Van Der Heijden (2006) has been included as an explicit dimension by (Römgens, Scoupe, & Beusaert, 2019). It refers to compromising between conflicting interest of self and the organization. It also refers to managing stress and maintaining balance. Nevertheless, the fifth component is not considered for the study as the main of the study is to see the effect of IWL on competency development and employability. Therefore, measuring a work life balance may lead to biased response.

However for the proposed study the model developed by Heijde and Van Der Heijden (2006) will be adopted in the proposed study as it measures all the aspects of competencies including meta competencies, behavioral competencies, and generic competencies under the heading occupational expertise and optimization. It also includes social capital under the heading occupational expertise which is explained by social recognition by key figure. Further the reason for considering this

model is because the initial 47 item Employability Five-Factor instrument Heijde and Van Der Heijden (2006) has been redeveloped and a shorter version of 22 item five factor scale was developed.

The Short-Form Employability Instrument has consistent and acceptable internal consistencies and a similar factor structure across five different samples. The results support a five-dimensional operationalization of the employability construct over a higher-order unidimensional construct, with good discriminant validity of the underlying dimensions of employability (B. I. Van der Heijden et al., 2018). Moreover, because the five dimensions of employability are all significantly related to objective and subjective measures of occupational success, the predictive power of the shortened instrument is promising. The Short Form Employability Instrument facilitates career research without compromising its psychometric qualities (B. I. Van der Heijden et al., 2018). Finally, this model is also adopted considering the relationship between subjects and items.

**Table 4 Theorizing Employability**

Author and Employability Theory	Concepts of Theory
Defillippi, & Aurthur 1994	Boundaryless career, elements used to conceptualize career competence as: Know why, knowhow and know whom
Hall, 2004; Fugat et al., 2004; Laura Coretlozo et al., 2019	Protean Career, the component dimension is described based on person centric approach such as career identity, personal adaptability, and social and human capital
Van der Heijde, & Van der Heijden, 2006; Akkermans et al., 2013	Input based approach (competence) dimensions: occupational expertise, anticipation and optimization, personal flexibility, corporate sense and Balance.
Romgens et al., 2019	Holistic Approach, human capital, reflection on self and organization, lifelong learning, social capital and healthy work life balance.

**Source:** Developed by the Researcher

## **5. Personal and Functional Characteristics and Involvement in Informal Workplace Learning (IWL) and Competency Development**

The fact that IWL is influenced by individual differences is undeniable, but besides that, the literature also shows that occupational characteristics such as function also influence IWL (Kyndt, Dochy, & Nijs, 2009). In an empirical study conducted by Yoon et al. (2018) in a manufacturing company in Korea, they found that managerial level employees participate in informal learning activities more than other employees. Similarly, Kyndt et al. (2009) studied employees in three different types of organizations where employees were distributed across different aspects of their functions, such as blue collar, white collar, clerical, and so on.

Their study also concluded that IWL differed among employees with different functions. For example, white-collar workers indulged more in learning through "feedback," while blue-collar workers had the least access to these learning conditions. Similar findings can also be seen in a study by Lohman (2005) in which they conducted a survey to describe the informal learning experiences of public school teachers and staff developers and concluded that analysis of the data revealed that teachers relied more heavily on interactive learning activities while staff developers relied more heavily on independent learning activities. On the other hand Skule, (2004)'s research added new insights in IWL. He found that jobs that require higher level of education often had more access to Informal learning opportunities.

This means, employees working in higher positions with more responsibilities continue to enjoy better learning opportunities at work (Eilström, & Kock, 2008).

It can be inferred that learning conditions differ for different groups of employees based on their job function. Therefore, it can be said that demographic factors such as age, gender, designation and experience can influence IWL and competency development. Due to this phenomenon, the present study considers including all employees working in five banks as the sample for the study. However, the study will exclude the support staff and security personnel as the data will be collected using self-administered e-questionnaires.

## **6. Employee's Personal Characteristics**

Bandura found that external environmental factors were not the only factors influencing learning and behavior. He realized that learning does not always come from the outside. Your state of mind and motivation play an important role in learning behavior. IWL is learner-driven, which means it is influenced by individual differences. In fact, researchers from various fields such as human resource development, management, and psychology have found that individual differences influence informal learning (Noe, Tews, & Michel, 2017). Many researchers such as (Choi, 2009; Kyndt et al., 2009) emphasize their importance as antecedents of informal learning. Most notably, Cerasoli et al. (2018) identified personal characteristics such as learning goal orientation (LGO) and self-directed learning orientation (SDLO) as antecedents of informal learning.

Personal characteristics are defined as skills, personality, and interests related to learning and development activities in the workplace. In this study, personal characteristics include learning goal orientation and self-directed learning orientation.

### **6.1 Learning Goal Orientation (LGO)**

Learning goal orientation refers to the extent of a person's intention to engage in challenging activities, eagerness to improve, and tendency to use one's past performance as a benchmark for evaluating current performance (Button et al., 1996). In the 1960s, Edwin Locke proposed that intention to work toward a goal is an important source of work motivation. This theory states that goal setting is essentially related to task performance. It states that specific and challenging goals contribute to higher and better job performance (Locke, & Latham, 2006).

Although different authors use slightly different terms, two types of goal orientation are distinguished in the literature: first, learning goal orientation (Locke, & Latham, 2006), which refers to the motivation to improve one's competencies by learning and practicing new skills and learning new and difficult tasks; and second, performance goal orientation, which refers to the motivation to perform better than others, seek ratification for one's competencies, and avoid negative feedback. In this study, only learning goal orientation was examined (Locke, & Latham, 2006).

Individuals with a learning goal orientation seek to understand something new or to expand their competencies through learning. Individuals with a high learning goal orientation are less interested in how they are judged by others. Individuals with a high-performance goal orientation are likely to seek to demonstrate their competence through task performance or to avoid negative feedback of their task performance.

In addition, individuals with a learning goal orientation pursue challenging tasks, whereas individuals with a performance orientation tend to avoid such tasks (Phillips, & Gully, 1997). According to Bandura's self-efficacy theory, failure to achieve a goal is perceived by high LGO individuals as a temporary setback that they have not yet been able to overcome. Therefore, these individuals continue to focus on their tasks and develop their skills and abilities so that they can achieve similar goals in the future (Bandura, 1986, 1997).

## **6.2 Self-directed Learning Orientation (SDLO)**

Individual factors determine whether individuals truly learn on the job. According to Raemdonck et al. (2014), workers who feel personally responsible for developing their knowledge will engage in informal learning to a greater extent. Today, workers need to be able to stand out to compete in the labor market. As a result, an orientation toward self-directed learning has become an important characteristic.

Self-directed learning orientation (SDLO) is defined as a tendency to actively and independently approach learning activities and situations and to constantly overcome obstacles and setbacks in the work-related learning process (Raemdonck, Tillema et al., 2012). Employees with high SDLO recognize learning opportunities and show learning initiative to engage in learning activities (Decius, Schaper, & Seifert, 2021). Employees with low levels of self-directed learning orientation show the opposite pattern in that they may not find learning opportunities or take advantage of such opportunities (Raemdonck et al., 2014).

However, definitions of SDLO in the literature are often confusing and overlapping. The conceptual ambiguity surrounding SDLO is illustrated by a profuse of terms used in conjunction with the concept. Some authors use the term learning motivation to describe self-direction in learning and work. Learning



motivation is described as a person's desire to acquire learning content through learning activities at work (Choi, 2009). Some use the term self-education (Dickinson & Clark, 1975), self-initiated learning (Penland, 1979), andragogic learning (Knowles, 1975), autonomous learning (M. G. Moore, 1973). Thus, from the literature, it appears that the predominant perspective on SDLO is that which views SDLO as personal characteristics that are central to the study of SDLO.

### **7. Employees Functional Characteristics**

The learning and expression of competencies can be influenced by employee characteristics as well as contextual variables (Hashim, 2008; Pb, 2019; Takase, Yamamoto, Sato, Niitani, & Uemura, 2015; Yamazaki, Toyama, & Putranto, 2018). Worker characteristics such as occupational position can facilitate or limit the development of competencies and the opportunity to apply them at work.

Research carried out on this field show that the employee's tenure, position, gender and age can influence the informal learning methods adopted and competencies developed. Studies showed that self-education and team work were prevalent learning methods used by managers to develop job related and managerial competencies (Hashim, 2008). Similarly, Takase et al. (2015) also found that learning from practice and learning from others were the most prevalent methods used by less experienced nurse. while learning through feedback was strongly associated with the self-reported competencies of experienced employees.

Further research has applied competency development based on experiential learning theory as conceptualized by Kolb (1984). The results showed that the learning strategy of managers is significantly different from that of non-managers (Yamazaki et al., 2018). Pb (2019) also points out that those who held multiple roles as TL, manager, and individual contributor had high density of work experience and consequently high competence. Even though organizations are integrated systems characterized by a multi-level structure (Kozlowski and Klein, 2000), most of the research conducted in this area, including research on learning and competence, does not consider this assumption and simply examines each organizational level in isolation. As a result, there is a lack of studies that not only attempt to empirically examine the relationships between these constructs, but also take a nuanced perspective to analyze different positions (designation), age,

Experience, gender, and their differences in learning strategies and competency development as well as employability.

## **Research Hypothesis**

### **1. Informal Workplace Learning (IWL) and effect on Self-Reported Competency Development**

Globalization, innovation, and restructuring have led to human competence increasingly becoming a crucial resource and a competitive parameter. In addition, the required competencies cannot be built and acquired through education, because there is a constant need for change and renewability (Illeris, 2003). As Eraut describes, competencies are a moving target (Eraut 2010). For this reason, informal learning and workplace competencies have become a more interesting focus than education and instruction.

The term was first cited by Knowles in the 1950s as informal learning, "informal adult education" mentions this concept when all adult education is informal learning (Lin, & Lee, 2014).

Informal workplace learning was characterized as Learning from experience and competencies were often characterized as ability to fulfill job standards. For example Nyhan (1998) studied the kinds of competencies developed in eleven European companies and the learning approaches used. Eight companies used Informal learning approaches extensively and six companies used preliminary formal learning approach. The informal learning methods used were cognitive learning strategy, planned on the job learning, real work situations and cooperative learning and coaching. Competence developed because of these learning approaches were cognitive, technological, entrepreneurial, and social competence.

Similarly, Paloniemi, & Hager (2006) examined workers' perceptions of the importance of experience for professional competence and its development in the professional context. They found that the most used ways of developing competence were as follows: competence sharing within the work community, learning on the job as such (e.g., problem solving), attending training, following professional literature and other sources of information, collaborating outside the work community, and using knowledge and skills acquired in other areas of life.

These findings point to the importance of recognizing different types of worker competencies and finding organized ways to promote experiential competence sharing in work communities. Based on Kolb's (1984) experiential learning theory, Yamazaki et al. (2018) conducted an empirical study to determine how managers and non-managers learn. The study concluded that managers were more likely than non-managers to prefer thinking over feeling, but the groups similarly learned by doing rather than thinking, which led to the development of competencies such as leadership, relationships, and quantitative analysis.

This study is done based on the context that employees seek vertical career path/ traditional and therefore this study depicts the required competencies non managers need to develop to become managers. Therefore, this can be summed up in a partial and very inadequate way of representing the informal learning characteristics and as well as ignoring the current career path, known as employability.

As the literature continues, two distinct trends in informal learning and competencies. These are self-directed learning, learning from others, and vocational or social competencies respectively. To name just a few studies: Hashim (2008) studied how Malaysian managers acquire professional competencies such as technical knowledge, communication, and managerial competencies. The study found that methods of self-directed learning, such as self-study and working in a team, were among the most used by respondents to acquire competencies.

However, this study claims that to develop competence, people and employees should be willing and ready to learn. Similarly Rowold and Kauffeld (2008) also found that informal learning, example discussion with colleagues lead to the development of self-reported work related competence. Competences such as professional, method and social competence. Besides the fact that informal learning led to development of work-related competence the study also combined formal learning (off the job learning) and its influence in the competence development. Therefore, it cannot be concluded that informal learning exclusively leads to competence development. However, it can be rationalized that informal learning leads to functional or professional competence development.

On the other hand, Brandão et al. (2012) surveyed 239 Brazilian banks to investigate whether there was a predictive relationship between the informal learning strategies they used, the number of hours they spent on formal learning, and the expression of their competencies at work. The study found that the more hours the branch spent on training and development activities, the higher the intensity of the expression of competencies at work. The better the group's (branch) perception of organizational support, the more pronounced the competencies of branch managers. This suggests that organizational support predicts competency development. Therefore, this study is not entirely consistent with previous findings, which indicated that informal learning led to competency development.

Social learning approaches/networks, learning from feedback, and supervisor support have been found to influence professional competencies. For example, Crouse et al. (2011) examined the workplace learning strategies used by HRM practitioners and the types of individual and organizational learning outcomes HRM practitioners experienced as a result of their workplace learning and found that a mix of formal and informal learning (with an emphasis on informal learning), learning through doing the job, and interaction with others led to development of competence and personal career growth. Interestingly, the study also found that experienced individuals preferred learning through feedback.

However, the strongest facilitators were learning with and from others, and organization and managerial support. Few expressed learning from lawyers and consultants, increased resources, own initiative, job/task issues. Nevertheless, this study has also identified that the strongest facilitator in informal learning is networking. Which facilitated learning through feedback and learning from others. Similarly, Takase et al. (2015) examined which methods of workplace learning would be related to self-reported competence. They found that learning with and from others, feedback, training, and support from the organization and supervisors most strongly promoted competence development.

Similar ideas have been put forward by Haemer et al. (2017) and A. L. Moore, & Klein (2019). Haemer et al. (2017) state that informal techniques of learning at work benefit a wide range of professionals, regardless of their work context. Their study identified that learning strategies such as trial and error, help

seeking, and reflection were the major contributors of competency development. However, like most of the studies this study also included both formal and informal learning to examine the influence on competency development.

Though the research indicates the influence of informal learning on competence development, but the significance of the relationship cannot be finalized accurately. The recent studies of Moore and Klein (2019) on informal learning at workplace has also identified sharing knowledge and interacting with others, as the most frequently used informal learning method. This indicates that informal learning at work does influence competence development, but it depends on the support received from supervisor and the management.

Not all research which approached informal learning and competence followed this line. Sadeghi and Srikanth discussed the extent to which employee's characteristics such as experience and perceived support influenced informal learning and competence development. Sadeghi states that informal guidance lead to professional and social competence provided on received support from supervisor (Sadeghi, 2019). However, the results suggest that informal learning behaviour is not significantly related to perceived competence unless one was supported by a supervisor.

However, this study also combined formal learning techniques such as on-the-job courses, continuing education, and informal self-learning. Similarly, Pb (2019) in his longitudinal study of skill development through work experience found those individual who has high experience prefer to seek help in writing and learn through trial and error. His study also shows that individuals with high work experience tend to have high HR competencies.

Competence development is seen as people acquiring new competences primarily through interaction with real professional situations and tasks. New competencies are developed when a person enters a new situation or task where action is not predetermined. Reflection on the results or feedback from a more experienced person helps in this development. Consequently, there is a plausible link between informal learning and competence. This relationship is also referred to as "competence development" by Forrier, & Sels (2003).



They define it as an activity performed by an organization and employees to maintain or improve their functioning, learning, and career abilities. Burgoyne uses a functional perspective to define competencies, which he states are factors in achieving organizational goals by improving individual performance (Burgoyne, 1993). From this point of view, it is an individual learning process in which abilities are acquired (Eilstroem, & Kock, 2008).

Further most of the research have studied the social approach of Informal learning, but experiential learning, learning from feedback, learning by reflecting and learning intent has never been studied together. Owing to the fact that, in real life these factors cannot be separated, and the effect could be visible more definitively when these four factors/ characteristics are combined. Hence, this study attempts to fill the gap in literature and hence the study hypothesizes that

*H<sub>1</sub> Employees Informal Workplace Learning affect self-reported competency development.*

## **2. Competency Development and Employability**

Learning at work is considered important for both employability and competitiveness, and several studies have also proved that competencies also influence Employability (Mulder, 2013). In a larger survey of financial services firms conducted by De Vos et al. (2011) in Belgium, they examined the relationship between perceived support for competency development, employability, and career success. The results indicate that employee participation in competency development initiatives was positively associated with employees' perceived employability. This study provides deeper insight into the role of individuals in competency development and employability. However, this study only measures perceived competency support and not the actual competency development of the employee.

De Vos et al. (2015), on the other hand, examine learning, competency development, and employability from an organizational perspective. They show how competency development is linked to the broader organizational and socioeconomic context, and how the various HR practices related to competency development are interconnected and affect employability. This qualitative study measured competency

development through the number of training sessions attended, on-the-job learning, and career management practices. The competencies studied were functional competence, learning competence, and career competence. The results suggest that the organization itself cannot develop an employee's competencies but can only create a stimulating environment and provide practical tools to develop their competencies. Therefore, this study lacks an in-depth analysis of the specific role of self-direction in competency development. Whether competency development initiatives actually lead to improved competencies depends largely on the investment of the employee, who has the responsibility to take advantage of these development opportunities (Heijde & Van Der Heijden, 2006).

Serim et al. (2014) examined the impact of workers' perceptions of competency models on employability with a moderating role of social exchange theory. The results of the study suggest that perceptions of competency models are positively related to employability outcomes. Regardless of how significantly the variables are related, the study measures workers' perceptions of competency models rather than their individual competency, and it measures employability orientation rather than actual employability. Employability orientation is defined as an antecedent to employability activities. Thus, if employees perceive the competency models used in the organizations as fair and relevant, finer employability outcomes can be achieved.

Competencies and employability have been studied from different angles, for example by B. I. J. M. van der Heijden (2001) studied professional competence and its impact on employability by analyzing the influence of age. Occupational/functional competence was operationalized using five dimensions: Knowledge, Metacognitive Knowledge, Skills, Social Recognition, and Growth and Flexibility. An output-based approach was used to measure the dependent variable, employability. It is found that the level of employability actually decreases with the age of the worker, especially when the transition is to a new occupational field, to a higher position, or to an equivalent position. (Blokker et al., 2019).

D. Froehlich et al., 2014; Dominik E. Froehlich et al. (2019), however, also found that proactively seeking information, feedback, and help improved professional competence, anticipation and optimization, and personal flexibility.

Thus, we hypothesize that learning from others in the form of feedback and experience can improve both employability and individual competence. Perhaps existing studies do not clearly show the influence of competence on employability, so we hypothesize that:

*H<sub>2</sub> Self-Reported Competency Development relates positively to Employability.*

### **3. Mediating effect of Competency Development between Informal Workplace Learning (IWL) and Employability**

The concept of lifelong employability implies that workers take more responsibility for investing in their own human capital and thus for their job security, learning, and future career development. B. Van Der Heijden et al. (2009) investigated the role of social informal learning activities and formal learning activities of non-academic staff in Dutch universities on employability. The results suggest that job-related formal learning, interaction with one's supervisor, and networking within the organization are the most important predictors of all five components of employability. In particular, networking within and outside the organization is positively related to occupational competence, flexibility, and anticipation and optimization. However, the extent of perceived informal learning seems to depend on the department in which employees work.

Gerken et al. (2015) investigated how proactive social informal and formal learning activities are related to faculty employability at a Dutch university. IWL techniques such as responding to feedback, help-seeking behaviour, and information-seeking behaviour were assessed. Formal learning, on the other hand, was measured by the number of hours of training attended. The results showed that social informal learning was related to faculty members' employability. Specifically, seeking external information and responding to feedback from colleagues predicted faculty members' employability. Formal learning, however, was not related to employability.

Both studies (Gerken et al., 2015; B. Van Der Heijden et al., 2009) have examined the role of formal and informal learning, but their study has focused only on the social aspect of informal learning and ignored the role of self-learning. Moreover, the mix of formal and informal learning studied makes it difficult to find the actual relationship between IWL and employability. However, both studies have taken a competency- based approach to measuring employability (Heijde & Van Der Heijden, 2006).

The above literature shows that employability of employees is of great importance not only for companies but also for individual employees. The studies also show that informal learning in the workplace is a prerequisite for creating employability. To date, there is only one study by De Vos et al. (2015) that examines the antecedents and outcomes of Competency Development but from an organizational perspective. The results suggest that the organization itself cannot develop an employee's competencies but can only create a stimulating environment and provide practical tools to develop their competencies. Therefore, an in-depth analysis of the specific role of self-learning in the development of competencies is needed.

The literature also demonstrates that there is a plausible relationship between informal workplace learning and employability. It also shows that competence is related to employability. However, the effect of informal workplace learning on employability and the mediating effect of competency development on employability is not yet clear, so the study hypothesizes that;

*H<sub>3</sub>: Competency development mediates the relationship between Informal Workplace Learning and Employability.*

#### **4. Informal Workplace Learning (IWL) and Employability**

The concept of lifelong employability implies that workers take more responsibility for investing in their own human capital and thus for their job security, learning, and future career development. B. Van Der Heijden et al. (2009) examines the role of social informal learning activities and formal learning activities of non-academic staff in Dutch universities on employability. The results show that

interaction with one's supervisor and networking within the organization are the most important predictors of all five components of employability. In particular, networking within and outside the organization is positively related to professional competence, flexibility, anticipation, and optimization. However, the extent of perceived informal learning seems to depend on the department in which employees work. This shows the importance of the learning value of the work.

Gerken et al. (2015) investigated how proactive social informal and formal learning activities are related to the employability of faculty members at a Dutch university. Informal learning techniques such as responding to feedback, help-seeking behaviour, and information-seeking behaviour were assessed. Formal learning, on the other hand, was measured by the number of hours of training attended. The results showed that social informal learning was related to faculty members' employability. Specifically, seeking external information and responding to feedback from colleagues predicted faculty members' employability. Formal learning, however, was unrelated to employability. In another study by Lecat et al. (2018), they found a stronger relationship between informal learning and employability. In particular, the use of feedback appeared to have a strong impact on employability. However, the study also included formal learning.

These studies have studied the role of formal and informal learning, but their study has focused only on the social aspect of informal learning, ignoring the role of self-learning. Further the blend of formal as well as informal workplace learning studied makes it difficult to find the actual relation between informal workplace learning and employability. However, both the studies have adopted competence based approach to measure employability (Heijde & Van Der Heijden, 2006).

Studies also suggest that workers' participation in workplace learning and competency development initiatives was positively associated with perceived employability (B. I. J. M. van der Heijden, 2001). Some studies suggest a positive relationship between informal workplace learning and employability (Dominik E. Froehlich et al., 2019). Although there is a strong theoretical basis for the assumption that informal workplace learning influences employability, it fails to test the causal relationships (Dominik E. Froehlich et al., 2019).



The literature above shows that employee employability is important not only for organizations but also for individual employees. The studies also show that informal learning is a prerequisite for creating employability. Therefore, the study hypothesizes that;

*H<sub>4</sub> Informal learning at work relates positively to Employability.*

## **5. Personal Characteristics and Informal Workplace Learning (IWL)**

Personal characteristics are defined as skills, personality, and interests related to learning and development activities in the workplace. In this study, personal characteristics include learning goal orientation and self-directed learning orientation.

Bandura noted that exterior environmental factors are not the only factor that influences learning and behavior. And he recognized that learning does not always come from the outside. One's own mental state and motive play a vital role in determining whether a behavior is learned or not. IWL is learner-driven, which means it is influenced by individual differences. In fact, researchers from various fields such as human resource development, management, and psychology have found that individual differences influence informal learning (Noe et al., 2017).

Many researchers such as (Choi, 2009; Kyndt et al., 2009) emphasize its importance as an antecedent to informal learning. Most notably, Cerasoli et al. (2018) identified personal characteristics such as learning goal orientation (LGO) and self-directed learning orientation (SDLO) as factors that influence learning and competency development. Therefore, the study hypothesizes that personal characteristics enhance the positive impact of IWL on competency development.

### **5.1 Learning Goal Orientation (LGO)**

Goal orientation can be roughly divided into two types: Learning goal orientation and performance goal orientation (Dweck & Henderson, 1989). Individuals with a learning goal orientation seek to understand something new or to expand their skills through learning. Individuals with a high learning goal orientation are less interested in how they are judged by others. Individuals with a high-performance goal orientation are likely to seek to demonstrate their competence through task performance or to avoid negative evaluations of their task performance.

In addition, learning goal-oriented people pursue demanding tasks, while achievement-oriented people tend to avoid such tasks (Phillips, & Gully, 1997). The direction of learning goals is described as developing abilities as a result of one's desire to learn and grow. (Kim, 2007). Learning goal-oriented means that the challenge is seen as an opportunity to learn something new, and the risk of failure does not mean that the skills are inadequate, but one must work harder and pursue another strategy. (Dweck, & Henderson, 1989).

Based on Bandura's (1986, 1997) social cognitive theory, individuals' personal factors (e.g., LGO) influence their cognitive, affective, and behavioral patterns (Bandura, 1982, 1986, 1997). People with a LGO are often interested in development of their competencies rather than showing better performance. Therefore, LGO can be defined as one's motivation to develop their competencies by learning new and complex tasks (Locke, & Latham, 2006).

In this way, these individuals maintain their focus on the task and continue to develop their skills and abilities, allowing them to improve their competence (Bandura, 1986, 1997). For example, to develop competence, it is critical that employees in the banking sector work with a new scheme or compare their work performance with their previous performance. Some workers set learning goals, such as a low number of nonperforming loans or a high profit. These goals help them receive feedback and monitor their own performance to improve their competencies in the long term (Decius et al., 2021).

Positive and negative feedback are often view as an opportunity to learn and develop by those individuals who have high LGO (Tuckey, Brewer, & Williamson, 2002). Because failures are viewed as an opportunity to learn (Dweck, & Henderson, 1989).

Empirical studies show the high importance of LGO for participation in IWL and competency development. One of the earliest study done by Dweck and Leggett (1988) found that learning goal orientation had a positive relation between personal attributes and learning efforts. Choi's study among the managers of Korean Bank also found that second level managers tend to try something new at work to overcome challenging situations as a conscious effort (Choi, 2009).

Thus, one's assessment of one's desire to learn (Noe, & Schmitt, 1986) and one's learning orientation (Dweck, 1989) determine which activities are preferred for learning and how much one engages in those learning activities. Similarly, Decius et al. (2021) found that learning goal orientation was positively related to informal learning in the workplace. The study by Noe et al. (2017) also found that learning goal orientation has a significant positive direct relationship with informal learning. Similarly, Runhaar, Sanders, & Yang (2010) found that learning goal orientation is positively related to informal workplace learning.

In addition to what has been said, there is another area of studies that point to the directive that learning goal orientation is related to competence development. For example, Kabuoh and Otsupius' study found that learning goal orientation was significantly related to leadership development (Kabuoh & Otsupius, 2015). Similarly, Dragoni and colleagues found that managers with a stronger learning goal orientation are more likely to participate in developmental tasks and achieve higher levels of competence (Dragoni, Tesluk, Russell, & Oh, 2009). Similarly, they are open to and interested in learning from new experiences (VandeWalle, Cron, & Slocum Jr, 2001).

However, little research has been conducted on the moderating effect of LGO on the relationship between IWL and competency development. Overall, theory and research suggest that individuals with high levels of learning goal orientation interpret tasks with high levels of development as valuable opportunities to improve their competencies and are therefore more likely to accept these types of tasks. Thus, this study hypothesizes that LGO strengthens the relationship between informal workplace learning and competency development.

*H<sub>5a</sub>: Learning goal orientation strengthens the positive effect of IWL on Competency Development*

## **5.2 Self-directed Learning Orientation (SDLO)**

The phenomenon of self-directed learning has received substantial attention in the adult education literature. Numerous researchers profess that the ability to engage in self-directed learning is a prerequisite for all adults in a rapidly

changing, society. Oddi, in particular, states that self-directed learning is essential if adults are to maintain their competencies and learn (Oddi, 1987).

Self-directed learning orientation (SDLO) is defined as a tendency to approach learning activities and situations actively and independently and to persistently overcome obstacles and setbacks in the work-related learning process (Raemdonck, Tillema, et al., 2012). Employees with high SDLO identify learning opportunities and show learning initiative to engage in learning activities (Decius et al., 2021). Researchers such as Schmitz and Wiese (2006) have recognized that the SDL process goes through a cycle of preparatory action, action, and subsequent action. That is, one's goals, motivation, self-efficacy, and affect.

In an empirical study conducted by Raemdonck and colleagues they found that striving for knowledge, task variety and learning initiative (IWL) were significant predictors of SDLO (Raemdonck, van der Leeden, Valcke, Segers, & Thijssen, 2012). These were identified as characteristics that provided opportunities for IWL (Raemdonck et al., 2012). Likewise, Confessore and Kops (1998) found a clear relationship between actual number of SDL undertaken and the on the job learning opportunities provided. A job that provided high degree of specialization and restricts trying and applying own ideas reduces IWL opportunities, which negatively influences SDLO (Confessore & Kops, 1998).

The study conducted by Decius et al. (2021) also shows that workers with high levels of SDLO exhibit more learning behaviors at work than workers with low levels of SDLO because they acquire more new skills than the others. Similarly, Raemdonck et al. (2014) found that workers with high levels of self-directed learning also exhibit more workplace learning behaviors than workers with low levels of self-directed learning orientation.

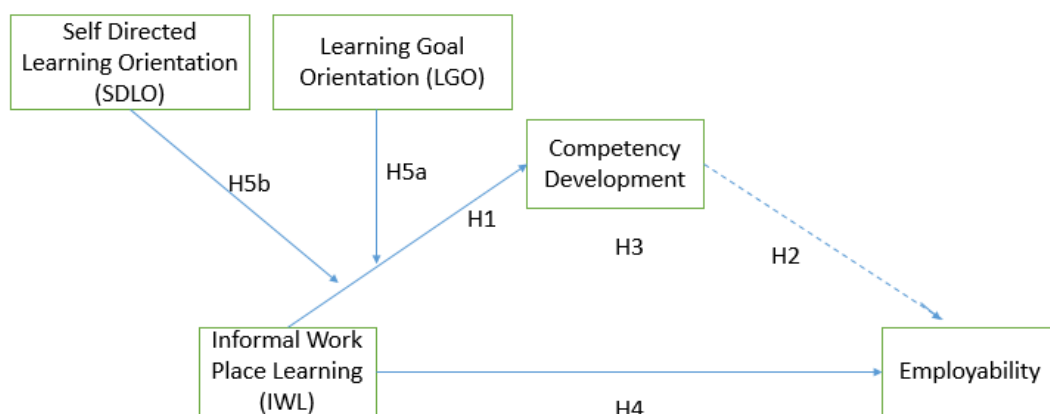
This suggests that workers with high SDLO view learning primarily as their own responsibility to keep up with change. Such employees have a constant desire to develop and are therefore motivated to take the initiative to learn and persevere in learning (Choi, 2009; Decius et al., 2021; Kyndt et al., 2009; Raemdonck et al., 2014). This leads to the following hypothesis:

*H<sub>5b</sub> Self-directed learning orientation strengthens the positive effect of IWL on Competency Development.*

### Conceptual Framework

The conceptual framework developed for this study is shown in Figure 5. The objective of the study is to examine the impact of IWL on employability with the mediating role of competency development among financial sector employees in Bhutan. The various changes in working life pose challenges to employees of all ages, both in terms of informal learning at work and competence development. Employees need to be competent not only to give the company a competitive advantage, but also to be prepared to meet changing work demands.

Figure 6 below explains the relationship between informal workplace learning, competency development, and employability that the proposed study will explore. Several studies have also found that employee characteristics such as age, gender, designation, and experience also influence informal workplace learning techniques used, competencies development, and employability. Therefore, this study will also attempt to compare the results with the results of other studies.



**Figure 6** The conceptual framework of the study

**Source:** Developed by the researcher



## Chapter Summary

This chapter identified two underlying theories: social cognitive theory by Albert Bandura and workplace learning theory by Kund Illeris to explain the relationship between the three variables. The application of social cognitive theory to this study through four key concepts can be succinctly explained as follows: The concept of observational learning states that individuals learn to develop intellectual, social, and behavioral skills by observing the behavior of others (Bandura, 1988). The concept of reciprocal determinism considers the interactions between social and cognitive factors of learning as determinants of behaviors specifically related to competence development (Compeau & Higgins, 1995). In addition, Bandura notes that workers' beliefs about their competencies can have a profound influence on the career paths they take (Bandura, 1988).

On the other hand, Illeris' theory of Learning at Workplace, explains that the interaction dimension is downplayed in the learning program, which also leads to poor learning outcomes (Nguyen, 2007). Thus, both cognitive and emotional functions and their interaction crucially depend on the interaction process between the learner and the social, cultural, and material environment. These two interaction processes can hardly be planned or structured in advance. Therefore, they take place informally as people learn from the experiences they have in their daily work (Watkins, & Marsick, 1992).

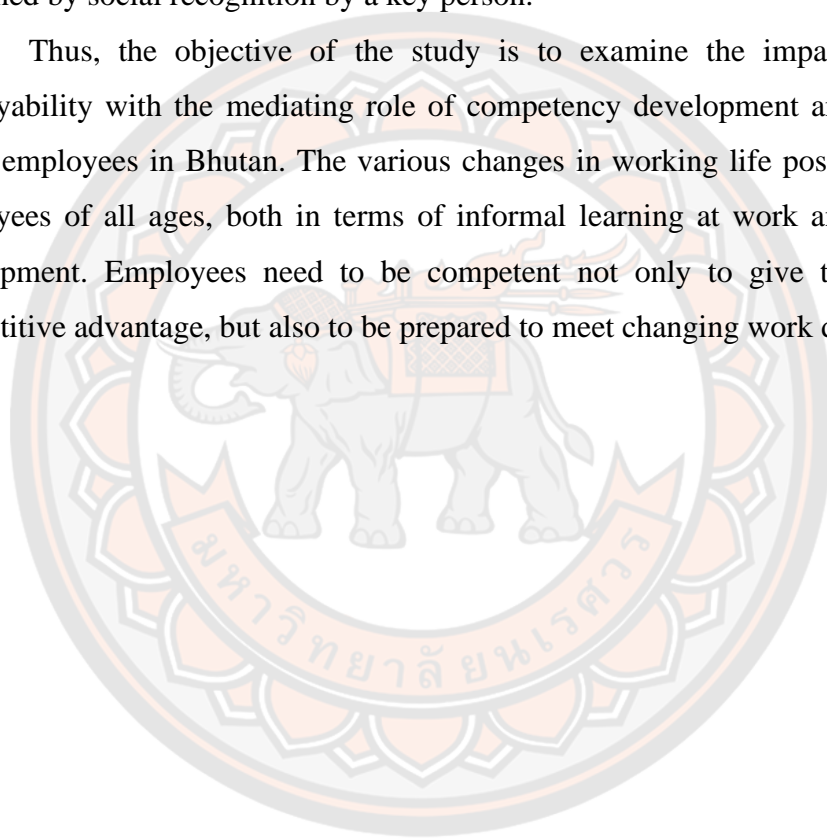
The octagon model of (Decius et al., 2019) is adopted for this study because this model states that learning has no fixed sequence, and the learning cycle can begin and end at any point. In addition, the model assumes that all learning components are interconnected and complement each other. The components of IWL include experience/action, feedback, reflection, and intention to learn.

Competency development is conceptualized based on the combination of the two theories (Cheetham, & Chivers, 1996; Deist, & Winterton, 2005) and existing literature (Naim, & Lenka, 2017; Otoo, 2019; Rowold, & Kauffeld, 2008; Salman et al., 2020), identifying the competencies that capture actual change in individual competency levels: personal, professional, and social competencies. In this sense, the model considers knowledge (*savoir*), skills (*savoir-faire*), and knowing how to be (*savoir-etre*) from the French approach Vargas-Halabí, Mora-Esquivel, & Siles

(2017), similarly to knowledge, skills, and attitudes from the North American approach KAS (Le Deist and Winterton, 2005).

Employability is conceptualized using the model developed by Heijde and Van Der Heijden (2006), which is used in the proposed study, as it measures all aspects of competencies including metacompetencies, behavioral competencies, and generic competencies under the heading occupational expertise and optimization. It also includes social capital under the heading occupational expertise, which is explained by social recognition by a key person.

Thus, the objective of the study is to examine the impact of IWL on employability with the mediating role of competency development among financial sector employees in Bhutan. The various changes in working life pose challenges to employees of all ages, both in terms of informal learning at work and competence development. Employees need to be competent not only to give the company a competitive advantage, but also to be prepared to meet changing work demands.



## CHAPTER III

### RESEARCH DESIGN AND METHODOLOGY

Research design is the conceptual structure within which research is conducted; it represents the blueprint for collecting, measuring, and analyzing data (Kothari, 2004). The research design is a general plan of how one will proceed in answering the research questions (Saunders, Lewis, & Thornhill, 2009). This chapter consists of:

#### **Research Approach**

1. Research Approach
2. Time Frame
3. Research Instrument
4. Measurement of Variables
5. Stage I Pre-Test
6. Stage II Pilot Test
7. Data Collection and Analysis
8. Sampling and Population
9. Reliability and Validity
10. Chapter Summary

This study uses a quantitative research method (Creswell & Clark, 2007). Quantitative data are used to answer the primary question in a correlational design, and qualitative data are used to explain the mechanisms associated with the predictor and outcome variables. In this study, a survey is conducted to gather information on the impact of IWL on competency development and employability.

It followed by a semi-structured interview with ten participants. Therefore, this method can be called a sequential explanatory Quasi-Mixed design. In a quasi-mixed design, two types of data are collected (QUAN, qual) with little integration of the two types of findings or conclusions from the study (Tashakkori, Johnson, & Teddlie, 2020).

The purpose of the follow-up surveys is to interpret and illustrate the results of the quantitative data (J. W. Creswell, 2009). The intent is to first test the relationship between IWL and Competency Development and Employability within a large sample and then to elaborate and illustrate these findings in the qualitative phase using a few cases (J. W. Creswell, 2009). Due to the timing of the two consecutive data collection phases, the survey responses were analyzed first. From the data collected and observations made, conclusions were drawn based on logical inferences using a deductive process (Ghuri, Grønhaug, & Strange, 2020). The details of the research design used are explained below.

### **Research Approach**

The study took a deductive approach since the study is initiated by theories. The researcher developed a relationship between studied variables based on existing theories and prior studies (literature). Then the researcher deduced hypotheses from the literature, which was subject to empirical testing and thus was either accepted or rejected (Ghuri, Grønhaug, & Strange, 2020).

With the before said approach, the study used both quantitative and qualitative data collection method, (J. W. Creswell & Creswell, 2017). The reason for using these two methods of data collection is explained further in detail.

Research designs are procedures for collecting, analyzing, interpreting, and reporting data in research studies. Research depends on timing, weighting, blending, and theory building (Creswell & Plano Clark, 2007; Saunders et al., 2009). Timing refers to when the data are analyzed and interpreted rather than when the data are collected, although these time points are often related. Weighting refers to the relative importance or priority of the quantitative and qualitative methods in answering the study questions. This choice is also referred to as a "prioritization decision." Blending is the explicit linking of the two data sets. Conceptually, there are three general strategies for blending quantitative and qualitative data.

The two types of data can be merged, one can be embedded in the other, or they can be connected. The fourth factor, theorization, refers to the theoretical perspective that guides the entire design. Morse (1991) explains this as the study taking an inductive approach, a deductive approach, or a combination of both. Related

to this is the question of whether one will conduct a qualitatively oriented study, a quantitatively oriented study, or an equally mixed-methods study.

In the proposed study, both quantitative and qualitative data were collected. They were collected consecutively. The theoretical drive used in the proposed study is a post positivist worldview that calls for quantitative priority (Morse, 1991). The use of both types of data collection methods is considered because its two-stage structure makes it easy to implement, as the researcher collects two different types of data in separate stages and collects only one type of data at a time. This means that a single researcher can carry out this design and the final report can be written in two phases, making it easier to write and providing a clear delineation for the reader.

While this design requires a large amount of time to complete the two phases, the multiphase investigations that allow the researcher to explain or extend the quantitative results outweigh its limitations. In conjunction, the subsequent semi-structured interview allows for a better assessment of the extent to which the research findings can be trusted and what conclusions can be drawn by addressing "a range of confirmatory and exploratory questions using both quantitative and qualitative approaches to data collection." (John W Creswell, & Creswell, 2017; Morse, 1991; Saunders et al, 2009; Schoonenboom, & Johnson, 2017)

For the above reasons, quantitative data were collected in the first phase of this study. In the second phase, the results of the quantitative portion were discussed with senior executives consisting of the Deputy CEO, Vice-President, Chief Human Resource Officers, and Chief Strategy and Information Officer to determine whether informal workplace learning, which the quantitative results indicated was related to the acquisition of learning outcomes, was also perceived as relevant. (J. W. Creswell, & Plano Clark, 2007, p. 108). The research has a core quantitative component with a complementary qualitative component. Integration is accomplished by combining the quantitative results with the qualitative interviews (J. W. Creswell, & Plano Clark, 2007).

The researcher integrates the two sets of results and draws an integrated conclusion about how the qualitative results explain and extend certain quantitative results. This is the integration link that connects the initial quantitative results to the subsequent qualitative data collection. Although the study collects both QUAL and



QUAN data, there is no real integration of the information in a meaningful way because the study focuses more on the QUAN findings of the relationship between informal workplace learning, employability, and the mediating role of Competency Development. Therefore, this study uses a Quasi-Mixed methodological design because there is no real integration of the QUAN and QUAL results.



**Figure 7 A sequential explanatory Quasi-Mixed method design**

**Source:** Tashakkori, Johnson, & Teddlie, 2020, p. 127

### **Time Frame**

The duration of data collection of this study lasted for four months. It started on May 22<sup>nd</sup>, 2021 and ended on August 22<sup>nd</sup> 2021. For the qualitative phase the interviews were conducted through Watts app video call. The interviews started from October 15<sup>th</sup> and ended on November 23<sup>rd</sup>, 2021. Each interview lasted for a minimum of 45 minutes.

### **Research Instrument**

This study adapted the instruments form previous study and modified to suite the present study. The research instrument has six parts: Part A collected the Demographic information of the respondents. Part B measured the Informal Workplace Learning adapted from Decius et al. (2019) , Part C Measures Competency Development adapted from Naim and Lenka (2017), Part D measured the Employability adapted from (B. I. Van der Heijden et al., 2018), part E measure the Learning Goal Orientation (LGO) adapted from (Decius, Schaper, & Seifert, 2021) and finally the part F measured the Self-Directed Learning Orientation (SDLO) also adapted from (Decius et al., 2021).

Since the original questionnaires were used specifically for blue color workers. Therefore, the questions were restructured to be suitable for bank employees. In this study, the same six-point Likert scale was used for all items to avoid cognitive overload of participants and to ensure good data quality (Doering and Bortz 2016): 1 = Do not agree at all, 2 = Largely not agree, 3 = Rather not agree, 4 = Rather agree, 5 = Largely agree, 6 = Fully agree.

The mean values of the six-point Likert scale items were interpreted as follows:

The score 1-1.8 means do not agree at all

The score 1.9-2.6 means largely not agree

The score 2.7-3.4 means rather not agree

The score 3.5-4.2 means rather agree

The score 4.3-5.0 means largely agree

The score 5.1-5.8 means fully agree

The study followed a stepwise approach to develop and validate the instrument, including pretest, pilot test, and field study. In the pretest, content validity, face validity, and criterion validity are obtained from the corresponding expert. In the pilot study phase, the pilot study data were collected, and the reliability and construct validity were tested.

### **Measurement of Variables**

The proposed study has used the existing questionnaire items from published prior studies. The scales were free to use and required no permission. The scales were modified based on the fit of it to financial sector employees.

#### **1. Part A Demographic Information**

The first part of the instrument collected the demographic information of the employees including their gender, designation, experience, age, and the organization they belonged to.

#### **2. Part B the Informal Workplace Learning (IWL) Scale**

The Decius et al. (2019) short scale was used to measure informal learning in the workplace. The scale covers each of the eight factors of the IWL octagon model consisting of 24 items. The scale was free to use; therefore, no

permission was required. This scale was selected because it was developed based on the IWL octagon model. However, the items in the scale were rephrased to match the banking sectors. The scale consists of eight factors (Trying and Applying own ideas, Model Learning, Direct Feedback, Vicarious Feedback, Anticipatory Reflection, Subsequent Reflection, Extrinsic Intent to Learn and Intrinsic Intent to Learn) each with three items.

### **3. Part C Competency Development**

Competence development is conceptualized as the improvement of employees' professional, personal, social, value, and ethical competencies. To measure competence development, a 15-item scale was adopted from Naim,& Lenka (2017), reflecting the three dimensions of professional competence development, personal competence development, and social competence development. The first factor professional competence consists of six items, the second factor personal competence consists of four items, and the third factor social competence consists of five items.

### **4. Part D Employability**

Employability was measured using the shortened, 22-item self-report scale by (B. I. Van der Heijden et al., 2018). The scale consists of four factors Occupational Expertise (four items), Anticipation and optimization (four items), Personal Flexibility (five items) and Corporate Sense (four items). However, based on the experts' feedbacks and the Item Objective Congruence reports one item: "How would you rate the quality of your skills overall?" had to be removed. Other few items that were in question format had to be changed to statements based on the experts' comments.

### **5. Part E Learning Goal Orientation (LGO)**

To operationalize learning goal orientation, the study used Walle's (1997) scale, which originally consisted of six items but was later reduced to five by (Decius et al., 2021). The scale consists of five items. The item "For me, development of my work ability is important enough to take risks." was dropped because employees are not allowed to take many risks in their banking sector and risk taking is often sanctioned. Moreover, the discriminatory power (i.e., the item-total correlation corrected) of this item was also the lowest in previous studies (Decius et al., 2021).

## 6. Part F Self-Directed Learning Orientation (SDLO)

The study used a subset of the items from Raemdonck et al.'s (2014) Self-Directed Learning Orientation Scale and selected those items that covered the self-directed approach aspect of the construct (Decius et al., 2021). The three items are: "I take learning opportunities immediately to achieve my goals," "If I want to do a work-related learning activity, I will do it no matter what the odds are," and "If I want to learn something new for my job, I always find a way to learn."

### Stage 1 Pretest

The first phase includes content validity analysis and testing the instrument. Since the scales were modified based on the fit of it to financial sector employees, the original validity and reliability may not hold for the new scale (Creswell, 2009, p. 150).

#### 1. Validity

Validity indicates the extent to which an instrument measures what it is supposed to measure. There are three main types of validity: content validity, criterion-related validity, and construct validity (Kothari, 2004, p. 73). Content validity means whether the items measure the content they are intended to measure (J. W. Creswell, 2009, p. 141). This is to ensure that the survey instrument intended to measure informal workplace learning, Competency Development and employability contains all essential items and excludes objectionable items within a given construct domain (Boudreau, Gefen, & Straub, 2001).

There are two approaches in determining content validity, namely the judgmental and statistical approaches. The judgmental approach involves a literature review and subsequent evaluation by experts or a panel. Item validation is based on a high degree of agreement among expert panels or judges on the items in question; therefore, it is judgmental in nature (Boudreau et al., 2001). The empirical or quantitative approach to content validity, on the other hand, involves estimating the statistical validity ratio.

The expert judgment approach was used to assess content validity. Five experts (two chief executive officers from the banking sector and three academics) were asked to judge each item as to whether it really measured the

expected attribute. The Item Objective Congruence (IOC) Index by Hambleton, 1978, was used as the basis for screening item quality. For each item, experts were asked to determine the content validity score by assigning the value:

The score = 1 if the expert is sure that this element really measured the attribute. The score = -1 if the expert is sure that this item does not measure the attribute. The score = 0 if the expert is not sure whether the item measures the expected attribute or not (to what extent it measures the content area is unclear) for each target. The items that had a score of less than 0.5 were revised. In contrast, the items that had a score greater than or equal to 0.5 were deferred (see Appendix V).

**Instrument Testing:** A pre-test of the resulting instrument was conducted with ten respondents. Five respondents were from Banking industries comprising of (IT officer, Chief Credit officer, two Human resource manager and one deputy CEO) and five academics and researchers. The respondents were also asked to determine whether the questions were grammatically correct. Based on the feedbacks received statements in the questions were re structured and corrections were made.

The suggestions that were provided by the respondents regarding the rewording and modifying of the items were all implemented at this stage and that is reflected in the pilot questionnaire.

### **Stage 2 Pilot Test**

The final phase of the development of the instrument was a pilot test of the questionnaire with respondents from the banking sector in other regions (dzongkhags). The main objective of the test was to ensure that the scales have a reasonable level of reliability. The pilot test also provides an estimate of actual response rates. In addition, the pilot test also helps to identify the difficulties that respondents may have in completing the questionnaire.

The final questionnaire, developed after incorporating feedback from the pretest, was used in this phase. It consists of six parts, which have already been explained in detail above. Three additional questions were asked to determine if respondents understood the questionnaire. The four questions were 1) Are the questions understandable? 2) How long did it take the respondent to complete the questionnaire? 3) Is the layout of the questions acceptable?



The pilot test was carried out with convenience sample of 30 respondents using the snowball sampling method in the month of March 2021. All 30 participants responded, hence a response rate of 100 percent. After the completion of pilot test, the questionnaire was submitted to the Universities Institutional Review Board, Naresuan University Institutional Review Board (NUIRB), for ethical review. The final questionnaires were distributed after receiving the certificate of approval from NUIRB.

### **1. Construct Validity**

Construct validity refers to whether items measure hypothetical constructs or concepts. Constructs very rarely exist independently because the human brain is not a simple machine. It consists of an interconnected network of emotions, mind, and senses. Any measurement instrument must be able to untangle these complex interactions and determine that the measurement instrument is only testing the desired construct. Construct validity is defined as "the degree to which a test measures what it purports to measure" (J. D. Brown, 2000). In other words, it can be understood as the extent to which a measurement (questionnaire) used actually tests in reality the hypothesis or theory it measures. Construct validity is intended to determine whether the results of a particular test actually predict the theoretical characteristic it purports to measure (Ginty, 2013). There are two subsets of construct validity: convergent construct validity and discriminant construct validity.

Discriminant validity is the extent to which a latent variable discriminates from other latent variables (e.g., social skills, self-esteem). If it does not, then the validity of the individual indicators and the construct is questionable (Fornell, & Larcker, 1981). In short, discriminant validity (or divergent validity) tests whether constructs that should have no relationship have no relationship.

Convergent validity refers to the extent to which two measures of constructs that theoretically should be related are actually related (Ginty, 2013). The convergent and discriminant validity of the instrument was tested through correlational analysis. The results of the pilot test indicate that the values of the overall correlation of the corrected items ranged from 0.32 to 0.819, e.g.,  $< 90$  (Kline, 2015); thus, the validity of this questionnaire is accepted. The pilot test showed acceptable validity for the use of this questionnaire in the main study.

**Table 5 Correlations Table**

	TAI	ML	DF	VF	AR	SR	EIL	IIL	PCD	PrCD	SCD	OE	AO	PF	CS	LGO	SDLO
TAI	1	0.202	0.285	0.206	0.306	0.221	-0.003	0.047	.371*	0.256	0.243	-0.095	0.323	0.007	0.13	0.06	0.202
ML	0.202	1	.418*	.703**	.457*	.503**	0.19	.440*	.443*	.609**	.506**	.538**	.603**	.474**	.417*	.566**	.386*
DF	0.285	.418*	1	.605**	.444*	.560**	0.3	0.076	.478**	0.285	0.272	0.258	.408*	0.227	0.244	0.242	.367*
VF	0.206	.703**	.605**	1	.648**	.693**	0.283	0.359	.459*	.410*	.444*	0.33	.519**	0.315	0.278	.450*	.479**
AR	0.306	.457*	.444*	.648**	1	.607**	.373*	.568**	.651**	.567**	.691**	.388*	.636**	.490**	.500**	.444*	.666**
SR	0.221	.503**	.560**	.693**	.607**	1	.424*	.515**	.534**	.550**	.565**	.517**	.545**	.604**	.503**	.491**	.594**
EIL	-0.003	0.19	0.3	0.283	.373*	.424*	1	.615**	.453*	0.293	.427*	0.263	0.284	.434*	.388*	.379*	.422*
IIL	0.047	.440*	0.076	0.359	.568**	.515**	.615**	1	.581**	.676**	.695**	.640**	.693**	.631**	.677**	.607**	.683**
PCD	.371*	.443*	.478**	.459*	.651**	.534**	.453*	.581**	1	.801**	.694**	.613**	.656**	.493**	.556**	.383*	.491**
PrCD	0.256	.609**	0.285	.410*	.567**	.550**	0.293	.676**	.801**	1	.732**	.814**	.721**	.669**	.658**	.482**	.520**
SCD	0.243	.506**	0.272	.444*	.691**	.565**	.427*	.695**	.694**	.732**	1	.738**	.662**	.731**	.768**	.472**	.711**
OE	-0.095	.538**	0.258	0.33	.388*	.517**	0.263	.640**	.613**	.814**	.738**	1	.667**	.793**	.671**	.453*	.525**
AO	.323	.603	.408	.519	.636	.545	.284	.693	.656	.721**	.662**	.667**	1	.657**	.637**	.575**	.664**
PF	0.007	.474**	0.227	0.315	.490**	.604**	.434*	.631**	.493**	.669**	.731**	.793**	.657**	1	.733**	.418*	.519**
CS	0.13	.417*	0.244	0.278	.500**	.503**	.388*	.677**	.556**	.658**	.768**	.671**	.637**	.733**	1	.492**	.600**
LGO	0.06	.566**	0.242	.450*	.444*	.491**	.379*	.607**	.383*	.482**	.472**	.453*	.575**	.418*	.492**	1	.710**
SDLO	0.202	.386*	.367*	.479**	.666**	.594**	.422*	.683**	.491**	.520**	.711**	.525**	.664**	.519**	.600**	.710**	1

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**Source:** Developed by the Researcher

## 2. Reliability

Measuring constructs is extremely difficult because they are multidimensional and complex (Kothari, 2004). Therefore, it is not enough to test only the validity of the scale. We must also test these scales to ensure that they consistently and accurately measure the intended construct (i.e., that the scales are "reliable"). Reliability concerns the extent to which a measurement of a phenomenon produces stable and consistent results (Carmines, & Zeller, 1979). Cronbach's alpha ( $\alpha$ ) (1951) is a measure of the reliability or internal consistency of a scale. This technique requires a basic conceptual understanding of reliability and, in particular, internal reliability.

The instrument's reliability was verified through Cronbach's alpha, by calculating the overall Cronbach's alpha of the pilot test data. The alpha value of Informal Workplace Learning was 0.91, Competency Development was 0.94, Employability was also 0.94, Learning Goal Orientation was 0.89 and for Self-Directed learning orientation was 0.81. Typically, items having fairly large coefficients of 0.70 or above are considered adequate (Cronbach, 1951). However, for a pilot study it is suggested that reliability should be equal to or above 0.6 (Straub, Boudreau, & Gefen, 2004).

Nevertheless, the variables used in this study were reliable, with coefficient alpha values ranging from 0.81 to 0.94 which exceeded the minimum acceptable level of 0.70. The results of the pilot test indicated that the measured variables for each construct in the questionnaire had acceptable reliability level. In accordance with the results of validity test, IOC test and reliability test of pilot data, the revised questionnaire was used as the research instrument for this study.

**Table 6 Cronbach's alpha for five variables**

Variables	Cronbach's alpha	Number of Items
Informal Workplace Learning	0.91	24
Competency Development	0.94	15
Employability	0.94	17
Learning Goal Orientation	0.89	5
Self-Directed learning orientation	0.81	3

**Source:** developed by the author

### **Data Collection and Analysis**

The underlying study required the collection of both quantitative and qualitative data. As mentioned earlier, both types of data were collected. The study followed a deductive theoretical approach with a core quantitative component followed by an additional qualitative component (John W Creswell, & Creswell,

2017, p. 105). To achieve the objectives of the study using quantitative data, both primary and secondary data were collected. Primary data is the data that is collected by the researcher for the first time, while secondary data is the data that is newly analyzed that has already been collected for another purpose (Saunders et al., 2009, p. 256). Secondary data include both raw data and published summaries, such as payroll information, copies of letters, and meeting minutes.

### **1. Quantitative Data:**

Quantitative data refer to any numerical data that can be quantified to answer the research question(s) and achieve the objectives of the study (Saunders et al., 2009, p. 141). They can range from simple counts such as frequency of occurrences to more complex data such as test scores, prices, or rental costs. Quantitative data can be both primary and secondary. In the current study, both primary and secondary data are collected.

For the proposed study, the quantitative primary data were collected following the survey method using self-administered questionnaires Saunders et al. (2009, p. 362) in the capital city (Thimphu). The survey questions were designed based on the theoretical framework. The survey method was chosen because the survey strategy is best suited in the deductive approach. It is a popular and widely used strategy in business and management research and is most commonly used to answer the who, what, where, how much, and how much questions (Saunders et al., 2009, p. 144). This method also allows for the collection of a large amount of data from a large population in an extremely economical manner. In addition, the survey strategy allows for the collection of quantitative data that can be analyzed quantitatively using descriptive and inferential statistics. All questionnaires related to quantitative data were in closed-ended form.

For the study, all employees (except support staff) of five financial institutions were surveyed. The researcher distributed the questionnaires via email and completed them online to minimize respondent attrition and ensure uniformity and external validity as an additional measure. The researcher personally handed paper questionnaires to respondents who were unable to respond to emails. In addition, if respondents were unable to provide the exact number of years of experience, secondary data were analyzed to obtain this information.

## 2. Analysis of quantitative Data

Quantitative primary data were analyzed using either SPSS (AMOS). Both descriptive and regressive analysis techniques were used to determine the results. Specifically, confirmatory factor analysis (CFA) and structural equation modeling (SEM) were used to determine the theoretical relationship with the empirical data. Confirmatory factor analysis was used to test whether latent variable measurements were consistent with the researcher's understanding of the nature of that construct (or factor). Thus, the goal of confirmatory factor analysis was to test whether the data fit a hypothesized measurement model based on theory and previous analytic research. Therefore, CFA was conducted first and then integrated into the structural model (SEM) (Schumacker, & Lomax, 2004, p. 167).

According to Schumacker, & Lomax (2004, p. 171) there are few measures that needs to be completed while conducting CFA:

*Model Specification:* Model specification is a necessary first step in the analysis of a confirmatory factor model. Many different relationships among a set of variables can be represented with many different parameters estimated. Therefore, many different factor models can be postulated based on different hypothesized relationships between the observed variables and the factors. The decision to include a particular factor in a model can be based on sound theory and previous research.

*Model Identification:* This step confirms that there is a unique solution for all free parameters in the given model. If the model has an unbounded number of solutions, then the model is not sufficiently identified (Schumacker, & Lomax, 2004, p. 172). Therefore, model estimation cannot be performed if the model is not identified, as the model estimate may not converge or reach a solution.

*Model Estimation:* Having solved the identification problem, the next step is to estimate the parameters of the specified factor model. This means estimating the model parameters and creating a fitting function.

*Model Testing:* The fourth step is the model testing phase. In this phase, the confirmatory factor models are analyzed to see if the sample variance-covariance data fit the specified model. If the fit of the model is good, the specified model is supported by the sample data. If the fit of the model is not so good, the specified



model is not supported by the sample data and the researcher usually needs to specify the model to get a better fit.

*Model modification:* If the model does not match the data, the model must be modified or re-specified, with the researcher deciding how to delete, add, or change parameters in the model. Typically, the researcher performs a specification search to find a better-fitting mode.

### **3. Qualitative Data**

The use of qualitative data was primarily to explain initial quantitative results. The qualitative methods allow the quantitative results to be explained in depth (John W Creswell & Creswell, 2017, p. 100). In addition, this method adds value in the field of business by increasing the validity of the results, providing information for the collection of the second source of data, and assisting in the creation of knowledge (Harrison, Reilly, & Creswell, 2020).

For the purposes of current study, the researcher used semi-structured interviews (Saunders et al., 2009, p. 322). The semi-structured interviews were developed by conducting a pilot interview with a random sample of four participants. This served to refine the interview questions. Such unstructured in-depth interviews permitted the researcher to develop different themes and therefore conduct a thematic analysis or content analysis of these data.

The interview protocol for the semi-structured interviews consisted of three parts. The first part focused on gathering demographic information. The second part contained more general questions about IWL to the senior managers. Finally, the third part related to the theoretical framework of IWL. After discussing the individual IWL components, the results of the quantitative part were discussed with the respondents to determine whether the IWL components were related to competency development and whether they considered them relevant from their perspective.

### **4. Analysis of qualitative data**

For the analysis of the qualitative data, all interviews were transcribed verbatim. Thematic coding was conducted to identify sections of text that related to each of the eight components of informal workplace learning (Tashakkori, Teddlie, & Teddlie, 1998). The information summarizing the data related to perceived relevance was used to answer the research question. Analysis of the qualitative data was

conducted manually without the use of software given the small sample size (Saunders et al., 2009, p. 481).

### **Sampling and Population**

The country's employment rate is estimated at 96.6%. Of the total employed population, the highest percentage is employed in agriculture (54.0%), while the lowest percentage is in the industrial sector (11.5%). The percentage of the service sector is 34.5%. Thimphu Dzongkhag (82.3%) has the highest percentage of employees in the service sector (NSB, 2017, p. 22).

The financial sector, especially the banking sector, has the largest number of employees compared to all other service sectors, so for this study we need to examine employees in the service sectors. Banking institutions, which essentially control the financial sector in developing countries like Bhutan, face a dynamic and competitive environment due to global interconnectedness. While technological innovations create more opportunities to deliver financial services, it also creates the need for employees to continuously learn and develop their competencies to meet changing demands (Castellanos, & Sahoo, 2010).

This is evident from the Covid 19 scenario in Bhutan where it was clear that employees in banks frequently encountered changes in the form of working from home and increased digitized transactions, which also led to a high volume of enquiry calls. As a result, banks had to create a new department called "Command Call Center" (Subba, 2020). Therefore, such sector becomes a perfect place to study Informal Workplace Learning where they do not have the time to attend formal training programs in such situations. Finally, the validity and reliability test were conducted before analyzing the final results.

#### **1. Sampling for Quantitative Data**

Henry (1990) argues that random sampling allows for greater overall accuracy than a census. The lesser number of cases for which data must be collected means that more time can be allocated in developing and testing the means to collect those data, and once the researcher has collected the data, proportionally more time can be spent reviewing and testing the data for accuracy prior to analysis (Tashakkori et al., 2020, p. 244). In addition, the questionnaire was completed online using a

Google form, so the sample for quantitative data collection was based on a proportional stratified random sample (Kothari, 2004, p. 63).

Stratified random sampling is a method used when the researcher wants the sample to represent population in terms of certain characteristics, such as scores, divisions, and functions. It is used when the researcher wants different subgroups of a population to be represented (Tashakkori et al., 2020, p. 154). Such a case is known as stratified random sampling, which combines stratified sampling with random sampling. The snowball method was used to draw the samples. The link for the google forms were shared to the CEO of the banks and it was forwarded to the employees.

The sample size was calculated based on the minimum sample size required to conduct the SEM analysis. Unfortunately, although determining an appropriate sample size is a critical issue in SEM, there is no consensus in the literature on what the appropriate sample size should be for SEM. Some studies state that a small sample can be used to analyse simple SEM models (Hoyle, 1999; Hoyle, & Kenny, 1999; Marsh, & Hau, 1999), but typically 100 to 150 is considered the minimum size for conducting SEM (Tinsley and Tinsley, 1987; Anderson, & Gerbing, 1988; Ding, Velicer, & Harlow, 1995; Tabachnick, & Fidell, 2001).

Sample size is often determined by the number of variables observed. For normally distributed data, Bentler, & Chou (1987) suggest that a ratio of 5 cases per variable is sufficient when latent variables have multiple indicators. Therefore, with 64 observations and five latent variables, a sample size of 345 was used to conduct the SEM analysis.

For this study, all financial institutions (banks) located in Thimphu were selected because the capital city has the highest proportion of employees in the financial services sector (NSB, 2018, p. 18).

**Table 7 Sample and population sizes using Stratified Random Sampling**

<b>Financial Sectors in Thimphu, Bhutan</b>	<b>Population Size in Head Office (HO) and Branch</b>	<b>Total Population Size</b>	<b>Sample Size with 5% margin of error</b>
Bank of Bhutan	(HO-200, Branch-208)	408	140
Bhutan National Bank	(HO265, Branch-67)	332	114
Bhutan Development Bank Ltd	(HO-31, Branch-41)	72	24
Druk Punjab National Bank Ltd	(HO-38, Branch-37)	75	25
Tashi Bank Ltd	(HO-79, Branch-43)	122	42
<b>Total</b>		<b>1009</b>	<b>345</b>

**Source:** Developed by the researcher

## **2. Sampling for Qualitative Data**

Purposive sampling is a common sampling method for the supplementary qualitative phase. Therefore, ten senior executives consisting of four deputy CEOs, one vice president, and five chief human resource officers were selected. They were purposively selected from the five banking institutions for the current study. These participant tribes were selected based on their explanatory power and represent the quantitative samples (John W Creswell, & Creswell, 2017, p. 107).

**Table 8 Sample and population sizes using Purposive sampling**

<b>Respondent</b>	Chief HRO	Strategy and Information Officer	Total
<b>Samples</b>	5	5	10

**Source:** Developed by the researcher

### **Reliability and Validity**

For the proposed study, the existing questionnaire items from published previous studies were used. The scales were modified and combined with other existing scales. However, the existing validity and reliability may not be applicable to the new scale (Creswell, 2009, p. 150). Therefore, the study tested three traditional forms of validity, namely: content validity, predictive validity, and construct validity. Content validity means whether the items measure the content they are intended to measure, predictive or concurrent validity refers to whether the scores predict a criterion, and construct validity means whether the items measure hypothetical constructs or concepts (J. W. Creswell, 2009, p. 141).

In addition, the reliability of the scale was also investigated. A reliable instrument is one that functions in a consistent and predictable manner (DeVellis, 2016). Therefore, reliability tests were conducted, such as measures of internal consistency, i.e., whether item responses are consistent across constructs, and test-retest correlations, i.e., whether scores are stable over time when the instrument is used a second time (J. W. Creswell, 2009, p. 141).

**Internal Consistency** - To measure how closely related the items of the research questions representing each of the independent and dependent variables are as a group, Cronbach's alpha was used. The value of Cronbach's alpha ranges from 0 to 1, with 1 being the highest value and signifying perfect internal consistency. A Cronbach's alpha with a value greater than 0.6 is considered reliable compared to values less than 0.6 (Straub et al., 2004).



## Chapter Summary

This study uses the sequential explanatory quasi-mixed design method. Two types of data are collected (QUAN, qual), with little integration of the two types of findings from the study (Tashakkori, Johnson, & Teddlie, 2020). The follow-up survey interprets and illustrates the results of the quantitative data. The research approach used in this study is a deductive approach because the study is driven by theories. The theoretical drive used in the proposed study is a post positivist worldview that calls for quantitative priority (Morse, 1991). The use of both types of data collection methods is considered because its two-stage structure makes it easy to implement, as the researcher collects two different types of data in separate phases and collects only one type of data at a time.

In the first phase of this study, quantitative data was collected. In the second phase, the results of the quantitative portion were discussed with senior executives consisting of the Deputy CEO, Vice President, Chief Human Resource Officers, and Chief Strategy and Information Officer to determine if informal workplace learning, which the quantitative results indicated was related to the acquisition of learning outcomes, was also perceived as relevant. (J. W. Creswell & Plano Clark, 2007, p. 108). The study has a core quantitative component and a complementary qualitative component. Integration is achieved by combining the quantitative results with the qualitative results.

The proposed study used the existing questionnaire items from published previous studies. The scales were free to use and did not require approval. The scales were modified based on their suitability for financial sector employees (J. W. Creswell, & Plano Clark, 2007). The questionnaire was pretested, measuring content validity. Validation of the items was conducted by five experts from academia and practice. In addition, the instrument was tested by ten respondents to ensure grammatical correctness. The final stage of the development of the instrument was a pilot test of the questionnaire with 30 respondents from the banking sector in other regions (Dzongkhags).

The main objective of the test was to ensure that the scales had a reasonable level of reliability. For the proposed study, the quantitative primary data were collected using the survey method using self-administered questionnaires by Saunders

et al. (2009, p. 362) in the capital city (Thimphu). For the study, all employees (except support staff) of five financial institutions were surveyed. The researcher distributed the questionnaires via email and completed them online to minimize respondent attrition and ensure uniformity and external validity as an additional measure.

The use of qualitative data was primarily to explain initial quantitative results. The semi-structured interviews were developed by conducting a pilot interview with a random sample of four participants. This served to refine the interview questions. The interview protocol for the semi-structured interviews consisted of three parts. The first part focused on gathering demographic information. The second part included more general questions about IWL to the senior managers. Finally, the third part related to the theoretical framework of IWL. To analyze the qualitative interviews, thematic coding was conducted to identify sections of text that related to each of the eight components of informal workplace learning.

The sample size was calculated based on the minimum sample size required to conduct the SEM analysis. The sample was calculated using the stratified random method representing each bank, and samples were drawn using the snowball method. Therefore, with 64 observations and five latent variables, a sample size of 345 was used to perform the SEM analysis. For this study, all financial institutions (banks) located in Thimphu were selected because the capital city has the highest proportion of employees in the financial services sector. Purposive sampling was used for the qualitative phase. Ten senior executives, consisting of four deputy CEOs, one vice president, and five human resource managers, were selected. They were purposively selected from the five banking institutions for the current study. These participant bases were selected for their explanatory power and represent the quantitative sample.

## **CHAPTER IV**

### **ANALYSIS AND RESULTS**

This chapter outlines the empirical analysis using SPSS 18.0 and AMOS graphics. As the preliminary analysis the general information of the respondents, the descriptive statistics, intercorrelations, reliabilities, common method bias of constructs and multicollinearity were derived from collected data are presented in the first part of this chapter. It also includes the findings of one-way ANOVA and independent sample t-test about the differences in responses for the variables. The central aim of this chapter is to identify the relationship between IWL and employability and explore the mediating role of competency Development. The chapter consist of following topics:

1. Demographic Information
2. Initial Examination of Survey Data
3. Descriptive Statistics
4. Confirmatory Factor Analysis
5. Validity and Reliability
6. Structural Equation Model Analysis
7. Model Test
8. Structural Equation Model Assessment and Hypotheses Testing
9. Results of Research Questions
10. Data Analysis Phase II Qualitative Methods
11. Thematic Analysis
12. Results of Data Analysis
13. Chapter Summary

### **Demographic Information**

The demographic information of the respondents comprises of gender, age, experience in the present job, designation, and the organization the respondents belong to see table below. This general information helps to identify the difference in terms of IWL, competency development and employability if any.

Out of 512 respondent's 46.1 percent were male and 53.9 percent were female, majority of the respondents (71.9 percent) were between the age group of 25 to 39. 15.4 percent belonged to the age group 40 to 60, 12.5 percent belonged to the age group 18 to 24 and only 0.2 percent that is one individual belonged to the age group 60 and above. In terms of Designation most of the respondent were Banking Assistant (40.8 percent) followed by Banking Officer (33 percent). 19.3 percent of respondents were Mangers and Assistant mangers, 29 percent were Head of the Departments and finally 1.2 percent were Chief Officers.

When it comes to organizations a good number (59.6 percent) of respondents were from the Bank of Bhutan Ltd, 15 percent were from Bhutan National Bank Ltd, 8 percent were from Bhutan National Bank Ltd, and another 8 percent from Druk Punjab National Bank Ltd. Lastly, Tashi Bank constituted 9.4 percent of the respondents. Regarding working experience 48.4 percent had a working experience of 0 to 5 years. 23 percent had a working experience of 6 to 10 years, 13.5 had a working experience of 11 to 15, 8 percent had a working experience of 16 to 20 and 7 percent had an experience of 21 years and above (see table 9).

**Table 9 Demographic Information of the Respondents**

<b>General Information</b>	<b>Category</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Gender</b>	Male	236	46.1
	Female	276	53.9
	<b>Total</b>	512	100.0
<b>Age</b>	18 to 24	64	12.5
	25 to 39	368	71.9
	40 to 60	79	15.4
	60 years and older	1	0.2
	<b>Total</b>	512	100.0
<b>Designation</b>	Chief Officer	6	1.2
	HOD	29	5.7
	Manger/Asst.Manger	99	19.3
	Banking Officer	169	33.0
	Banking Assistant	209	40.8
	<b>Total</b>	512	100.0
<b>Organization</b>	BOBL	305	59.6
	BNBL	77	15.0
	BDBL	41	8.0
	DPNBL	41	8.0
	T BANK	48	9.4
	<b>Total</b>	512	100.0
<b>Experience in your field</b>	0 to 5	248	48.4
	6 to 10	118	23.0
	11 to 15	69	13.5
	16 to 20	41	8.0
	21 and above	36	7.0
	<b>Total</b>	512	100.0

Source: Survey data, 2021



### **Initial Examination of Survey Data**

The quantitative data were prepared for further analysis using pre-tests to ensure that the data are normally distributed and are bias free. Data was collected through questionnaire survey from the banking sector in Bhutan in 2021. The second phase of the data was collected using semi structured interviews. Prior to SEM analysis, the survey data were subjected to an initial review:

#### **1. Check for missing Data**

Regardless of the effort involved in the survey, chances of missing data are always high. Missing data were removed from the sample by excluding the subjects. That is by deleting the data that was missing. This was done because there were only three cases with missing data. The original sample size was 515 and was later reduced to 512.

#### **2. Statistical normality test of variables**

Several statistical methods have been proposed to test the normality of data in many ways, but there is currently no good standard method. Visual examinations are useful for medium to large samples (such as  $n > 50$ ) but may not be suitable for small samples. Formal tests of normality, including the Shapiro Wilk test and the Kolmogorov-Smirnov test, may be unreliable on large samples (such as  $n < 300$ ) (H.Y. Kim, 2013). Therefore, using the skewness and kurtosis of the distribution, HY. normality of data was assessed. Kim (2013).

The table below (table 10) shows the statistical normality test results with the values for skewness and kurtosis. The measure of deviation of the distribution of a variable from a symmetry is known as skewness (Ho, 2006). Kurtosis, on the other hand, is a measure of peakedness or flatness of the distribution of a variable. The critical values for accepting the null hypothesis must be between -2 and +2 for absolute skewness and between -7 and +7 for absolute kurtosis (H.-Y. Kim, 2013). The table below shows a normal distribution of data with skewness ranging from -0.57 to -1.26 (SE =0.108) and kurtosis ranging from -0.05 to 2.86 (SE =0.215) for all variables.

**Table 10 Normality Test Results**

	Minimum	Maximum	Mean	Std. Dev	Skewness	Kurtosis
TAI	2.33	6.00	5.0638	0.76696	-0.575	-0.312
ML	1.00	6.00	5.1686	0.78555	-1.264	2.869
DF	1.00	6.00	4.8379	1.03954	-1.243	1.891
VF	1.33	6.00	5.0951	0.82660	-1.045	1.643
AR	2.00	6.00	5.1999	.72554	-0.743	0.282
SR	2.67	6.00	5.2754	.71171	-0.849	0.368
EIL	2.00	6.00	5.1608	.79022	-0.912	0.591
IIL	2.67	6.00	5.4108	.68172	-1.212	1.374
PCD	1.67	6.00	4.8187	.74430	-0.534	0.328
PrCD	1.25	6.00	4.9116	.80110	-0.810	1.046
SCD	2.40	6.00	5.0672	.71332	-0.724	0.454
OE	2.40	6.00	5.0796	.74510	-0.587	0.211
AO	2.50	6.00	5.0669	.71914	-0.418	-0.342
PF	2.80	6.00	5.2410	.66806	-0.635	-0.239
CS	2.50	6.00	5.3569	.63851	-0.967	0.866
LGO	3.00	6.00	5.2881	.63922	-0.690	0.028
SDLO	3.00	6.00	5.3477	.64395	-0.861	0.155

**Source:** Developed by the Researcher

### 3. Test for Multicollinearity

The chances of two independent variables being highly correlated may give rise to problems multicollinearity (Ho, 2006). The VIF (Variance Inflation Factor) was used to assess the inflation in parameter estimates that might be caused by collinearity between independent variables. This is also referred to as multicollinearity. In addition to the VIF, tolerances were also compared to identify multicollinearity.

The tolerance value of  $>0.10$  for each individual variable and the level of multicollinearity with a VIF value of less than 6 was considered acceptable according to Cohen (Cohen, et al., 2014). The value of tolerance for all the independent variables were above 0.10 and the VIF values for all the dependent variables were less than 6. The value of each independent variable is presented in the table below. For a detail information see (Table 11).

**Table 11 Tolerance and VIF**

Independent variables	Tolerance	VIF
TAI	.445	2.249
ML	.440	2.272
DF	.589	1.698
VF	.486	2.058
AR	.278	3.603
SR	.287	3.488
EIL	.510	1.962
IIL	.481	2.080
PCD	.253	3.949
PrCD	.228	4.394
SCD	.290	3.452
OE	.395	2.533
AO	.304	3.292
PF	.314	3.180
CS	.362	2.766
LGO	.445	2.249
SDLO	.616	1.624

**Source:** Developed by the Researcher

Kaiser-Meyer-Okline (KMO) was performed to check the adequacy of the samples for each variable. The KMO value was 0.956. KMO values change between 0 and 1. Value 0 indicates that the total partial correlation for the sum of correlations is large, but the correlation pattern is compact and thus indicates 1 near the reliable element. give. However, KMO values between 0.8 and 1 show that the samples are sufficient. A KMO value of less than 0.6 indicates that sampling is not appropriate and corrective action should be taken (Kaiser & Rice, 1974). Bartlett's test for sphericity yielded an approximate chi-square value of 24606.207 with 2016 degrees of freedom and a significance value of  $< 0.001$ , indicating appropriate factorization of the correlation matrix.

#### 4. Common Method Bias Test

Finally, the Harman test was performed for one factor to check for common method bias (CBM). The total variance for a single factor was 33.926 percent. If the total variance for a single factor is less than 50%, this indicates that the CMB does not affect the data and therefore the results (Podsakoff, & MacKenzie, 2003).

#### 5. Reliability and Alpha Value

The descriptive statistics and reliabilities were calculated to check the reliability of the measurement instrument used for survey response. The reliability of the variables is shown below (see table 12).

**Table 12 Alpha value of the variables**

Variable	Alpha	Mean	S.D	No of items
Informal workplace Learning	.94	5.15	0.59	24
Competency Development	.94	4.93	0.70	15
Employability	.95	5.18	0.60	17
LGO	.81	5.23	0.64	5
SDLO	.82	5.35	0.64	3

**Source:** Developed by the Researcher

In table 12, the alpha values of all latent variables are greater than 0.7. In general, reliability coefficients of alpha values close to 0.9 are considered "excellent," values around 0.8 are considered "very good," and values around 0.7 are considered "adequate" (Hair, Black, Babin, Anderson, & Tatham, 2006). The alpha values of all latent variables are within the acceptable range. The above table shows that the correlations between factors were very low ( $<.90$ ). This result shows that the discriminant validity is within an acceptable range (Hair et al., 2006).

The mean value of IWL was 5.15(Fully agree), which indicated that employees do learn informally at work. The mean value of competency development was 4.92 (Largely agree), which shows that IWL did lead to development of competency. According to the perpetual measure of the employees the mean value of employability was 5.18 (Largely agree) which depicts that employees do have employability competencies. Further, the mean value of LGO was 5.23 (Fully agree) which indicates that employees have a strong LGO. Finally, the mean value of SDLO was 5.35(Fully agree) demonstrating that employees were self-directed learners.

The mean values of these latent variables shows that employees highly indulged in IWL and has high competency development and employability. It also shows that employees were self-directed learners and has a high rate of learning goal orientation.

## **Descriptive statistics**

### **1. Independent Samples T-Test for Gender of Employees**

To test the difference between the mean score of male and female, a T-test with independent samples was performed. The results are significantly different in terms of skill development. Statistically, it tests the probability that both scores (male, female) are from the same population. Since the sig value of Levene's test was above 0.05, equal variance was assumed.

Significant difference between male and female were found for competency development ( $t=2.96$ ,  $p=0.003<0.05$ ), in the scores with mean score for male ( $M=5.03$ ,  $S. D=0.65$ ) was higher than female ( $M=4.84$ ,  $S. D=0.72$ ). The magnitude of mean difference was 0.181 with 95% confidence interval. However, no significant difference between male and female was found for IWL ( $t=-1.22$ ,



$p=0.22 \Rightarrow >0.05$ ), Employability ( $t=0.48$ ,  $p=0.63 \Rightarrow >0.05$ ), SDLO ( $t=1.83$ ,  $p=0.06 \Rightarrow >0.05$ ), LGO ( $t=1.60$ ,  $p=0.10 \Rightarrow >0.05$ ). The results of independent sample T test of Gender are shown in Table 13.

**Table 13 Result of independent sample T test for gender of employees**

Variables	Gender	Mean	S.D	F	T	p-value (2-tailed)
IWL	Male	5.11	0.59	0.04	-1.22	0.22
	Female	5.18	0.61			
CD	Male	5.03	0.65	2.89	2.96	0.003
	Female	4.84	0.72			
Emp	Male	5.20	0.57	2.80	0.48	0.63
	Female	5.18	0.64			
SDLO	Male	5.40	0.62	0.93	1.83	0.06
	Female	5.29	0.66			
LGO	Male	5.28	0.61	0.45	1.60	0.10
	Female	5.19	0.66			

Source: Developed by the Researcher

## 2. The result of one-way ANNOVA for Designation of the employees

One-way ANNOVA was conducted to reveal the difference in terms of IWL, competency development, employability, SDLO and LGO in terms of Designation of the employees. The Levene's test reported sig value  $>0.05$  for all variables. According to the results there was no significant difference on IWL ( $F=1.10$ ,  $p=0.35 \Rightarrow >0.05$ ), Competency Development ( $F=2.03$ ,  $p=0.08 \Rightarrow >0.05$ ), Employability ( $F=2.05$ ,  $p=0.36 \Rightarrow >0.08$ ), SDLO ( $F=1.68$ ,  $p=0.25 \Rightarrow >0.15$ ), and LGO ( $F=0.57$ ,  $p=0.68 \Rightarrow >0.05$ ). The scores for all the variables do not differ significantly irrespective of different designations, see table 14.

**Table 14 Results of one-way ANOVA for designation of employees**

<b>Variables</b>	<b>Designation</b>	<b>Mean</b>	<b>S.D</b>	<b>F</b>	<b>P-Value (2-tailed)</b>
IWL	Chief Officer	5.02	0.50	1.10	0.35
	HOD	4.94	0.59		
	Manager/Asst Manager	5.17	0.58		
	Banking Officer	5.18	0.57		
	Banking Assistant	5.14	0.63		
CD	Chief Officer	5.12	0.86	2.03	0.08
	HOD	5.19	0.51		
	Manager/Asst Manager	5.02	0.65		
	Banking Officer	4.89	0.69		
	Banking Assistant	4.87	0.74		
Emp	Chief Officer	5.71	0.39	2.05	0.08
	HOD	5.30	0.46		
	Manager/Asst Manager	5.19	0.57		
	Banking Officer	5.22	0.60		
	Banking Assistant	5.12	0.63		
SDLO	Chief Officer	4.72	0.83	1.68	0.15
	HOD	5.41	0.56		
	Manager/Asst Manager	5.40	0.65		
	Banking Officer	5.33	0.65		
	Banking Assistant	5.34	0.63		
LGO	Chief Officer	4.9	0.63	0.57	0.68
	HOD	5.26	0.45		
	Manager/Asst Manager	5.21	0.64		
	Banking Officer	5.20	0.66		
	Banking Assistant	5.25	0.63		

**Source:** Developed by the Researcher

### 3. One-way ANOVA for Number of years of experience in the current position

Levene's test yielded a sig value  $>$  of 0.05 for all variables except for competency development with sig value 0.02 and SDLO with sig value 0.04. Therefore, the results of Welch's test were considered. Because Glantz and colleagues recommend that the Welch test is preferable to the Brown-Forsythe test because it has higher power and keeps alpha at the desired level. They recommend Brown-Forsythe when the data are skewed (Glantz, & Slinker, 2001). The one-way ANOVA test of employee experience on IWL ( $F=3.71$ ,  $p=0.007 < 0.05$ ), competency development ( $F=2.85$ ,  $p=0.02 > 0.05$ ), and SDLO ( $F=4.3$ ,  $p=0.002 < 0.05$ ) showed a significant difference. In contrast, there was no significant difference in employability ( $F=1.82$ ,  $p=0.12 > 0.05$ ) and LGO ( $F=1.74$ ,  $p=0.14 > 0.05$ ) with 95 percent confidence interval.

Post- hoc comparison using the Games-Howell test for the variable IWL indicated that the mean score for experience between 0 to 5 years ( $M=5.10$ ,  $S.D.=0.61$ ) and 6 to 10 years ( $M=5.11$ ,  $S.D.=0.62$ ) was significantly different from 16 to 20 years ( $M=5.40$ ,  $S.D.=0.49$ ). whereas experience level of 11 to 15 years ( $M=5.23$ ,  $S.D.=0.48$ ) and 21 years and above ( $M=5.15$ ,  $S. D=0.65$ ) did not differ significantly. The magnitude of mean difference was -0.30 between 0 to 5 years of experience to 16 to 20 years, and 0.29 between 16 to 20 years of experience and 6 to 10 years. This indicate that employees with experience of 16 to 20 years scored high in IWL, followed by employees with 6 to 10 years of experience with 95% confidence interval.

Similarly, for the variable competency development the post-hoc comparison using the Games-Howell test indicate that the mean score for experience of 0 to 5 years ( $M=4.84$ ,  $S.D.=0.74$ ) was significantly different from experience of 16 to 20 years ( $M=5.14$ ,  $S.D.=0.52$ ). The magnitude of mean difference was 0.29 with 95% confidence interval. This signifies that those employees with experience of 16 to 20 years scored high on competency development.

Finally, one-way ANOVA test show a significant difference for the variable SDLO too. The post-hoc multiple comparison revealed that the mean score for experience of 0 to 5 years ( $M=5.30$ ,  $S.D.=0.66$ ) was significantly different from experience of 16 to 20 ( $M=5.65$ ,  $S. D=0.44$ ). The magnitude of mean difference was -0.33. Likewise, the mean score for experience of 6 to 10 years of experience ( $M=5.35$ ,

S. D=0.65) was significantly different from experience of 16 to 20 years. In addition, significant difference was also found between experience of 11 to 15 years (M=5.32, S. D=0.57) and 16 to 20 years. The mean difference was -0.31.

This shows that employees with 16 to 20 years of experience have the highest SDLO, followed by employees with 6 to 10 years of experience. Surprisingly, employees with 11 to 15 years of experience have a lower value than employees with 6 to 10 years of experience (M=5.35, S. D=0.65) with a confidence interval of 95%. This shows that employees with 16 to 20 years of experience score high on the SDLO.

**Table 15 Result of Welch Test of equality of mean**

Variables	Experience	Mean	S.D.	F	p-value (2-tailed)
<b>IWL</b>	0 to 5	5.10	0.61	3.71	0.007
	6 to 10	5.11	0.62		
	11 to 15	5.23	0.48		
	16 to 20	5.40	0.49		
	21 and above	5.15	0.65		
<b>CD</b>	0 to 5	4.84	0.74	2.85	0.02
	6 to 10	4.95	0.64		
	11 to 15	4.99	0.61		
	16 to 20	5.14	0.52		
	21 and above	5.06	0.82		
<b>Emp</b>	0 to 5	5.14	0.66	1.82	0.12
	6 to 10	5.19	0.59		
	11 to 15	5.19	0.52		
	16 to 20	5.31	0.47		
	21 and above	5.35	0.57		
<b>SDLO</b>	0 to 5	5.30	0.66	4.43	0.002
	6 to 10	5.35	0.65		
	11 to 15	5.32	0.57		
	16 to 20	5.64	0.44		
	21 and above	5.33	0.70		
<b>LGO</b>	0 to 5	5.20	0.65	1.74	0.14
	6 to 10	5.22	0.65		
	11 to 15	5.19	0.58		
	16 to 20	5.46	0.58		
	21 and above	5.22	0.62		

**Source:** Developed by the Researcher

The ANNOVA test for age could not be performed because there was only one employee belonging to the age group 60 plus. The next phase of analysis consists of structural analysis.

#### 4. One-way ANOVA of Organization

One-way ANNOVA was conducted to reveal the difference in terms of IWL, competency development, employability, SDLO and LGO among the banks. The Levene's test reported sig value  $>0.05$  for all variables. According to the results there was no significant difference on IWL ( $F=6.51$ ,  $p=<0.005=<0.05$ ), Competency Development ( $F=6.7$ ,  $p=<0.005=<0.05$ ), Employability ( $F=5.13$ ,  $p=<0.005=<0.05$ ), SDLO ( $F=2.87$ ,  $p=0.02=<0.05$ ), and LGO ( $F=4.04$ ,  $p=0.003=>0.05$ ). See table 13.

However, employees of DPNBL have rated highest in terms of all variables, compared to other banks employees. On the other hand, employees of T Bank seem to have rated the lowest in all variables.

**Table 16 Results of one-way ANOVA of difference of mean among Banks**

Variables	Banks	N	Mean	S.D	F	p-value (2 tailed)
IWL	BOBL	305	5.23	0.55	6.51	0.000
	BNBL	77	4.96	0.56		
	BDBL	41	5.03	0.79		
	DPNBL	41	5.28	0.63		
	T Bank	48	4.91	0.52		
CD	BOBL	305	4.94	0.67	6.17	0.000
	BNBL	77	4.78	0.66		
	BDBL	41	4.79	0.92		
	DPNBL	41	5.37	0.51		
	T Bank	48	4.77	0.62		
Employabil ity	BOBL	305	5.21	0.58	5.13	0.000
	BNBL	77	5.03	0.64		
	BDBL	41	5.25	0.71		
	DPNBL	41	5.47	0.44		
	T Bank	48	4.99	0.57		



Variables	Banks	N	Mean	S.D	F	p-value (2 tailed)
SDLO	BOBL	305	5.36	0.62	2.87	0.022
	BNBL	77	5.15	0.65		
	BDBL	41	5.39	0.75		
	DPNBL	41	5.54	0.49		
	T Bank	48	5.34	0.70		
LGO	BOBL	305	5.27	0.61	4.04	0.003
	BNBL	77	5.11	0.65		
	BDBL	41	5.12	0.73		
	DPNBL	41	5.43	0.65		
	T Bank	48	5.00	0.56		

**Source:** Developed by the Researcher

## Confirmatory Factor Analysis

### 1. Measurement Model

Using the graphs from AMOS, the hypothesized CFA model was specified based on theory and literature. Structural equation modeling (SEM) has become a standard tool for validating theoretical models that can explain relationships among many variables. Theory is defined as relationships between constructs. Therefore, constructs are first identified by testing confirmatory factor models that generate latent variables. Then, the latent variables are used in a structural equation model, which forms the basis for validating theory. Therefore, the appropriateness of the measurement model was tested before testing the hypothesis.

### 2. Model Fit Statistics of Measurement Model

A model must be deemed fit before any further analysis can be carried out. The two most popular ways (Absolute model fit and Incremental model fit) of evaluating model fit were used. Absolute Model Fit and Relative fit index.

As for deciding on the type of indices to report. Hopper and colleagues suggest reporting key indices such as the chi-squared  $\chi^2$ , the relative  $\chi^2$  ( $\chi^2$  /df), root mean square error of approximation RMSEA, RMR, NFI, TLI, CFI, and IFI (Hooper, Coughlan, & Mullen, 2008; Kline, 2015). Because it is difficult to find a rule of

thumb for assessing model fit, a variety of model fit indices are reported to capture different aspects of model fit. Although the chi-square model is fraught with many problems, researchers have noted that these statistics should always be reported with degrees of freedom and associated p-values (Hayduk, 1990; Kline, 2015). In the present study, the above key indices were reported and are explained in more detail below with the cutoff point and acceptable ranges.

### **Absolute Model Fit**

Alternative modes are not used as basis for comparison while measuring absolute fit index. These are simply derived from the conservative and implicit covariance matrix and the fitting of the ML minimization function (Kenny, 2015). This study uses the chi-square test ( $\chi^2$ ), the RMSEA (approximate mean square error), and RMR (mean squared remainder) to measure absolute model fit.

The goodness of fit was measured using chi-square value of a factor model. The chi-square test compares the observed model with the theoretically proposed model (Byrne, 2001). The  $\chi^2$ -test of model fit is susceptible to size of sample, as the  $\chi^2$ -statistic tends to show a significant level of probability as sample size increases (generally above 200) (Kenny, 2015; Newsom, 2020). Nevertheless, the chi-squared statistic itself (along with its degrees of freedom) is considered a useful measure of model fit if it is within an acceptable range of 5 or less (Schumacher & Lomax, 2004).

The RMSEA estimates "the difference between the model under study and a hypothetical model in which each component of the model is related to every other component". Sometimes RMSEA is also regarded as "badness- of- fit index" (Schumacher, & Lomax, 2004). An RMSEA of less than 0.08 indicates good fit (Byrne, 2001; Hu & Bentler, 1999). The RMR is the square root of the difference between the residuals of the sample model and the hypothesized model. Values for RMR range from 0 to 1.0, where a good-fitting models obtains values less than 0.05 (Byrne, 2001; Hu & Bentler, 1999).

### **Relative fit index**

To measure the proportional improvement in fit relative fit indices were used (Miles, & Huberman, 1994). This index is also known as comparative fit index. While measuring relative fitness of the model, a target model is compared against a

baseline model (Kenny, 2015). A base line model is a model in which observed variables are uncorrelated (Hu, & Bentler, 1999). Incremental fit indices used in this study include the NFI (Normed Fit Index), the TLI (Tucker-Lewis Index) and CFI (Comparative Fit Index) (Hu, & Bentler, 1999).

The Normed Fit Index (NFI Bentler and Bonnet, 1980) evaluates the model by comparing the  $\chi^2$  value of the model with the  $\chi^2$  value of the null model. The independent model is considered the poorest model because it asserts that all measured variables are not related. Values for this statistic range from 0 to 1, with values above 0.90 indicating goodness of fit (Bentler, & Bonett, 1980).

The Comparative Fit Index is a revised form of the NFI that considers sample size into account and produces good results even with a small sample size (Bentler, 1990). The Comparative Fit Index assumes that all latent variables are uncorrelated (independent model) and compares the sample covariance matrix to this null model. Values for the NFI range from 0.0 to 1.0, with values closer to 1.0 indicating a good fit. A value of CFI  $\geq 0.80$  is considered an indicator of good fit (Hu & Bentler, 1999).

TLI (The Tucker-Lewis Index) is based on the concept where a proposed model is compared to a model where no correlation between individual items is expected. The TLI is less in cases where the mean correlation between the variables is not high. Models with an overall fit index of 0.90 or higher are considered to be generally better (Bentler, & Bonett 1980).

Bollen's incremental fit index (IFI), calculated using the ratio between the chi-squared of the model and the chi-squared of the null model, taking into account the degrees of freedom, is considered "non-normalized" because values may occasionally be greater than 1 or slightly less than 0. Values should be greater than 0.90 to ensure a good fit of the models (Newsom, 2020).

### **3. First Order Confirmatory Factor Analysis (CFA) for individual Latent Variable**

#### **3.1 Informal Workplace Learning (IWL)**

Individual First order CFA was performed for each variable separately. For the variable IWL the variables were constrained and that led to an  $X^2/df$  (CMIN/DF=3.110) with 232 degrees of freedom with significant

difference( $p < 0.001$ ). The goodness of fit measure is shown in table 17. The squared multiple correlation for all the items were between the range of 0.9 to 0.3. Except for EIL3 (0.21) (see figure 8). The item was removed (I want to learn to impress my head or colleagues).

**Table 17 Model fit indices for Informal Workplace Learning (IWL)**

Fit Measures	Proposed model	Revised model	Cut off points
Chi-square( $X^2$ )	721.589( $p < 0.001$ )	619.05( $p < 0.001$ )	$P > 0.05$
$X^2/df$	3.11	2.96	$< 5$
NFI	0.916	0.92	$\geq 0.80$
CFI	0.94	0.95	$> 0.80-0.90$
IFI	0.94	0.95	$\geq 0.90$
TLI	0.93	0.93	$> 0.85-0.90$
RMR	0.44	0.38	$\leq 0.05$
RMSEA	0.06	0.06	$< 0.08$

**Source:** Developed by the Researcher

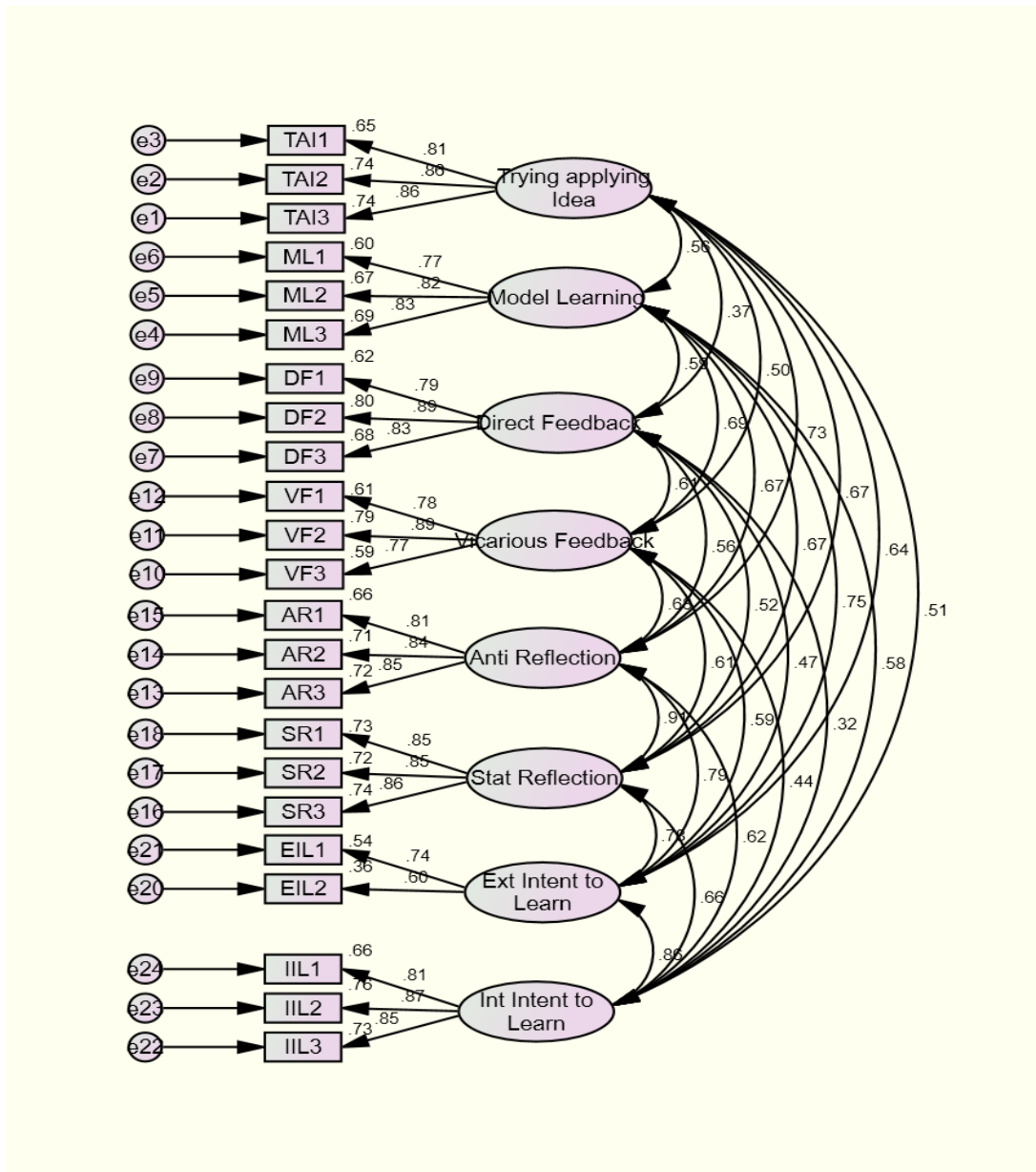


Figure 8 First order for Informal Workplace Learning (IWL)

Source: Developed by the Researcher

### 3.2 Competency Development

First order CFA for Competency Development with 120 data points and 33 parameters to be estimated it is an over identified model with 87 degrees of freedom, see table 18 for detailed information. The squared multiple correlations were



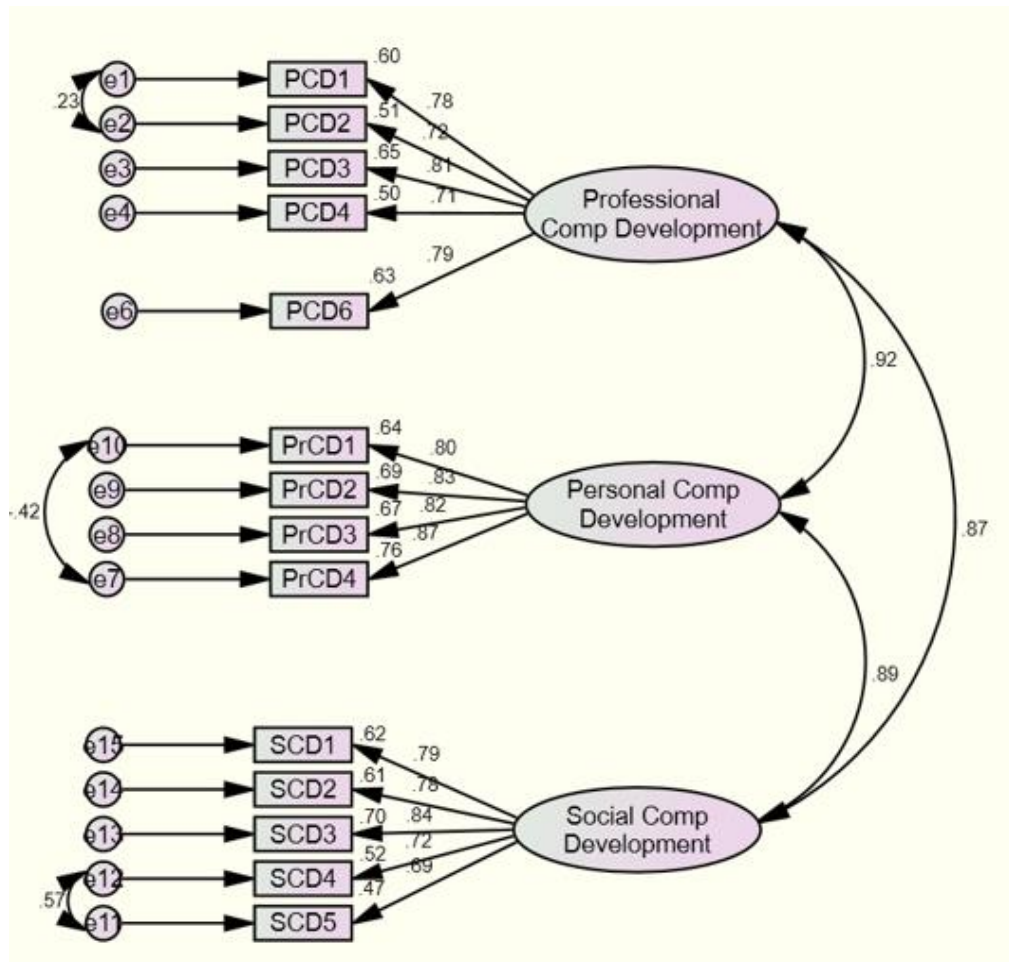
between 0.50 to 0.72, except for PCD5(0.37). The item 5” I have the ability to complete task on time (PCD5) was dropped because of standardized regression weight (1.01) was more than one and the squared multiple correlation (0.37) was also just near the margin.

The post hoc modifications suggested a close correlation between the error term e11 and e12. That is the item (14) ability to understand organizations culture and values has strong relation with item (15) ability to work in team organizations. Another modification index was e7 and e10 with M.I of 35.13 a par change of -0.09. The item 7 and 10(Personal competency development) that is the ability to handle stressful situations and ability to be creative is highly correlated. The error term e51and e2 were correlated with M.I. 17.47 with par change of 0.08 (see figure 9).

**Table 18 Model Fit Indices for Competency Development**

<b>Fit Measures</b>	<b>Proposed model</b>	<b>Revised model</b>	<b>Cut off points</b>
Chi-square( $X^2$ )	641.117 (p-<0.001)	293.058(p-<0.001)	P>0.05
$X^2/df$	7.36	4.12	<5
NFI	0.88	0.94	$\geq 0.80$
CFI	0.90	0.95	>0.80-0.90
IFI	0.90	0.95	$\geq 0.90$
TLI	0.87	0.94	>0.85-0.90
RMR	0.04	0.03	$\leq 0.05$
RMSEA	0.11	0.078	<0.08

**Source:** Developed by the Researcher



**Figure 9 First Order of Competency Development**

**Source:** Developed by the Researcher

### 3.3 Employability

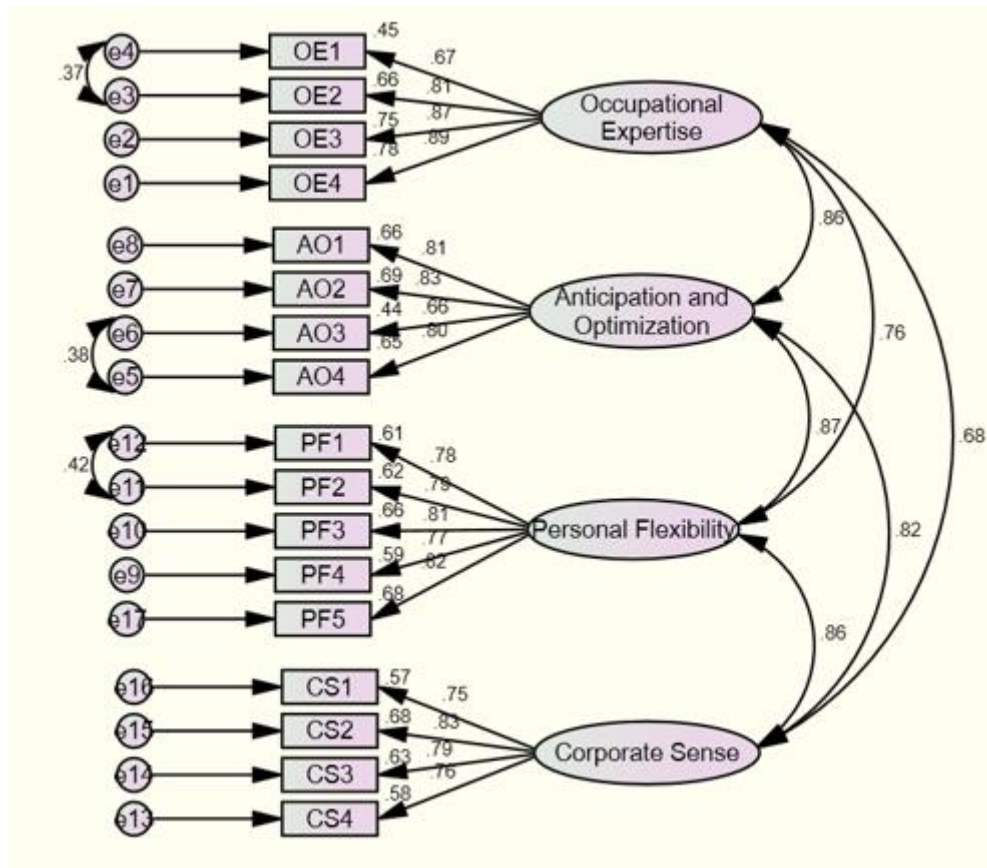
The results of first order CFA for measurement model employability reveals a Chi-square value of 511.049 with 113 degrees of freedom and significant difference ( $p < 0.001$ ). see table 19 for detailed information regarding the model fit indices. Model estimates reported a strong correlation between e3 and e4, e5 and e6, and e11 and e12 (see figure 10). The items “I am competent to distinguish main issues from side issues and to set priorities”, and “I am competent to weigh up pros and cons of decisions on working methods. Followed by the item “during the past year I was engaged in investigating adjacent job areas where success can be achieved” and

“During the past year I associate myself with the latest development in my job domain  
 “Finally, the item “I can adapt to change in my work very easily” and “I adapt to development within my organizations” were correlated. The squared multiple correlations were between the range of 0.44 to 0.78.

**Table 19 Model fit indices of Employability**

Fit Measures	Proposed Model	Revised Model	Cut off points
Chi-square( $X^2$ )	511.049 (p-<0.001)	317.90(p-<0.001)	P>0.05
$X^2/df$	4.52	2.89	<5
NFI	0.92	0.95	$\geq 0.80$
CFI	0.94	0.97	>0.80-0.90
IFI	0.94	0.97	$\geq 0.90$
TLI	0.93	0.96	>0.85-0.90
RMR	0.02	0.20	$\leq 0.05$
RMSEA	0.08	0.06	<0.08

**Source:** Developed by the Researcher



**Figure 10 First Order of Employability**

**Source:** Developed by the Researcher

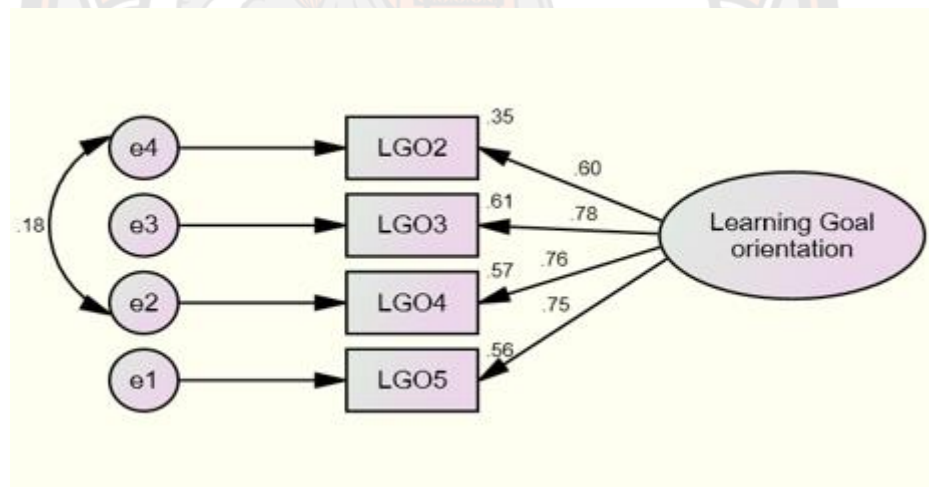
### 3.4 Learning Goal Orientation (LGO)

The model reported a Chi-square value of 10.194 with 5 degrees of freedom, with significant difference ( $p < 0.01$ ). Post-hoc modifications were indicated from the analysis because of poor fit. Hence two step modification were made. First, the squared multiple correlations were all between the acceptable range of 0.3 to 0.59. However, LGO1(0.30) and was dropped as the SMC was just near the acceptable margin. Secondly, Error term e2 and e4 were correlated (see figure 11). The model fit indexes are presented in the table 20.

**Table 20 Model fit indices of LGO**

Fit Measures	Proposed Model	Revised Model	Cut off points
Chi-square( $X^2$ )	50.971 (p=<0.001)	1.017(p=0.31)	P>0.05
$X^2/df$	10.194	1.01	<5
NFI	0.94	0.99	$\geq 0.80$
CFI	0.94	1.00	>0.80-0.90
IFI	0.99	1.00	$\geq 0.90$
TLI	0.89	1.00	>0.85-0.90
RMR	0.03	0.004	$\leq 0.05$
RMSEA	0.13	0.006	<0.08

Source: Developed by the Researcher

**Figure 11 First Order of Learning Goal Orientation (LGO)**

Source: Developed by the Researcher



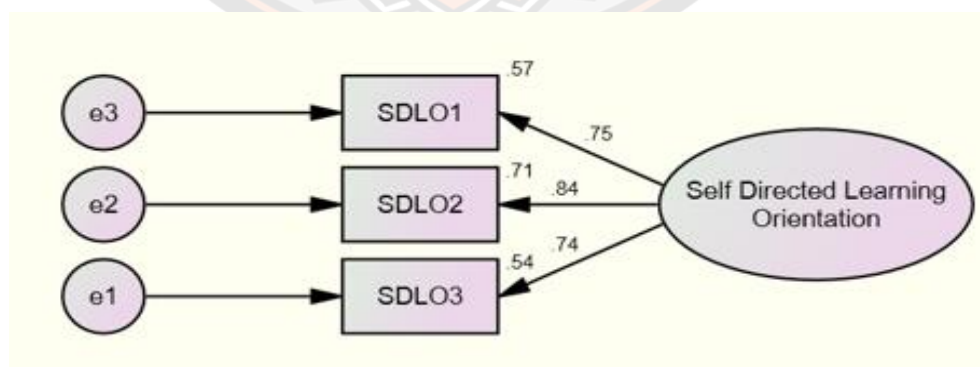
### 3.5 Self-Directed Learning Orientation (SDLO)

The chi-square value was 0.684 with 1 degree of freedom. The model was over identified. The squared multiple correlations (SMC): SDLO1 (0.57), SDLO2(0.708), SDLO3(0.54) were acceptable. The model fit index is presented in the Table 21. No Post-hoc modifications were indicated from the analysis because of good fit indexes.

**Table 21 Model fit indices of Self-Directed Learning Orientation (LGO)**

Fit Measures	Values	Cut off points
Chi-square( $X^2$ )	0.00 (p=0.40)	P>0.05
$X^2/df$	0.68	<5
NFI	0.99	$\geq 0.80$
CFI	1.00	>0.80-0.90
IFI	1.00	$\geq 0.90$
TLI	1.00	>0.85-0.90
RMR	0.009	$\leq 0.05$
RMSEA	0.00	<0.08

**Source:** Developed by the Researcher



**Figure 12 First Order of Self-Directed Learning Orientation (SDLO)**

**Source:** Developed by the Researcher

#### 4. Second Order Confirmatory Factor Analysis Model

Second order CFA was also done for each measurement models individually to see the model fit indices and ensure that the observed variables explain the latent variable well.

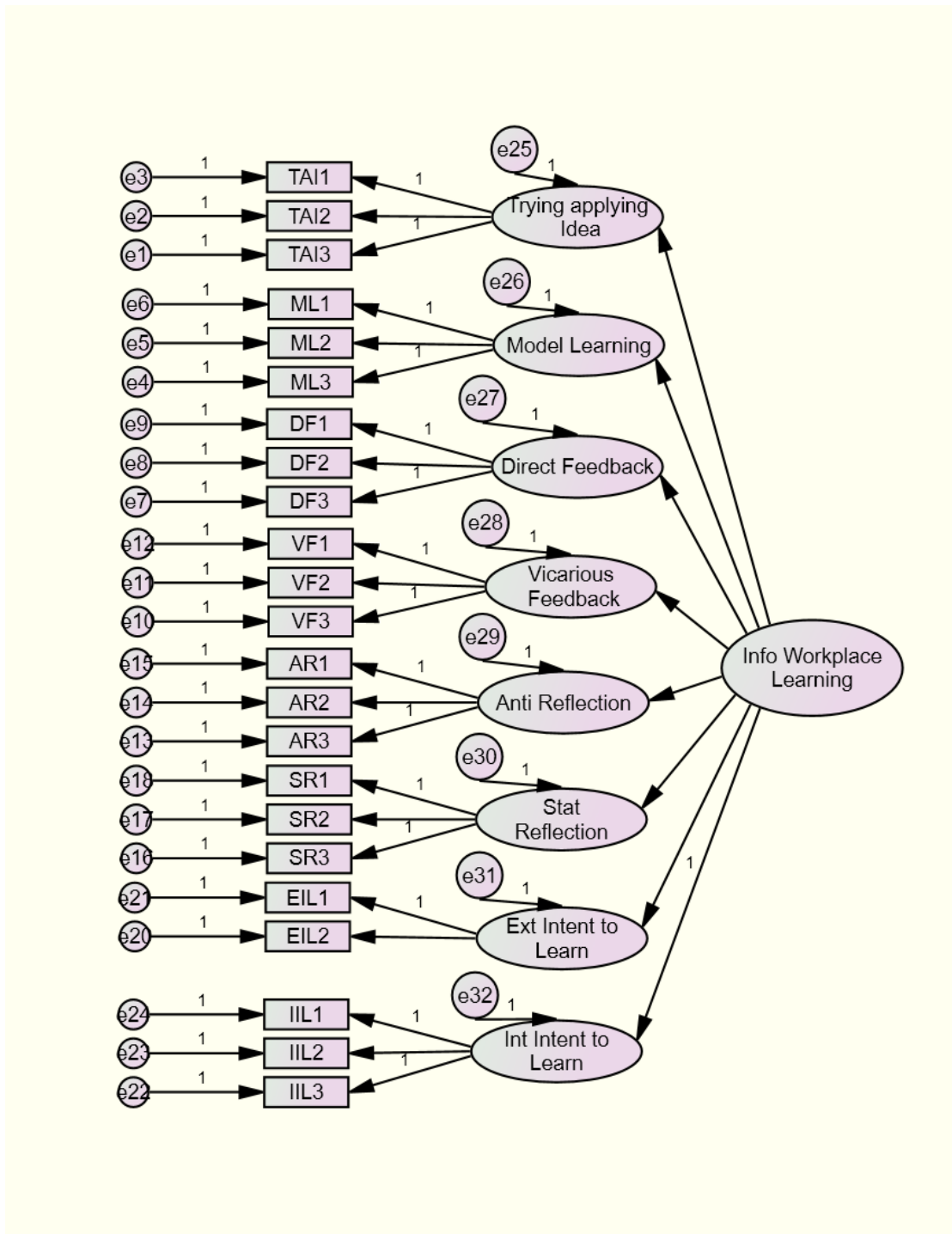
##### 4.1 Second Order of Informal Workplace Learning (IWL)

Second order CFA was carried for each variable individually. The  $X^2$  value of model after modification was 831.35 with 229 degrees of freedom and a p value of ( $p < 0.001$ ). The squared multiple correlations also fell between the range of 0.9 to 0.3 except for EIL 3(0.22). The post hoc modification indicated modification due to poor model fit. Hence, the item EIL3 was dropped. The model fit indexes before and after modification are presented below in table 22.

**Table 22 Second Order Model Fit Indices of Informal Workplace Learning**

Fit Measures	Proposed Model	Revised Model	Cut off points
Chi-square( $X^2$ )	957.27 ( $p < 0.001$ )	831.35( $p < 0.001$ )	$P > 0.05$
$X^2/df$	3.79	3.63	$< 5$
NFI	0.88	0.90	$\geq 0.80$
CFI	0.92	0.93	$> 0.80-0.90$
IFI	0.92	0.93	$\geq 0.90$
TLI	0.90	0.92	$> 0.85-0.90$
RMR	0.06	0.05	$\leq 0.05$
RMSEA	0.07	0.07	$< 0.08$

**Source:** Developed by the Researcher



**Figure 13** Second Order of Informal Workplace Learning (IWL)

**Source:** Developed by the Researcher

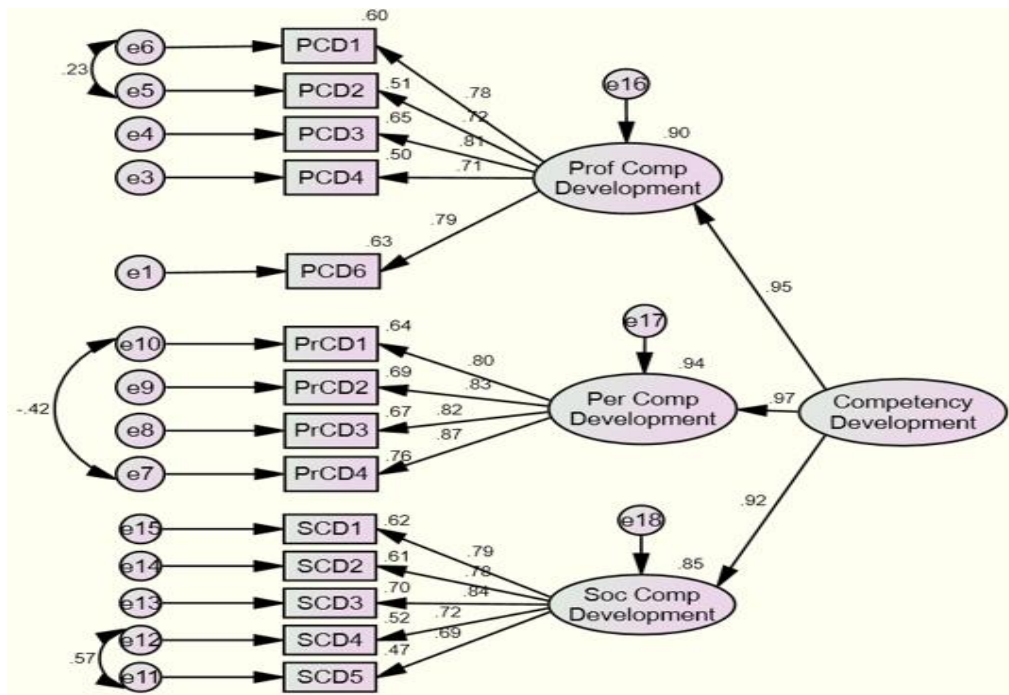
#### 4.2 Second Order CFA of Competency Development

The results of first order CFA and Second order CFA are same. There were no significant differences identified. the post hoc modification identified by the analysis was same as the first order CFA. The SMC values were within the range of 0.50 to 0.94. The standardized regression weights were all below 0.97. However, PCD5 had SMC of 0.37 hence the item was dropped. Further post hoc analysis indicated a correlation between e5 and e6, e7 and e10, and e11 and e12 (see figure 14). The model fit indexes before the modification and after are presented in table 23 below.

**Table 23 Second Order Model Fit Indices of Competency Development**

Fit Measures	Proposed Model	Revised Model	Cut off points
Chi-square( $X^2$ )	641.11 (p-<0.001)	293.05(p-<0.001)	P>0.05
$X^2/df$	7.36	4.12	<5
NFI	0.88	0.94	$\geq 0.80$
CFI	0.90	0.96	>0.80-0.90
IFI	0.90	0.96	$\geq 0.90$
TLI	0.87	0.95	>0.85-0.90
RMR	0.04	0.03	$\leq 0.05$
RMSEA	0.11	0.07	<0.08

**Source:** Developed by the Researcher



**Figure 14 Second Order of Competency Development**

Source: Developed by the Researcher

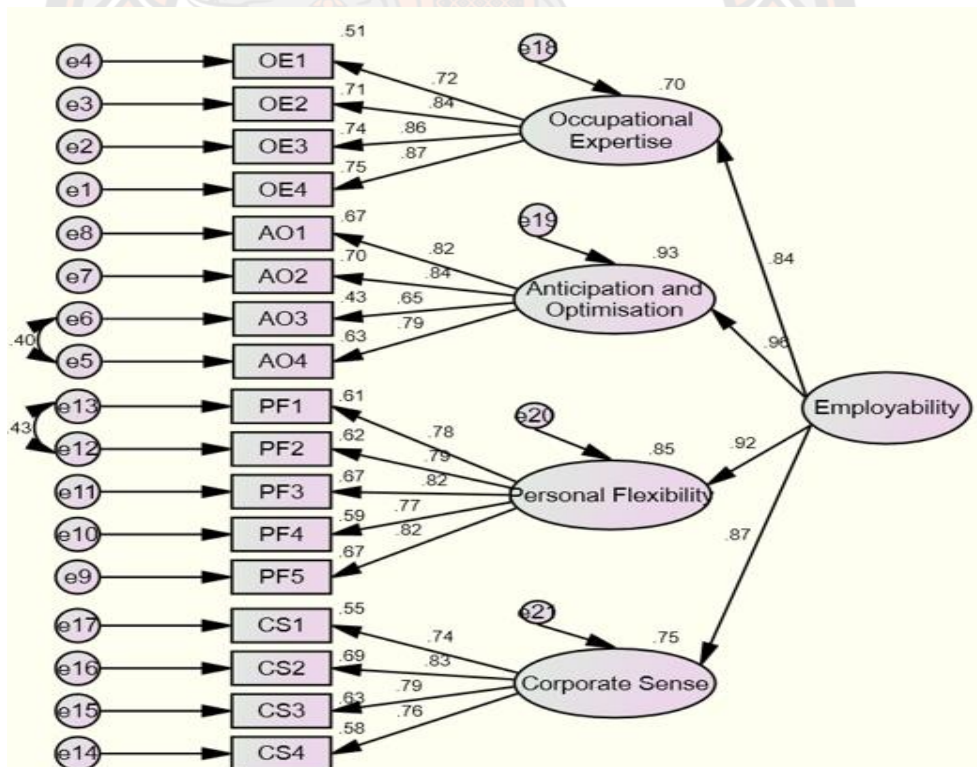
### 4.3 Second Order CFA of Employability

The results of second order CFA for measurement model employability reveals a Chi-square value of 554.929 with 115 degrees of freedom and significant difference ( $p < 0.001$ ). The post-hoc modification indexes indicated a covariance between e5 and e6, and e12 and e13 (see figure 15). The model fit indexes are reported in table 24. The SMC were between the range of 0.37 to 0.89. The highest standardized regression weight was 0.94. There was no significant difference between first order CFA and Second order CFA. Except the first order CFA indicated three step modification whereas the second order CFA indicated only two step modification.

**Table 24 Second Order Model Fit Indices of Employability**

Fit Measures	Proposed Model	Revised Model	Cut off points
Chi-square( $X^2$ )	554.929 (p-<0.001)	411.068(p-<0.001)	P>0.05
$X^2/df$	4.82	3.63	<5
NFI	0.92	0.94	$\geq 0.80$
CFI	0.93	0.95	>0.80-0.90
IFI	0.93	0.94	$\geq 0.90$
TLI	0.91	0.94	>0.85-0.90
RMR	0.03	0.02	$\leq 0.05$
RMSEA	0.08	0.07	<0.08

Source: Developed by the Researcher

**Figure 15 Second Order of Employability**

Source: Developed by the Researcher



#### 4.4 Second Order CFA of Five construct

A second order CFA was conducted for all the five constructs together. The post-hoc modification analysis indicated modification. Hence the covariance was made based on M.I as well as theory (Hayduk, 1990; Kaplan, 1989). The  $X^2$  value was 3619.59 with 1623 degrees of freedom with significant difference ( $p < 0.001$ ). Five items with low factor loadings LGO1(0.56), LGO2(0.66), EIL3(0.50), PCD2(0.71) and PCD5(0.62) were dropped (see figure 16). Further the theory also supplements that removal of the items. According to the octagon model of IWL each factor was measure using one item each in the short version (Decius et al., 2021). The squared multiple correlations for all the observations were within the range of 0.331 to 0.94.

Further, the post hoc modification indicated correlation between e13 and e14(0.31), e49 and e50(0.41), and finally e51 and e52(0.42). The model fit indexes are presented in table 25.

**Table 25 Model Fit Indices of Five construct**

Fit Measures	Values	Modified model	Cut off points
Chi-square( $X^2$ )	4963.83 ( $p < 0.001$ )	3619.59 ( $p < 0.001$ )	$P > 0.05$
$X^2/df$	2.56	2.23	$< 5$
NFI	0.81	0.84	$\geq 0.90$
CFI	0.87	0.91	$> 0.80-0.90$
IFI	0.87	0.91	$\geq 0.90$
TLI	0.94	0.90	$> 0.85-0.90$
RMR	0.03	0.04	$\leq 0.05$
RMSEA	0.07	0.49	$< 0.08$

**Source:** Developed by the Researcher

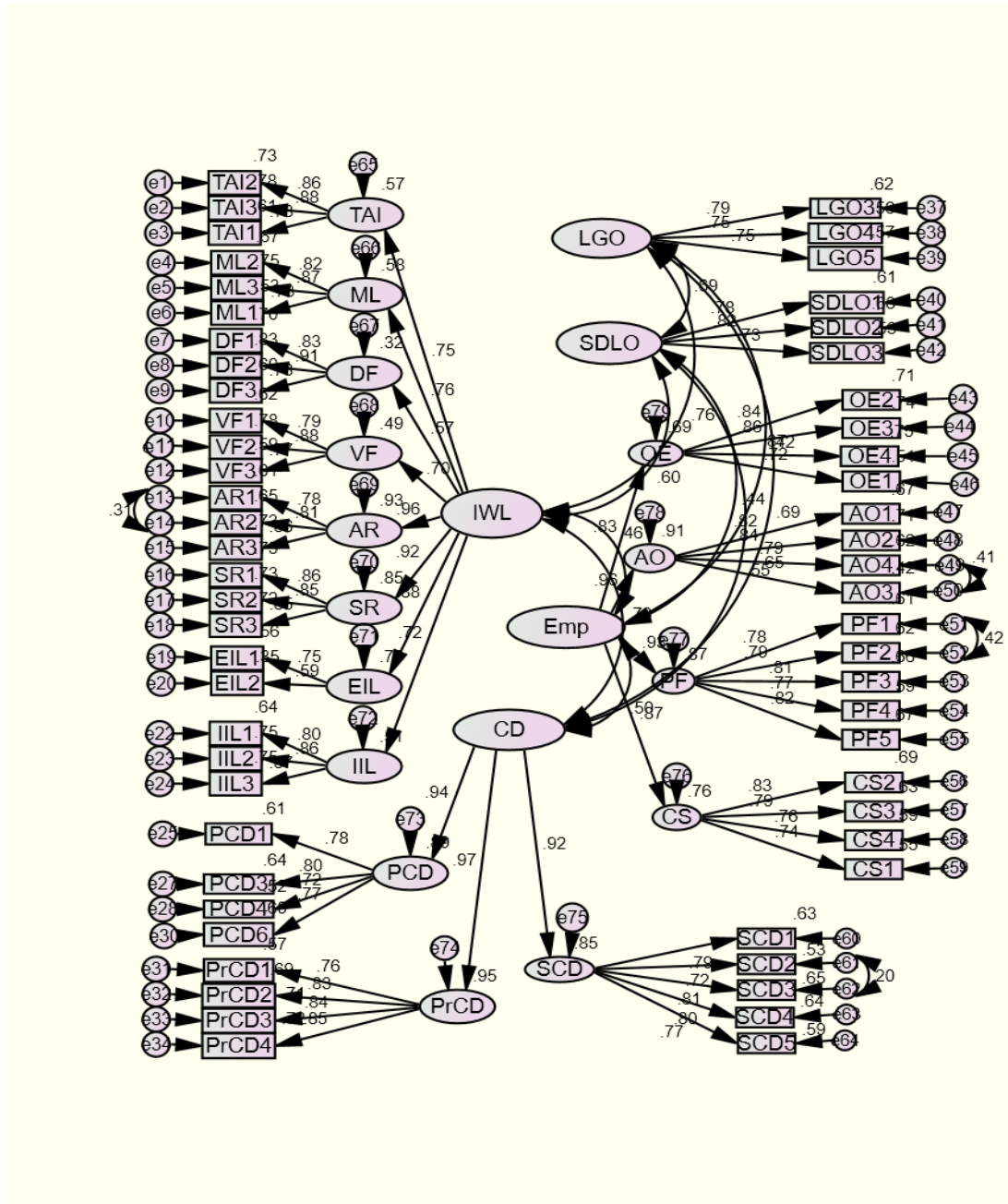


Figure 16 Confirmatory Factor Analysis of five constructs

Source: Developed by the Researcher

### Validity and Reliability

The validity and reliability of the CFA model was assessed by using measures such as: Average Variance Extracted (AVE), Composite Reliability (CR), Average Shared Variance (ASV) and Maximum Shared Variance (MSV).

To assess convergent validity, the average variance extracted (AVE) for each construct was evaluated based on its correlation with the other constructs. If AVE was greater than 0.5, convergent validity was considered confirmed (Bentler, & Bonett, 1980). Discriminant validity was established when the maximum shared variance (MSV) and average shared squared variance (ASV) were both lower than the average extracted variance (AVE) for all constructs (Bentler, & Bonett, 1980). Reliability of the constructs was established when the CR value was above 0.7 for all constructs. The details are presented in Table 26.

**Table 26 Validity and Reliability test results**

Variables	CR	AVE	MSV	ASV
IWL	0.93	0.63	0.57	0.42
CD	0.96	0.89	0.52	0.38
Employability	0.94	0.81	0.25	0.21
LGO	0.81	0.58	0.57	0.42
SDLO	0.82	0.61	0.47	0.33

**Source:** Developed by the Researcher

### Structural Equation Modelling Analysis

To draw a SEM containing relationships between IWL, competency development, employability, SDLO, and LGO, seven subsequent models were developed and compared and tested. The R<sup>2</sup> value (predictability of the model) and the strength of the relationship between the constructs within the different models were also considered. According to (Falk, & Miller, 1992), the minimum R<sup>2</sup> value required to predict a model is 0.1. Maximum likelihood estimation was used to analyze all the models, and the model fit was assessed using six different types of

indices-namely: Root Mean Square Error of approximation (RMSEA), chi-squares ( $X^2/df$ ), RMR, NFI, CFI, TLI, IFI.

## Model Test

### 1. Model 1 Base Model

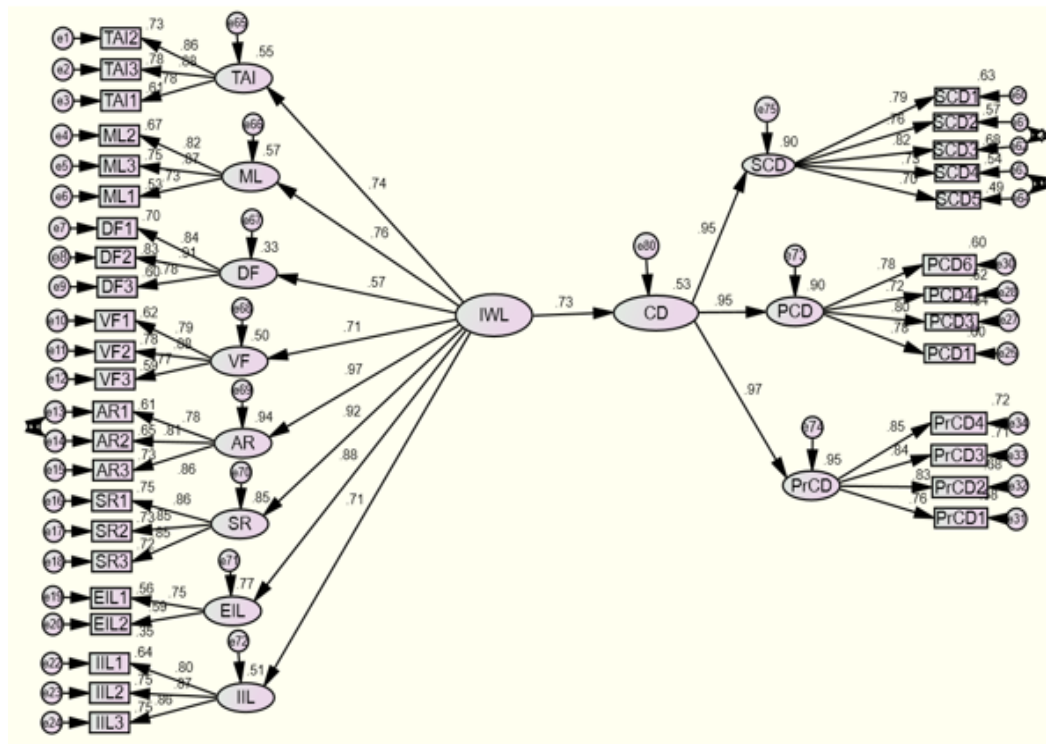
Findings for Model 1 suggest a good fit: the chi-squares ( $X^2/df$ ) were 2.27, NFI 0.88, CFI 0.92, IFI 0.92, TLI 0.91, RMR 0.05 and RMSEA was 0.05. The  $R^2$  value of the endogenous variable competency development (0.53) surpassed the minimum value of 0.1 (Falk & Miller, 1992). The model supported  $H_2$  significantly ( $p < 0.001$ ) which indicated a good relation between IWL and Competency Development. However, a third variable had to be incorporated to test the mediation effected. Hence model 2 was developed by incorporating the third variable employability.

**Table 27 Hypothesis Test result (Model 1 Baseline Model)**

	Estimate	P	Label
CD -- IWL	.950	***	Significant

\*\*\*= $p < 0.001$ , \*= $p < 0.05$

**Source:** Developed by the Researcher



**Figure 17 Standardized path coefficients of the structural equation model (SEM) model 1**

**Source:** Developed by the Researcher

## 2. Model 2 Standardized path coefficients of the structural equation model (SEM) Partial Mediation Model

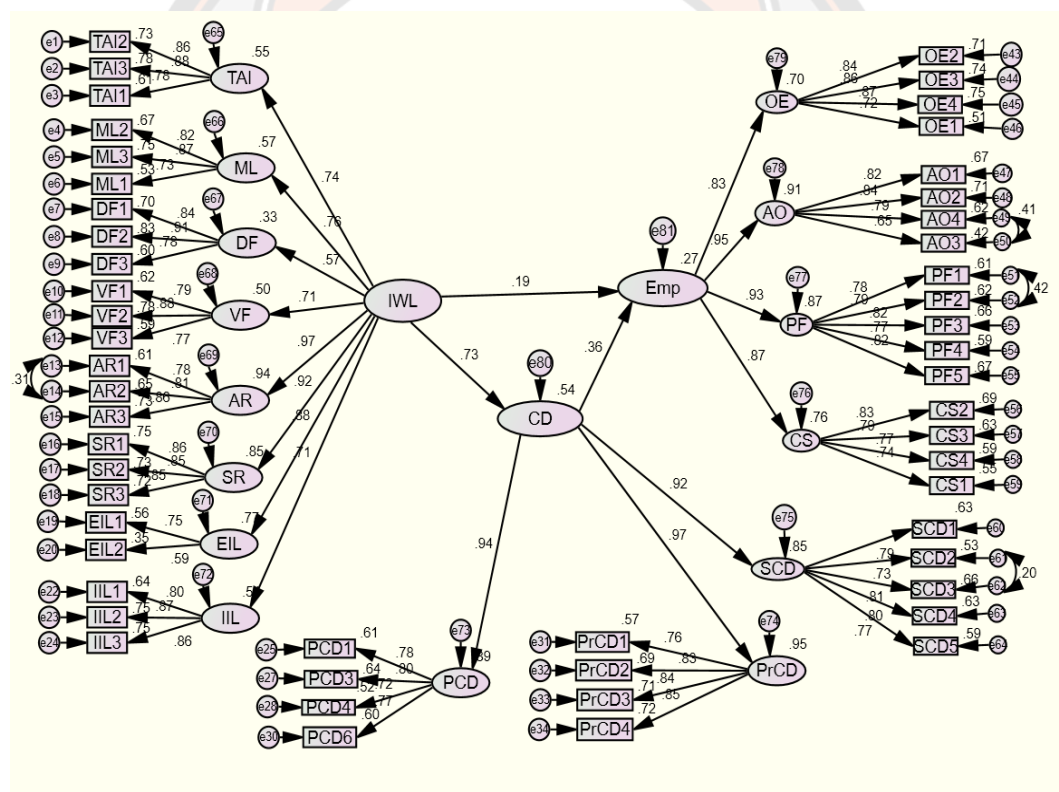
Model 2 was an elaboration of baseline model. The model tested H<sub>1</sub>, H<sub>2</sub>, H<sub>3</sub> and H<sub>4</sub>. The results suggest a better fit compared to Model 1. The chi-square value ( $\chi^2/df$ ) was 2.39, NFI 0.85, CFI 0.91, IFI 0.91, TLI 0.90, RMSEA 0.05 and RMR was 0.04. The R<sup>2</sup> value of Employability was (0.27). whereas there was slight improvement in the R<sup>2</sup> value of Competency Development (0.54). The model fit indices are reported in table above. The model supported H<sub>2</sub>, H<sub>3</sub>, H<sub>4</sub> and H<sub>5</sub>. Though the direct effect of IWL on employability was low (0.19) with a p-value of (0.02), but still significant, hence proving a partial mediation. The results of the hypothesis test are presented in the table below.

**Table 28 Hypothesis Test Results of Model 2**

		Total Effect	Indirect Effect	Direct Effect	Result
IWL- Emp	H <sub>4</sub>	0.46***	0.26 ***	0.19*	Partial mediation
CD-Emp	H <sub>2</sub>	0.36***		0.36 ***	
IWL-CD	H <sub>1</sub>	0.73***		0.73***	

\*\*\*=p<0.001, \*=p<0.05

Source: Developed by the Researcher



**Figure 18 Standardized path coefficients of the structural equation model 2 (SEM) Partial Mediation Model**

Source: Developed by the Researcher



### 3. Model 3 Standardized path coefficients of the structural equation model (SEM) Full Mediation Model

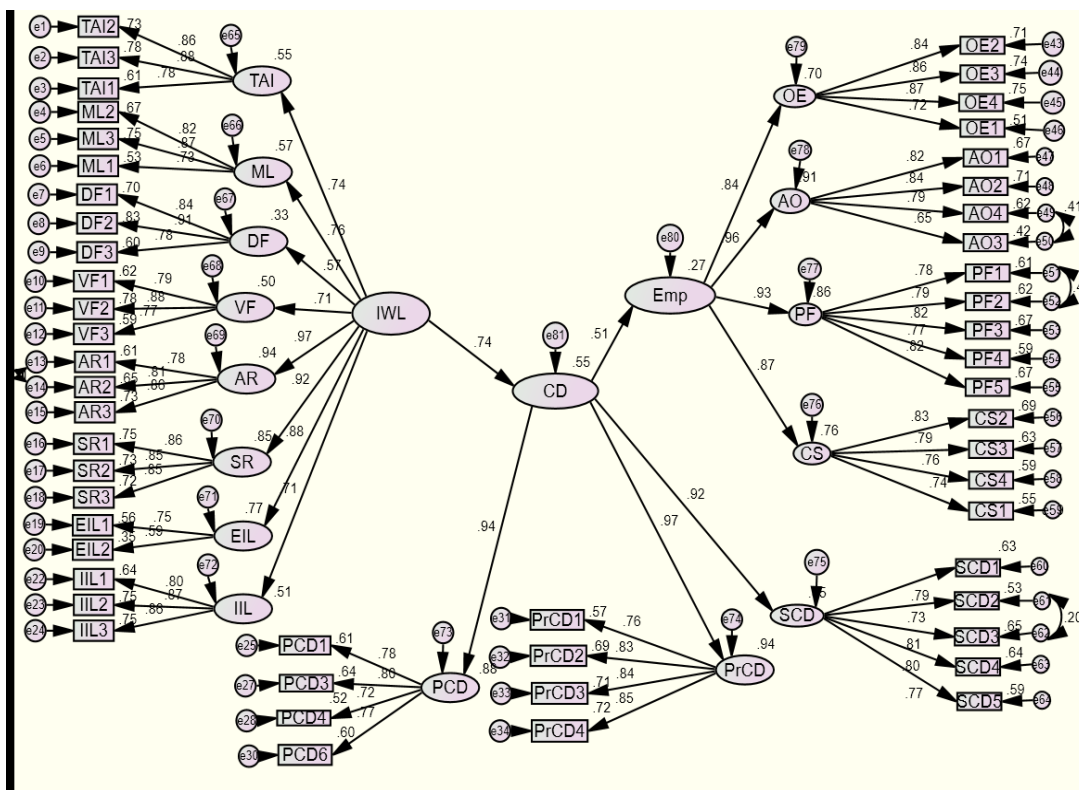
Results suggest that Model 3 had a good fit; the chi-square/df was 2.4, NFI 0.85, CFI 0.91, IFI 0.91, TLI 0.90, RMSEA 0.05, and RMR 0.04. Unlike the outcomes for Model 3, the relationship between Competency development and employability (0.51) and IWL and competency development (0.73) was significant with better direct effect than model 2, therefore supporting H2 and H1. In comparison to Model 2, Model 3 provided a slightly poor fit, and its fit indices were almost similar except The chi-square value ( $X^2/df$ ) of model 2(2.3) was slightly better than model 3(2.4). Further there all the hypothesis of the study was not supported by model 3. However, all the relationships in Model 3 were significant. A model with significant hypothesized relations is a better contribution to the literature rather than good global measures of fit.

**Table 29 Hypothesis Test Result of Model 3**

		Total Effect	Indirect Effect	Direct Effect	Result
IWL- Emp	H <sub>3</sub>		0.38 ***		Full mediation
CD-Emp	H <sub>2</sub>	0.51***		0.51 ***	
IWL-CD	H <sub>1</sub>	0.74***		0.74***	

\*\*\*= $p < 0.001$ , \*= $p < 0.05$

**Source:** Developed by the Researcher



**Figure 19 Model 3 Standardized path coefficients of the structural equation model (SEM) (Full mediation)**

**Source:** Developed by the Researcher

#### 4. Model 4 Moderating Effect of SDLO

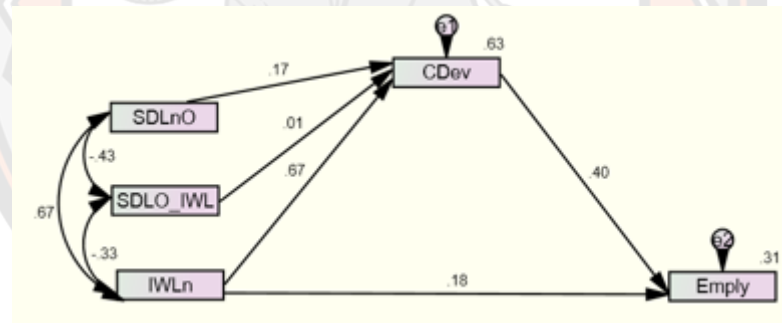
Model 4 tested the moderating effect of SDLO on competency development. The test was performed on model 2 because the model had better fit and supported the hypothesis well. Standardized values were used to test the interaction effect. However, there was no moderation effect of SDLO on relation between IWL and employability. The model fit indices were also not very good the The chi-square value ( $\chi^2$ ) was 35.632 p value was significant at ( $p < 0.001$ ). The chi-square value ( $\chi^2/df$ ) was 17.81, NFI was 0.96, CFI value was 0.97, IFI was 0.97, TLI value was 0.85, RMR was 0.01, and RMSEA was 0.18.

**Table 30 Hypothesis Test result of model 4a (before modification indices)**

		Total Effect	Indirect Effect	Direct Effect	Result
IWL- Emp	H <sub>4</sub>	0.30***	0.26***	0.18*	Partial Mediation
CD-Emp	H <sub>2</sub>	0.34***		0.40***	
IWL-CD	H <sub>1</sub>	0.67***		0.67***	
SDLxIWL-CD	H <sub>5a</sub>	0.01 (n/s)		0.01(n/s)	No Moderation
SDLO-CD		0.16***		0.16***	

\*\*\*= $p < 0.001$ , \*= $p < 0.05$

**Source:** Developed by the Researcher



**Figure 20 Model 4a Standardized path coefficients of the structural equation model (SEM) before modification Indices**

**Source:** Developed by the Researcher

Due to poor model fit and less degree of freedom the insignificant paths (SDLOxIWL to CD) that is the path testing the moderation effect between IWL and competency development was dropped. In addition, the post Hoc modification indices showed strong relation between SDLO and employability and a direct effect of SDLO

on competency development. However, the direct effect of IWL on employability became insignificant ( $p > 0.05$ ) in presence of direct effect of SDLO on employability.

Hence the insignificant path was removed. The final model (see fig: model 4) after incorporating the new paths had a good fit. The chi-square value ( $\chi^2$ ) was 1.342 with a non significant p value ( $p = 0.247$ ). The chi-square value ( $\chi^2/df$ ) was 1.34, NFI 0.99, CFI 1.00, IFI 1.00, TLI 0.99, RMR 0.003, RMSEA 0.02. The model supported the hypothesis  $H_1$  that is IWL is related to competency development,  $H_2$  (competency development is related to employability,  $H_3$  (competency development fully mediates the relationship between IWL and employability) but failed to support  $H_4$  and  $H_{5a}$ .

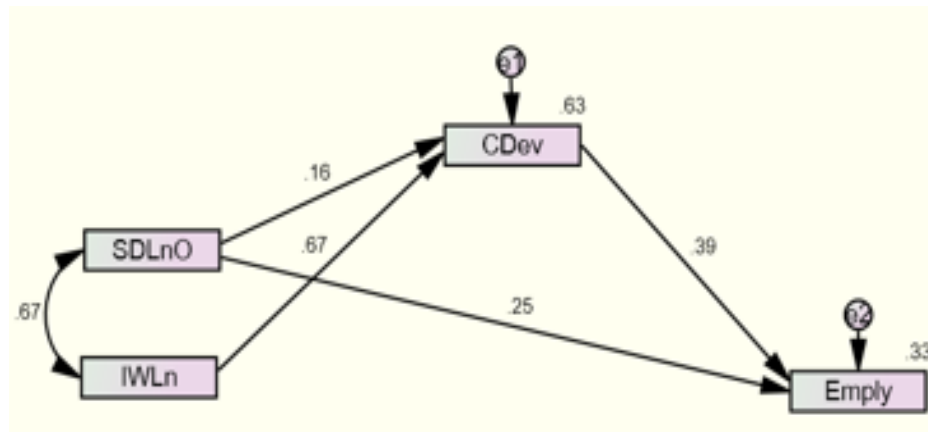
That is IWL had no direct effect on employability and SDLO had no moderation effect on relation between IWL and competency development. Instead, the model depicted a significant direct effect of SDLO on competency development. The  $R^2$  value of the endogenous variables had also improved: Competency development (0.63) and Employability (0.33). Model 4b is used for model comparison (see table model comparison)

**Table 31 Hypothesis Test result of model 4b (after modification)**

		Total Effect	Indirect Effect	Direct Effect	Result
IWL- Emp	$H_4$	0.26***	0.26***		Full Mediation
CD-Emp	$H_2$	0.39***		0.39***	
IWL-CD	$H_1$	0.67***		0.67***	
SDLO-CD		0.16***		0.16***	
SDLO-Emp		0.31***	0.64***	0.25***	Partial Mediation

\*\*\*= $p < 0.001$ , \*= $p < 0.05$

**Source:** Developed by the Researcher



**Figure 21 Model 4b Standardized path coefficients of the structural equation model (SEM) (After modification)**

**Source:** Developed by the Researcher

### 5. Model 5a Testing moderation effect of LGO

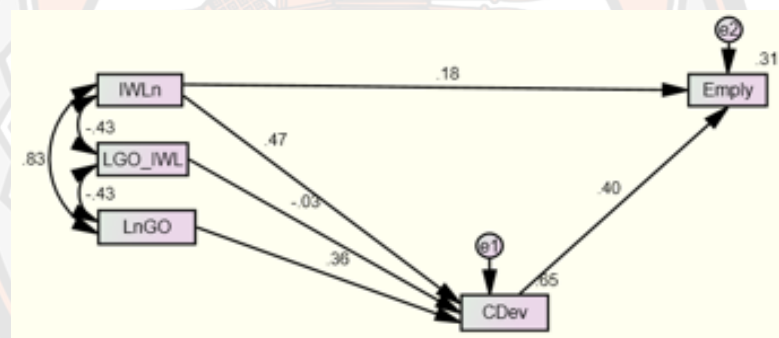
Model 5a tested the moderating effect of LGO on competency development. The test was performed on model 2 because the model had better fit and supported the hypothesis well. Standardized values were used to test the interaction effect. However, there was no moderation effect of LGO on relation between IWL and employability. The model fit indices were also not very good the The chi-square value ( $\chi^2$ ) was 23.78 with a significant p value( $p < 0.001$ ). The chi-square value ( $\chi^2/df$ ) was 11.89, NFI 0.98, CFI 0.98, IFI 0.98, TLI 0.92, RMR 0.03, RMSEA 0.14.

**Table 32 Hypothesis test result of model 5a (before modification)**

		Total Effect	Indirect Effect	Direct Effect	Result
IWL- Emp	H <sub>4</sub>	0.37***	0.18***	0.18*	Partial Mediation
CD-Emp	H <sub>2</sub>	0.40***		0.40***	Accept
IWL-CD	H <sub>1</sub>	0.47***		0.47***	Accept
LGOxIWL-CD	H <sub>5a</sub>	-0.03 (n/s)		-0.03(n/s)	No Moderation
LGO-CD		0.35***		0.35***	Accept
LGO-Emp		0.14***	0.14***		Full Mediation

\*\*\*= $p < 0.001$ , \*= $p < 0.05$

Source: Developed by the Researcher



**Figure 22 Model 5a Standardized path coefficients of the structural equation model (SEM) before modification Indices**

Source: Developed by the Researcher

Due to poor model fit and less degree of freedom the insignificant paths (LGOxIWL to CD) that is the path testing the moderation effect between IWL and competency development was dropped. The final model (see fig: model 5b) after incorporating the new paths the model had a good fit. The chi-square value ( $\chi^2$ ) was 0.979 with a non significant p value ( $p=0.323$ ). The chi-square value ( $\chi^2/df$ ) was 0.97, NFI 0.99, CFI 1.00, IFI 1.00, TLI 1.00, RMR 0.002, RMSEA 0.00.



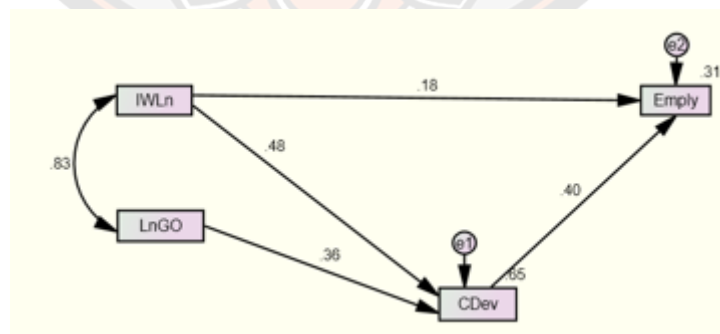
The model supported the hypothesis H<sub>1</sub> that is IWL is related to competency development, H<sub>2</sub> (competency development is related to employability), H<sub>3</sub>(competency development mediates the relationship between IWL and employability), H<sub>4</sub> (IWL is directly related to employability) but failed to support H<sub>5b</sub>. That is LGO had no moderation effect on relation between IWL and competency development. The R<sup>2</sup> value of Employability (0.31) had dropped slightly compared to model 4b. Model 5b is used for model comparison (see table model comparison).

**Table 33 Hypothesis test result of model 5b (after modification)**

		Total Effect	Indirect Effect	Direct Effect	Result
IWL- Emp	H <sub>4</sub>	0.37***	0.19***	0.18*	Partial Mediation
CD-Emp	H <sub>2</sub>	0.40***		0.40***	Accept
IWL-CD	H <sub>1</sub>	0.47***		0.47***	Accept
LGO-CD		0.36***		0.36***	Accept
LGO-Emp		0.14***	0.14***		Full Mediation

\*\*\*=p<0.001, \*=p<0.05

**Source:** Developed by the Researcher



**Figure 23 Model 5b Standardized path coefficients of the structural equation model (SEM) after modification Indices**

**Source:** Developed by the Researcher

### 6. Model 6 Standardized path coefficients of the structural equation model (SEM) including control variables

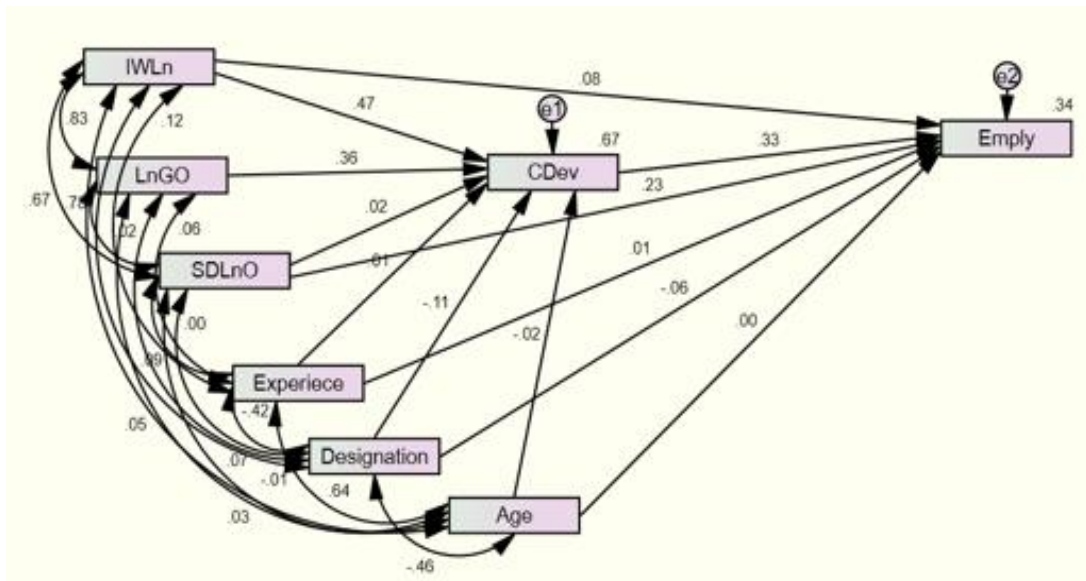
Model 6 was an incorporation of model 4b and 5b along with the control variables age, Experience and Designation. The model fit indices indicated a good fit with a chi-square value ( $\chi^2$ ) of 1.828 with a non-significant p value ( $p=0.17$ ). The chi-square value ( $\chi^2/df$ ) was 1.82, NFI 0.99, CFI 1.00, IFI 1.00, TLI 0.99, RMR 0.001, RMSEA 0.04. The model supported H<sub>1</sub>, H<sub>2</sub>, H<sub>3</sub>, (Full mediation), and H<sub>4</sub>. Besides that, the control variable, Designation had a significant effect on competency development and employability. The results indicated a direct effect of SDLO on employability, LGO on competency development. There for model 6 is comparatively a better fit due to its good fit indices, better R<sup>2</sup> values: competency development (0.67), employability (0.34) and it further supports majority of hypothesis.

**Table 34 Hypothesis test result of model 6**

		Total Effect	Indirect Effect	Direct Effect	Results
IWL-CD	H <sub>1</sub>	0.46***			Accept
LGO-CD		0.35***			
SDLO-CD		0.24(n/s)			
Age-CD		-0.01(n/s)			
Desg-CD		-0.01***			Control effect
Exp-CD		0.00(n/s)			
SDLO-Emp		0.23*	0.00(n/s)	0.23***	No Mediation
IWL-Emp	H <sub>3</sub>	0.23***	0.15***	0.27(n/s)	Full Mediation
CD-Emp	H <sub>2</sub>	0.33***			Accept
Age-Emp		-0.00(n/s)			
Desg-Emp		-0.09*			Control effect
Exp-Emp		0.01(n/s)			

\*\*\*= $p<0.001$ , \*= $p<0.05$

**Source:** Developed by the Researcher



**Figure 24 Model 6 Standardized path coefficients of the structural equation model (SEM) including control variables**

**Source:** Developed by the Researcher

Group analysis was conducted and there was no significant difference between the constraint and unconstraint model ( $p > 0.05$ ). Indicating no difference between Male and Female. the difference between the degree of freedom between constraint and unconstraint model was 12 with a  $X^2$  (d/f) 9.725. the relationship between the IWL to employability mediated by competency development is same in male and female.

#### **7. Model 7 Standardized path coefficients of the structural equation model (SEM) including control and mediating variables**

Therefore, group analysis was removed, and Model 7 tested the latent variable model. It was an elaboration of model 6. It included all the three-control variable and two moderators (SDLO, LGO). Though these two moderators had no moderating effect as indicated in previous models (model 5a and 4a), hence a direct effect of LGO to competency development and SDLO to competency development and employability was tested. The control variable age and experience had no effect on competency development and employability, so it was removed to free degree of

freedom. However, the control designation had a significant effect on competency development (-0.13) with  $p$  value  $< 0.001$ , but it didn't not have any effect on employability and IWL unlike the observed variable model (model 6).

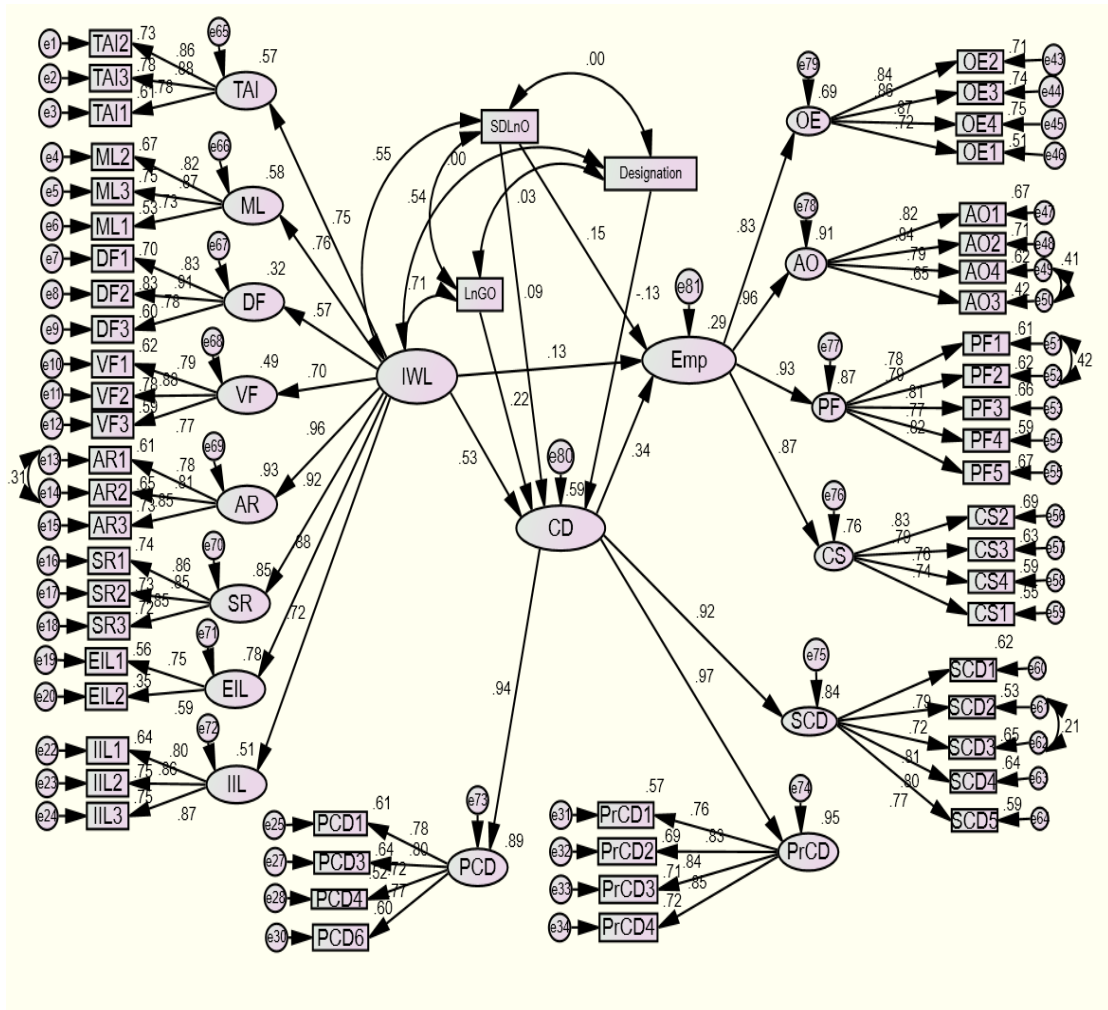
Therefore, the path of designation to employability and IWL was removed. The model fit indices were good as the  $X^2/df$  was 2.3, NFI was 0.85, CFI was 0.90, IFI was 0.90, TLI 0.90, RMR 0.04 and RMSEA 0.05. The model supported  $H_1$ ,  $H_2$ ,  $H_3$  and it also supported  $H_4$  as it was not supported in model 6. However, the  $R^2$  value dropped from 0.67 to 0.59 for competency development and 0.34 to 0.29. Nevertheless, the values were above 0.1 (Falk & Miller, 1992). Therefore, model 7 was used as the final model to test the hypothesis and draw inferences.

**Table 35 Hypothesis Test Result of Model 7**

		Total Effect	Indirect Effect	Direct Effect	Results
IWL-CD	$H_1$	0.52***		0.52***	Accept
LGO-CD		0.21***			
SDLO-CD		0.09***			
Desg-CD		-0.13***			Control effect
SDLO-Emp		0.17*	0.03*	0.14*	Partial mediation
IWL-Emp	$H_3$	0.30*	0.17***	0.13(n/s)	Full Mediation
CD-Emp	$H_2$	0.33***			Accept
IWL-Emp	$H_4$	0.30*			Accept

\*\*\*= $p < 0.001$ , \*= $p < 0.05$  values shown are standardized parameter estimates. All  $p$  values of the estimators are below 0.001, except for (SDLO-Emp  $p = 0.02$ , IWL-Emp  $p = 0.009$ )

**Source:** Developed by the Researcher



**Figure 25 Model 7 Standardized path coefficients of the structural equation model (SEM)**

**Source:** Developed by the Researcher

**Table 36 Summary of Structural Equation Modelling Standardized Regression Weights**

			Estimates	S.E.	C.R.	P
CD	<---	IWL	.527	.080	8.539	***
CD	<---	SDLO	.094	.045	2.345	.019
CD	<---	Designation	-.133	.024	-4.117	***
CD	<---	LGO	.218	.056	4.423	***
Emp	<---	IWL	.132	.079	1.874	.061
Emp	<---	CD	.335	.061	4.764	***
Emp	<---	SDLO	.147	.049	2.951	.003
TAI	<---	IWL	.754			
ML	<---	IWL	.759	.075	13.672	***
DF	<---	IWL	.570	.097	10.701	***
VF	<---	IWL	.700	.075	12.120	***
AR	<---	IWL	.962	.072	15.170	***
SR	<---	IWL	.923	.071	15.965	***
EIL	<---	IWL	.885	.068	13.512	***
IIL	<---	IWL	.716	.061	12.593	***
PCD	<---	CD	.944	.056	16.720	***
PrCD	<---	CD	.973			
OE	<---	Emp	.833			
AO	<---	Emp	.955	.055	17.103	***
PF	<---	Emp	.931	.055	16.066	***
CS	<---	Emp	.872	.055	16.100	***
SCD	<---	CD	.919	.051	16.633	***
TAI2	<---	TAI	.855			
TAI3	<---	TAI	.880	.042	23.831	***
ML2	<---	ML	.816	.047	20.667	***
ML3	<---	ML	.867			
DF1	<---	DF	.835			
DF2	<---	DF	.910	.046	23.036	***
DF3	<---	DF	.778	.040	19.864	***
VF1	<---	VF	.785			



			Estimates	S.E.	C.R.	P
VF2	<---	VF	.884	.056	19.922	***
VF3	<---	VF	.766	.056	17.709	***
AR1	<---	AR	.783			
AR2	<---	AR	.807	.045	23.679	***
AR3	<---	AR	.854	.048	20.868	***
SR1	<---	SR	.863			
SR2	<---	SR	.854	.038	24.792	***
SR3	<---	SR	.851	.038	24.639	***
EIL1	<---	EIL	.745			
IIL1	<---	IIL	.801			
IIL2	<---	IIL	.864	.051	21.278	***
IIL3	<---	IIL	.865	.049	21.303	***
PCD1	<---	PCD	.779			
PCD3	<---	PCD	.800	.054	19.216	***
PrCD1	<---	PrCD	.758			
PrCD2	<---	PrCD	.832	.052	19.801	***
PrCD3	<---	PrCD	.841	.050	20.057	***
PCD4	<---	PCD	.722	.053	16.978	***
PCD6	<---	PCD	.773	.058	18.432	***
PrCD4	<---	PrCD	.848	.050	20.246	***
OE2	<---	OE	.843			
OE3	<---	OE	.862	.038	24.021	***
OE4	<---	OE	.867	.038	24.247	***
AO1	<---	AO	.820			
AO2	<---	AO	.842	.048	22.048	***
AO4	<---	AO	.787	.055	20.047	***
PF1	<---	PF	.780			
PF2	<---	PF	.789	.039	25.217	***
PF3	<---	PF	.815	.056	19.714	***
PF4	<---	PF	.767	.060	18.333	***
PF5	<---	PF	.819	.050	19.849	***
CS2	<---	CS	.831			
CS3	<---	CS	.794	.050	20.233	***
CS4	<---	CS	.765	.040	19.251	***

			Estimates	S.E.	C.R.	P
SCD1	<---	SCD	.790			
SCD2	<---	SCD	.725	.061	17.252	***
SCD3	<---	SCD	.809	.054	19.847	***
AO3	<---	AO	.647	.065	15.472	***
EIL2	<---	EIL	.590	.080	11.754	***
ML1	<---	ML	.728	.047	17.982	***
OE1	<---	OE	.716	.046	18.264	***
CS1	<---	CS	.744	.047	18.561	***
SCD4	<---	SCD	.798	.049	19.587	***
SCD5	<---	SCD	.769	.045	18.696	***
TAI1	<---	TAI	.782	.043	20.488	***

**Source:** Developed by the Researcher

### Structural Equation Model Assessment and Hypotheses Testing

The next stage of the analysis involved exploring the proposed relationships or the direct, indirect, and total effects of IWL to competency development and employability and also the moderating and control effects using AMOS. For a hypothesis to be supported, the p-value and R-square must be satisfied. However, for these tests to be meaningful, the model fit indices must be satisfied. If a hypothesized relationship has a significant p-value ( $P < 0.05$ ) but the model is poorly fit, the p-value cannot be trusted. Next comes the test of variance explained or R-square. Even if a model has a significant p-value and a good model fit, but the R-squared is less than 0.1, the relationships tested are not very meaningful because they do not explain enough variance in the model.

In the first sub model IWL and competency development was included, in the second partially mediated model IWL, competency development and employability was included, third model fully mediated model comprised of IWL, competency development and employability, model four tested the moderating effect of SDLO on a partially mediated model, all estimators were significant except for moderation effect of SDLO.

Model five also tested the moderation effect of LGO on the partially mediated model. All estimates were significant except for moderation effect of LGO. Model six was an incorporation of model 4 and 5 along with the control variables age, Experience and Designation. The controls had no effect except for designation on competency development and employability. Model 7seven tested the latent variable model. It was an elaboration of model 6. It included all the three-control variable and two moderators (SDLO, LGO). Table below shows the parameter estimates and the model fit values of seven models.

**Table 37 Model Fit Comparison**

Fit Measure	Chi-square( $X^2$ )	$X^2/df$	NFI	CFI	IFI	TLI	RMR	RMSEA
Model 1	1618.20(p<0.001)	2.795	0.88	0.92	0.92	0.91	0.05	0.05
Model 2	3121.84(p<0.001)	2.39	0.85	0.91	0.91	0.90	0.04	0.05
Model 3	3129.82(p<0.001)	2.4	0.85	0.91	0.91	0.90	0.04	0.05
Model 4	1.342 (p=0.247)	1.34	0.99	1.00	1.00	0.99	0.003	0.02
Model 5	0.979(p=0.323)	0.97	0.99	1.00	1.00	1.00	0.002	0.00
Model 6	1.828(p=0.176)	1.82	0.99	1.00	1.00	0.99	0.001	0.04
Model 7	3392.3(p<0.001)	2.33	0.85	0.90	0.90	0.90	0.04	0.05
Cut off points	P>0.05	<5	$\geq 0.80$	>0.80- 0.90	$\geq 0.90$	>0.85- 0.90	$\leq 0.05$	<0.08

**Source:** Developed by the Researcher

**Table 38 Estimator Comparison**

Estimator	Model1	Model2	Model3	Model4	Model5	Model6	Model7
IWL-CD	0.95***	0.73***	0.74***	0.67***	0.47***	0.46***	0.52***
CD-Emp		0.36***	0.51***	0.39***	0.40***	0.33***	0.33***
IWL-Emp		0.46***		0.26***	0.37***	0.23***	0.30*
LGO-CD					0.36***	0.35***	0.21***
SDLO-CD				0.16***		0.24(n/s)	0.09***
SDLO-Emp				0.31***		0.23*	0.17*
Age-Emp						-0.0(n/s)	
Exp-Age						-0.0(n/s)	
Desg-CD						-0.01*	-0.13*

\*\*\*=p<0.001, \*=p<0.05

**Source:** Developed by the Researcher

The estimator's effect was similar in all the models. IWL to CD was the estimator with the largest size in all models followed by CD-Emp and then IWL-Emp except in model 2, the size of IWL-to Emp was larger than CD-Emp. The estimator SDLO-CD reduced in model 7 but was still significant.

To test the hypothesis, the result of the final model 7 was used. According to structural analysis of the final model (model 7) it indicated a significant relationship between IWL and competency development (0.46) with p-value (<0.001) supporting hypothesis1. Significant relationship between competency development to employability with (0.33) with p-value (<0.001), significant relationship between IWL to employability (0.30) with p value (<0.05). The model also indicates that competency development fully mediates the relationship between IWL and employability. However, there was no moderating effect of SDLO and LGO on the relationship between IWL and competency development (see model 4a and model 5a). Hence, supporting H<sub>1</sub>, H<sub>2</sub>, H<sub>3</sub>, H<sub>4</sub> and failing to accept H<sub>5a</sub>, H<sub>5b</sub>.

The structural analysis identified few new significant relationships besides the hypothesised relationship. A significant relation between LGO and competency development (0.21) with p-value ( $<0.001$ ), SDLO to competency development (0.94) with p-value ( $<0.001$ ), and SDLO to employability (0.17) with p-value ( $<0.05$ ) was found. Indicating competency development partially mediating the relationship between SDLO and employability.

Group analysis was conducted and there was no significant difference between the constraint and unconstraint model. The difference between the DF of two models is 57 and  $X^2/df$  is 57.78 with (p-value  $>0.05$ ) indicating that there is no significant difference between male and females when it comes to the relationship between IWL, competency development and employability.

#### **The final result of the Hypothesis based on Model 7**

Presented below is the final result of hypothesis test based on model 7. The model supports all the hypothesis except for hypothesis 5.

**Table 39 Result of the Hypothesis based on Model 7**

Hypothesis	Description	Accept/Reject
H1	Employees Informal Workplace Learning affect self-reported competency development	Accept
H2	Self-Reported Competency Development relates positively to Employability	Accept
H3	Competency development mediates the relationship between Informal Workplace Learning and Employability	Accept
H4	Informal workplace learning relates positively to Employability (total effect)	Accept
H5a	Learning goal orientation strengthens the positive effect of IWL on Competency Development	Reject
H5b	Self-directed learning orientation strengthens the positive effect of IWL on Competency Development	Reject

**Source:** Developed by the Researcher

### **Additional findings:**

The final model also found some new insights. The model indicated a direct effect of LGO on Competency Development, further SDLO had a direct effect on competency development and employability. The analysis on model 7 had dropped the control variables: age, gender and experience as it was not statistically significant, and its inclusion did not change the estimates of the explanatory variables. However, the control variable: designation was added in the model as it had a significant effect on competency development. The following section explains the results of each research question.

### **Results for Research Questions**

1. Does Informal Workplace Learning Influence Self-Reported Competency Development?

The relationship between IWL and competency development was examined using the standardized path coefficients from Model 7. As shown in Table 32, the evaluation of the path coefficients indicates that IWL has a significant effect on competency development. The direct effect of IWL on competency development is 0.52, with a p-value of (p=0.009). There is no indirect effect. The significant relationship of the path coefficient in the structural model shows that there is a relationship between IWL and competence development.

**Table 40 Standardized path coefficients displaying the relationship between IWL and competency development**

Path coefficient	Total effect	Direct effect	Indirect effect	P-value
IWL → CD	0.52	0.52		0.009

**Source:** Developed by the Researcher



**Table 41 Observed variable of IWL**

<b>Observed Variable in IWL</b>	<b>R<sup>2</sup> value</b>
Trying and Applying own idea	0.75
Model Learning	0.76
Direct Feedback	0.57
Vicarious Feedback	0.70
Anticipatory Reflection	0.96
Subsequent reflection	0.92
Extrinsic intent to learn	0.88
Intrinsic intent to learn	0.72
<b>Observed Variable in Competency development</b>	<b>R<sup>2</sup> value</b>
Professional competence	0.94
Personal competence (PrCD)	0.97
Social competence	0.92

R<sup>2</sup> values for observed variables

**Source:** Developed by the Researcher

R<sup>2</sup> values were analyzed to explain the variance of the variables. 96% of the variance in IWL is explained by anticipatory reflection, followed by subsequent reflection at 92%. While direct feedback and vicarious feedback explained only 57% and 70% of the variance respectively. Similarly, personal competence explained 97% of the variance in competency development while social competence explained 92% of the variance.

## 2. Does Self-Reported Competency Development Influence Employability?

Model 7 was again used to answer the second research question. The standardized path coefficient (Table 34) shows that competency development has a significant impact on employability. The direct effect of competency development on employability is 0.33, with a p-value of (p=0.011). There is no indirect effect. The

significance of the standardized path coefficient in the structural model proves that there is a covariation between competency development and employability. 96% of the variance in employability is explained by Anticipatory Reflection and Optimization, while corporate sense explains 87% of the variance.

**Table 42 Standardized path coefficients displaying the relationship between competency development and Employability**

Path coefficient	Total effect	Direct effect	Indirect effect	P-value
CD → Employability		0.33		0.011

**Source:** Developed by the Researcher

**Table 43 R<sup>2</sup> values for observed variables**

Observed Variable in Employability	R <sup>2</sup> value
Occupational expertise	0.83
Anticipatory reflection and optimization	0.96
Personal Flexibility	0.93
Corporate sense	0.87

**Source:** Developed by the Researcher

3. Does Competency Development mediate the relationship between Informal Workplace Learning and Employability?

The relationship between informal workplace learning and employability with the mediating role of competency development was examined using the standardized path coefficients derived from the structural model (7) as shown in Figure 25 Table 35 shows the result that IWL has no direct effect (0.13, p=0.17) on

employability, but there is a weak indirect effect (0.17,  $p=0.009$ ) on employability mediated by competency development above. This indicates full mediation.

**Table 44 Standardized path coefficients displaying the mediating effect of competency development between Informal Workplace Learning and employability**

Path coefficient	Total effect	Direct effect	Indirect effect	P-value
IWL $\xrightarrow{CD}$ Emp	0.30	0.13	0.17	0.009

**Source:** Developed by the Researcher

4. Which of the personal characteristics: Learning Goal Orientation (LGO), and Self-Directed Learning Orientation (SDLO) are moderators of Informal Workplace Learning?

The moderating effect of personal characteristics such as LGO and SDLO on the relationship between IWL and competency development was analyzed using the standardized path coefficient. The results show that there is no moderating effect of SDLO (0.01,  $p=$ ) on the relationship between IWL and competency development (see Model 5a). Similarly, no moderating effect (-0.03,  $p=$ ) of LGO was found on the relationship between IWL and competency development (see Model 5a).

**Table 45 Standardized path coefficients displaying the moderating effect of SDLO and LGO on relationship between IWL and competency development**

Path coefficient	Total effect	Direct effect	Indirect effect	P-value
SDLOxIWL → CD	0.01	0.01		0.709
LGOxIWL → CD	-0.03	-0.03		0.357

**Source:** Developed by the Researcher

5. Are there any differences in the nature of employee's professional characteristics (functional) and their involvement in Informal Workplace Learning and competency development?

To determine the difference between employees' functional characteristics and their participation in IWL and competency development, the standardized path coefficient was analyzed. The results showed no effect (0.002,  $p=0.95$ ) of designation on IWL, but a significant inverse effect (-0.13,  $p=0.005$ ) of designation on competency development. This indicates that employees' competency development decreases as they advance in their careers.

**Table 46 Standardized path coefficients displaying the effect of designation on Informal Workplace Learning and competency development**

Path coefficient	Total effect	Direct effect	Indirect effect	P-value
Designation → IWL	0.002	0.01		0.95(n/s)
Designation → CD		-0.13		0.005

**Source:** Developed by the Researcher

## **DATA ANALYSIS: Phase II: QUALITATIVE METHODS**

### **Introduction:**

This part and explains the quantitative results. It attempts to validate the quantitative results with examples and their experiences. The qualitative data from the II phase consist of a smaller part of the explanatory sequential mixed methods (QUAN-qual) (Tashakkori et al., 2020). This phase was conducted after the completion of quantitative phase. This part of analysis consists of semi structured interviews with the Deputy CEO, Vice president, and Chief HRO of the banking sector in Bhutan.

Thematic analysis was used to analyze the qualitative data to provide detailed information on IWL, competency development and employability of bank employees (Braun, & Clarke, 2012).

### **Thematic Analysis**

This design offers the possibility to explain quantitative outcomes with the help of qualitative interviews and fill the gaps that exist with the quantitative outcomes (Braun, & Clarke, 2012). Thematic analysis is the most used methods by qualitative researchers (John W Creswell, & Creswell, 2017; Harrison et al., 2020).

This method allows the data to be analyzed in terms of the main themes identified in the theoretical model. Further thematic analysis seems to be appropriate because, one of the end results of this study is to develop policy recommendations, and Braun, & Clarke (2006, 2013) states that, it provides an analysis suitable for policy development. In addition, thematic analysis provides researchers with great flexibility in analyzing data (Clarke, & Braun 2013). This method is suitable in case of a predefined theoretical framework, where testing of existing theory is the key objective (Braun & Clarke, 2012).

### **Steps involved in Qualitative Analysis**

Many scholars have published methods and instructions for conducting different ways of thematic analysis. In this study, the method described by Braun and Clarke (2006) is used because it allows researchers to return to initial steps in the face of new data or emerging themes that are helpful for further investigation. Moreover, this method is suitable because qualitative analysis aims to comprehend and analyze

range of experiences, thoughts or behaviors of employees of organizations (Braun and Clarke 2012). Their method of analysis consists of six steps:

Step 1: Familiarize with the data

Step 2: Generate Initial codes

Step 3: Search for themes

Step 4: Review of themes

Step 5: Define and name themes

Step 6: Writing the report

These steps are carried out and discussed in great detail, starting with getting to know the data, generating codes, using the existing themes, and writing up the results.

### **1. Getting Familiar with the Data**

The telephone interviews with the Dy. CEO and Chief HRO's were recorded and transcribed. As suggested by Braun and Clarke (2006, 2013), interview transcription was immediately done after the interview. Each interview lasted an average of 30 minutes. Notes were also taken during the interview.

To facilitate the development and overview of the analysis process, interview data were recorded through proper data transcription. Each telephone interview was labeled with the codes and information about the date and time of the interview (Miles & Huberman 1994). To gain a better understanding of the interview, the tapes were thoroughly listened to before analysis and the interview transcripts were read several times. The interview transcripts were then reread and organized.

### **2. Generating Initial Codes**

After familiarization in step 1, notes were made on potentially interesting data and other initial ideas. Codes were developed during this phase (Braun, & Clarke, 2012; John W Creswell, & Clark, 2017; Miles, & Huberman, 1994). Boyatzis defined a code as "the most basic information in the raw data that can be evaluated in terms of the phenomenon" (Richard E Boyatzis, 1998, p. 63).

A deductive coding framework was used to generate codes from the theoretical framework and theories used in the study (Braun, & Clarke, 2012). Once the coding framework was identified, the codes were used to label the data (Braun, & Clarke, 2012). Since the data set was not very large, the coding was done manually.



### **3. Search for Themes**

The third step was to examine the coded and compiled data excerpts for possible themes of general significance (Braun, & Clarke, 2012). Because a deductive analytic approach was taken, the interview questions were based on themes that evolved from SEM analysis, the themes were predefined and provided structure to the data (Braun, & Clarke, 2012).

Accordingly, the five main themes and three subthemes were: Banks Informal Learning in the Workplace; Competency development; Role of Designation in Competency Development; Learning Goal Orientation; and Self-Directed Learning Orientation. The subthemes were IWL learning methods, types of competencies developed, and employability. The themes were used as codes.

#### **Review of Themes**

Braun, & Clarke (2006) described the review of themes as a two-level analysis process. At the first level of analysis, the coded data for each theme were reviewed to ensure that they were correctly assigned. The relevant codes and data were reviewed to ensure that the data included supported each theme in a coherent manner. The themes were further reviewed to ensure that the data within each theme had sufficient commonality and coherence, and that the data between themes were clear enough to warrant separation (Braun & Clarke, 2012).

#### **Define and naming Themes**

Once the thematic map was refined, description of each theme was added based on the existing framework, including why it was important to the overarching question of the study (Braun, & Clarke, 2012). Areas of overlap between themes and emerging subthemes were identified. This served both to describe the themes in more detail and to clearly delineate what each theme encompassed (Braun, & Clarke, 2012). Data extracts are presented in the final report to show the key characteristics of the themes and to provide narratives that provide context to explain their relevance (Braun, & Clarke, 2012). The scope and focus of the predefined themes and codes are presented below. The themes explained below represent the exemplary quotes and experiences of the respondents.

**Table 47 Generation of categories and codes for Informal Workplace Learning and Competency Development**

Theme	category	Code	Sub-code	Respondent										
				1	2	3	4	5	6	7	8	9	10	total
IWL	Social Interactions	Informal discussions	Meetings, breaks	1	1	1					1	1	1	6
	Reflection	Replay the incident,					1							1
	Model Learning	Observe seniors					1	1						2
	Informal Guidance	Sitting by nelly, on the job attachments					1	1	1					3
Competency Development	Social Competency	Soft skills, emotional intelligence, inter personal skills, networking,		1	1	1		1		1	1			6
	Personal Competency	Customer requirements, problem solving, critical thinking, prioritize work,		1			1	1				1		4
	Professional competency	Technical competency, process, handling clients			1			1	1	1		1		5

**Source:** Developed by the Researcher

Majority of the respondents who indicated learning through networking also indicated development of social competencies. Followed by learning through informal guidance and observation and development of professional competencies. This was true for the younger employees, when they initially joined. They sat next to a senior employee and observed them and learned which helped to develop their procedural and technical competencies (professional competencies).

**Table 48 Generation of categories and codes for Competency Development and Employability**

Theme	category	Code	Sub-code	Respondent										Total		
				1	2	3	4	5	6	7	8	9	10			
IWL	Informal Discussion	Networking	Chatting in breaks	1			1	NO		NO						2
	Self-learning	Interest to learn			1											1
	Trying and applying own idea	Experience, by product of work									1	1	1			3
	Incidental Learning	Learning subconsciously							1							1
	Competency Development	Social competencies	Public relation, emotional competencies		1	1	1	1		1						
	Personal competencies	Interpersonal competencies, team skills				1			1		1	1				4
Employability	Anticipation and optimization	Networking, better in managing change,		1	1		1		1			1	1			6
	Occupational Expertise	Career progress, well experienced				1						1	1	1		4

**Source:** Developed by the Researcher

The respondents over all indicated that experience led to development of social and professional competencies and ultimately helped in enriching employability. Though the respondents didn't use the technical terms to describe the employability competencies, the codes were generated based on interpretation the descriptions the respondents provided. For example, when the respondent indicated that experience and book knowledge polish an individual and helps in career progression, it was interpreted as learning through experience led to development of social and personal competencies and helped in building career expertise and anticipation and optimization.

**Table 49 Generation of categories and codes for Learning Goal Orientation (LGO)**

Theme	category	Code	Sub-code	Respondent										Total	
				1	2	3	4	5	6	7	8	9	10		
LGO	No Opportunities	Lacks challenges, lacks competition,		1									1	1	3
	Relaxed culture,	Happy with the job, laid back administrative, everything is free		1					1	1			1		4
	Extrinsic motivation	Need incentives,		1		1									2
	Not interested	Not curious, obsolete managers, don't go the extra mile					1	1		1					3
	Self-motivated	Intrinsic motivation, seek opinions			1							1			2

**Source:** Developed by the Researcher

**Table 50 Generation of categories and codes for Self-Directed Learning Orientation (SDLO)**

Theme	category	Code	Sub-code	Respondent										Total
				1	2	3	4	5	6	7	8	9	10	
SDLO	Not interested		No reading habit, no one goes the extra mile, I don't care, don't want to take responsibilities	1	1	1				1			1	5
	Extrinsic motivation		Needs incentives to learn			1						1		2
	No opportunities		Saturated job market, lack effort, no challenges					1	1					2
	Self-directed		Tolerant of others idea, becoming competitive				1				1			2

**Source:** Developed by the Researcher

**Table 51 Generation of categories and codes for Designation and Competency Development**

Theme	category	Code	Sub-code	Respondent										Total
				1	2	3	4	5	6	7	8	9	10	
Designation (Function)	Exhausted		Too tired, no energy, no time	1						1				2
	Know all		overt confidence			1								1
	Modest		Feel like they have so much to learn,		1		1	1						3
	Glass Ceiling		No scope for career progression, no encouragement						1		1	1	1	4

**Source:** Developed by the Researcher

**Table 52 Generation of categories and codes for IWL learning Techniques**

Theme	category	Code	Sub-code	Respondent										Total	
				1	2	3	4	5	6	7	8	9	10		
IWL	Feedback	Lacks confidentiality,		1											1
		Independent	Young, don't like being told, don't like to be pointed wrong	1	1								1		3
		Feedback is not taken seriously	Casual, comfortable in own mess, let it be, don't care, don't take it seriously,			1	1	1	1	1					6
		Formal feedbacks,	Not sure										1		1
	Learning by Reflection	No humiliation	They don't feel humiliated, no discomfort, no need to face criticisms	1	1			1	1	1			1		6
		independent	Self-drive learning, no need to depend, don't like to ask, inward activity, no need to seek help		1	1		1	1	1	1	1	1		7
		Don't agree					1								1
		High motivation	High moral due to recognition					1							1

**Source:** Developed by the Researcher



**Table 53 Generation of categories and codes for Types of Competency Development**

Theme	category	Code	Sub-code	Respondent										Total	
				1	2	3	4	5	6	7	8	9	10		
Competency Development	Social Competency	Restrictive work environment	No scope for socialization, strict datelines, procedural work,	1				1			1			3	
		Not important	Prefer written directives, lacks encouragement ,lacks awareness,	1	1			1					1	4	
	Lacks Networking	Lacks listening skills				1						1	2		
	Biased Rating										1			1	
	Personal Competencies	High self esteem			1										1
Service regulation		Go by the book, guidelines, target, dateline, requirement, daily scene, working under pressure,	1	1		1	1			1			5		
Repeating same task		Same job					1							1	
Biased Job rotation	Move from one position to other, relocate from one branch to other.										1		1	2	

**Source:** Developed by the Researcher

**Table 54 Generation of categories and codes for components of Employability**

Theme	category	Code	Sub-code	Respondent										Total		
				1	2	3	4	5	6	7	8	9	10			
Employability	Anticipation and optimization	Repetitive task	Same job, dateline,	1			1					1	1		4	
		Job rotation	Moving from one job to other, move from one department to other,		1	1		1		1						4
		Service regulation	Required to stay employed, required to survive							1				1		2
	Corporate Senses	Not prime motive	Not designed to meet industry expectation,	1											1	
		No exposure	Low job involvement, not involved, no emphasis, no orientation or familiarization, no one cares, job description		1	1	1	1	1	1	1	1	1	1	1	9
		No such culture	We don't bother,				1						1		2	

**Source:** Developed by the Researcher

### Results of Qualitative Data

The data was interpreted by reflecting on the responses given by the participants (J. W. Creswell & Creswell, 2017). Illustrative tables, maps and diagrams were used to project the findings to facilitate readability as each theme was aligned to all respondents (Ritchie, & Spencer 2002).

### 1. Profile of the Interview Respondents

The sample for the survey consisted of all five banks in Bhutan. with the organization's consent to participate in the survey. To further describe and explain the banks' informal workplace learning methods, the types of skills developed, and employability skills, the deputy CEO (a vice president) and the head of human resources were interviewed. A total of ten individuals participated in the survey, two from each bank, consisting of a Dy CEO and a Chief HRO. Their length of service ranged from a minimum of 6 years to a maximum of 19 years (Table 7.1), which is sufficient work experience to provide the necessary information for data analysis.

**Table 55 Respondent's profile**

Interview respondent	Work Experience(years)	Job Title
R1	15	Dy CEO
R2	13	Dy CEO
R3	9	Vic President
R4	12	Chief HRO
R5	16	Dy CEO
R6	6	Chief HRO
R7	10	Chief HRO
R8	13	Dy CEO
R9	11	Chief HRO
R10	14	Chief HRO

**Source:** Developed by the Researcher

### 2. Theme 1 IWL and Competency Development

Since the main aim of the qualitative analysis was to obtain a better explanation for the empirical results. The respondents were asked whether they agreed that IWL can lead to competence development and what their experience of it had been. All ten respondents agreed (100%) that IWL can help develop competencies. The respondents answered that learning was always informal, they learned without

being aware of it, and some indicated that they learned by thinking. They stated that these informal learning methods helped them in developing interpersonal skills, emotional intelligence, listening skills and problem-solving skills. One of the respondents said:

...When I see the oldest guy handled the whole thing very well in a meeting, I go back and replay the incident, when I am alone and then this is how I mean subconsciously learn. Such interactions help in building interpersonal skills, emotional intelligence, listening skills, solving problems as well as critical thinking

(R4, Interviewer, 10 October 2021)

Another respondent said:

...We have “M-pay” (Banking App) most of the improvements and augmentations, you see face-lifting that is going on do not happen because of formal instructions, this happens based on the discussions that sometimes we get to overhear, during cigarette break or lunch breaks. This has helped in building our technical abilities.

(R2, Interviewer, 3 October 2021)

Most banks have no formal training for new recruits. They usually report to a supervisor and learn by observation. All ten interviewees stated that basic training in the field or expertise in banking and finance was required, but at the same time they were all aware of informal ways of learning. Some of the respondents stated:

...When we have new employees joining us, we don't have a formal training for them. We attach them with the seniors they watch them and learn from them, because we tried giving a formal training right after joining but that was not effective, they were thoroughly confused. Now we don't send them for formal trainings, until they are very experienced and require certain specialization.

(R7, Interviewer, 25 October 2021)

...We really don't have any formal training programs as such we just give an orientation for a day or two and then the next day they are on board, watching the colleges work and learn.

(R3, Interviewer, 17 October 2021)

...I have seen them discussing with the seniors, learning from the seniors, on the job attachments is something we frequently encourage. such informal means of learning helps them in learning about the process and learning how to manage and prioritize their work.

(R5, Interviewer, 18 October 2021)

...Two days ago, we had a board meeting, and the chair of our board was very clear about how having a set of well-defined policies and rules for alone is not enough. The board was trying to remind the management that encouraging and building good work culture Informal's and casual environment is very important if not more important than the prescriptive and the define policy.

(R2, Interviewer, 3 October 2021)

It was clear from the themes that they value and practice IWL and that they recognize that such informal learning tools help in the development of social, personal, and professional competencies. Although the study did not quantify the extent of IWL and skill development, the interview of CEOs and Chief HROs revealed that the majority of respondents who reported learning through networking also reported developing social competencies. Followed by learning through informal guidance and observation and developing technical competencies. This was also true for the younger employees when they first joined the company. They sat next to a senior employee, observed him and learned, which contributed to the development of their procedural and technical competencies (job skills).

**Table 56 Themes and exemplary quotes related to participants' experiences of relationship between IWL, and competency development**

Interview Respondent	Agree/ Disagree	Themes	
		IWL	Competency Development
R1	Yes	“Some discussion was going on in the canteen about commercial loan defaulters and, I was not aware of the situation”.	Over the period, I have become more social and have the real idea of what the customers prefer.
R2	Yes	“Developments happens based on the discussions that sometimes we get to overhear, during cigarette break or lunch breaks”.	This has helped in building our technical abilities or what you refer as capabilities.
R3	Yes	“The chair of our trying to remind the management that encouraging and building good work culture and casual environment is very important.”	I see such discussions has helped in developing people skills and soft skills which is very important in today
R4	Yes	“When I see the oldest guy handled the whole thing very well in a meeting, I go back and replay the incident, when I am alone and then this is how I mean subconsciously learn”	Such interactions help in building interpersonal skills, emotional intelligence, listening skills, solving problems as well as critical thinking.
R5	Yes	“I have seen them discussing with the seniors, learning from the seniors, on the job attachments is something we frequently encourage”	“Learning informally helps them in learning about the process and learning how to manage and prioritize their work”
R6	Yes	“When we have new employees joining us, we don't have a formal	“Through discussion with seniors, people in



Interview Respondent	Agree/ Disagree		Themes
		training for them. We attach them with the seniors they watch them and learn from them”.	organization they also gain technical knowledge, relationship skills, conceptual, these skills are subject to learning.”
R7	Yes	“We take them to the branch and attached, there after they will be given placement. We don’t have any formal monitoring and evaluation forms. So, it’s completely informal”.	“To learn different banking products, technical and process skills”
R8	Yes	“Whenever I talk with anyone if I gain any insight or knowledge, I consider it as learning for me”	“It helps me to build up my interpersonal skills”
R9	Yes	“I feel whatever I have learned so far has been acquired informally, of course formal education and training is important but majority of what I know today is learned through informal means”.	“It has helped me advance my people management skills, now I can handle most of the perilous situations without getting emotionally strained”.
R10	Yes	“They often stop by my office and seek for suggestions”.	“Financial decision making, how to handle important clients is what the discuss”

**Source:** Developed by the Researcher

### 3. Theme 2 IWL, competency development and employability

The second area of the qualitative theme was to see if the respondents agree that competencies developed through IWL lead to enhanced employability. Out of ten respondents two respondents did not agree that IWL and competency development led to enhanced employability. Only (80%) of the respondents agreed to it.

Two respondents said that IWL leads to competency development and ultimately better employability generally and theoretically, but when it comes to their experience and observation, things are quite distinctive. One respondent stated that:

Respondent 5 aforementioned:

...After you have experience there is always a chance to uplift your career. You know more than the book knowledge. But in Bhutan we have a very small fraction of people who wants to leave the comfort and go elsewhere.

(R7, Interviewer, 25 October 2021)

Similarly, (R7) indicated:

...People getting better offers based on their excellent competencies are quite low.

(R7, Interviewer, 10 October 2021)

Whereas majority of them agreed that competencies developed through IWL lead to enhanced employability. They stated that they landed better opportunities based on what they had learned by doing the work and getting information from people.

As some of the respondents specified:

...Competency developed informally is a byproduct of work, which ultimately is an added advantage in terms of enriching employability.

(R9, Interviewer, 10 October 2021)

...Chit chatting over coffee tea or lunch, so if people really understand and know how to leverage you know this kind of setups, is where you get the raw and pure information, So, these skills make you better than others and you always have a better employment opportunity.

(R4, Interviewer, 10 October 2021)

Another one stated that:

...The former director moved to a better organization solely because of his people management skill and the way he spoke captured everyone's attention. And these things are not taught in any trainings you develop such skills through informal interaction and refine yourself over the time.

(R3, Interviewer, 10 October 2021)

Overall, respondents indicated that the experience led to the development of social and professional competencies and ultimately helped to improve employability. Although respondents did not use technical terms to describe employability competencies, codes were created based on interpretation of respondents' descriptions. For example, if the respondent stated that experience and book knowledge polished a person and helped in career advancement, this was interpreted as learning through experience that led to the development of social and personal competencies and helped in building professional expertise and anticipation and optimization.

**Table 57 Themes and exemplary quotes related to participants' experiences of relationship between IWL on Employability with the mediating role of competency development**

Interview Respondent	Agree/ Disagree	Themes Employability
R1	Yes	"I realize that doing masters is not sufficient for future growth, I had to be good in building public relations and positive image of the organization, if wanted to climb the career ladder".
R2	Yes	"Someone with the right attitude and the ability and the interest to learn from the informal means, who has better competency than his competitors definitely sustain a better chance of employability within and outside. But in Bhutan People are very complacent".
R3	Yes	"The former director moved to a better organization solely because of his people management skill and the way he spoke captured everyone's attention. And these things are not taught in any trainings you develop such skills through informal interaction and refine yourself over the time".
R4	Yes	"Chit chatting over coffee tea or lunch, so if people really understand and know how to leverage you know this kind of setups, is where you get the raw and pure information, So, these skills make you better than others and you always have a better employment opportunity"
R5	No	"After you have experience there is always a chance to uplift your career. You know more than the book knowledge. But in Bhutan we have a very small fraction of people who wants to leave the comfort and go elsewhere".
R6	Yes	"Such generic competencies can lead to employability. even without knowing they learn a lot subconsciously. These learning develop their emotional competencies, interpersonal competencies, or team competencies so ultimately it will be an added value to them in terms of employability".

Interview Respondent	Agree/ Disagree	Themes
R7	No	“People getting better offers based on their excellent competencies are quite low”.
R8	Yes	“Definitely it will be an added advantage, to progress in career”
R9	Yes	“Competency developed informally is a byproduct of work, which ultimately is an added advantage in terms of enriching employability”.
R10	Yes	“I have seen people advancing their career ladder, based on what they have learned through their experience”

**Source:** Developed by the Researcher

#### 4. Theme III Learning Goal Orientation

Based on the survey responses in phase one, it was clear that LGO did not strengthen the relationship between IWL and skill development. That is, the employees’ willingness to engage in challenging activities to develop competencies were not seen. Therefore, in the second phase, the analysis intended to understand the respondents experience of LGO among their employees.

Out of the ten respondents, only two agreed with the statement that employees in the banking sector of Bhutan are learning goal oriented. 80% of the respondents disagreed. Most respondents indicated that there is a lack of competition in the work atmosphere, and few are interested in learning unless there is reward or recognition. Most respondents pointed to a culture where most are satisfied with what they have and do not strive for more.

The respondents stated:

...Because I've seen that the work atmosphere lacks competition. As far as they are comfortable and happy in their work, they don't strive to be better than others. They are only motivated to learn if a monetary reward is associated.

(R1, Interviewer, 7 October 2021)

...If they don't see any reward attached to it, they don't usually put the effort to learn.

(R3, Interviewer, 17 October 2021)

...Due to the laid-back approach of the administrative system, cultural system there is not many challenges they have to face so they are quite slow in terms of learning and development.

(R6, Interviewer, 19 October 2021)

...In Bhutan everything is free, people are happy with what they have, so I would say they are content.

(R9, Interviewer, 10 October 2021)

While two respondents stated that

...majority of their services have migrated to online through digital approaches so employees in digital sector are self-motivated and do a lot of research on their own

(R2, Interviewer, 3 October 2021).

Another one stated that

...They are quite curious and seek for advice and opinions voluntarily

(R8, Interviewer, 10 October 2021).

Therefore, it can be concluded that very few employees are learning goal oriented, specifically the people working in IT department.

Thus, the reason for the non-significant moderating effect of LGO on the relationship between IWL and competency development was a relaxed culture and the absence of challenge and competition. This low score on LGO can be explained by the fact that learning from feedback was the least preferred learning pattern in phase I



analysis. And as Decius et al. (2021) noted, "LGO is associated with the tendency to view feedback - as an important element of IWL.

**Table 58 Themes and exemplary quotes related to participants' experiences of the moderating effect of Learning Goal Orientation (LGO)**

Interview Respondent	Agree/ Disagree	Themes LGO
R1	No	"Because I've seen that the work atmosphere lacks competition. As far as they are comfortable and happy in their work, they don't strive to be better than others. They are only motivated to learn if a monetary reward is associated".
R2	Yes	"Most of our services have migrated to online through digital approaches so I've seen that specially our employees working in the digital sector in the department are self-motivated and they do a lot".
R3	No	"If they don't see any reward attached to it, they don't usually put the effort to learn".
R4	No	"it's sad to see that sometimes even you know the young colleagues who are supposed to be energetic curious you know hungry to learn I miss that, and then the other thing is that we have that obsolete manager who is like conservative that's a little old and they don't want to change their ways of working, they do the same thing again and again".
R5	No	"Very small fraction of people is there who wants to learn. Not just banks its almost in every organization."
R6	No	"Due to the laid-back approach of the administrative system, cultural system there is not many challenges they have to face so they are quite slow in terms of learning and development".
R7	No	"They don't have so much of interest. Because once they get a job, they feel that they are set for life".
R8	Yes	"They are quite curious and seek for advice and opinions voluntarily"

Interview Respondent	Agree/ Disagree	Themes
R9	No	“In Bhutan everything is free, people are happy with what they have, so I would say they are content”.
R10	No	“No opportunities and no scope for competition, people don't bother go that extra mile, unless its required”.

**Source:** Developed by the Researcher

### 5. Theme IV Self-Directed Learning Orientation (SDLO)

The next theme that was investigated was SDLO. Based on the survey responses in phase one, it was clear that SDLO did not strengthen the relationship between IWL and skill development. Therefore, the analysis in phase II aimed to understand the respondents' experiences with SDLO among their employees. The responses were similar to those of LGO. Hardly two of the respondents agreed that their employees had an SDLO. However, 80% of the respondents disagreed that their employees had an SDLO.

This is in line with previous research which indicated that IWL can develop an employee's competencies, but it is up to the employee to seize this opportunity and develop his or her competencies accordingly (Deci, & Ryan, 2002; Sundberg, 2001; Van der Heijde, & Van der Heijden, 2006). Therefore, SDLO was included in our study as a moderating variable between IWL and competence development.

The majority of respondents indicated that there is a lack of opportunity and competition in the labor market and that people who do not see any reward or meaning in it do not really make an effort or take the responsibility to learn for themselves. As some of the respondents stated:

...The job market is almost saturated where the rate of employment is (18%) which is large in any context. So even if you have the skills there is no opportunities that's why people don't really put the effort to learn and progress.

(R5, Interviewer, 18 October 2021)

...People have a I don't care attitude unless they are highlighted by the management they don't really care.

(R3, Interviewer, 17 October 2021)

It can be concluded that employees are neither self-directed learners nor do they take responsibility for their learning. One of the interviewees pointed out that employees hardly take advantage of these opportunities even though the company offers incentives and promotions for participating in formal development programs. (R7, Interviewer, 25 October 2021) stated:

...People don't take up formal training courses even when we provide incentives, I don't think we can refer them as self-directed. In the past two years we had only one employee apply for this training program.

**Table 59 Themes and exemplary quotes related to participants' experiences of the moderating effect of SDLO**

Interview Respondent	Agree/ Disagree	Themes SDLO
R1	No	"Executives were supposed to read the policy guide before coming for the meeting so that they can comment on the amendments, but none of them did".
R2	No	"Out of 10 employees maybe there would be one, maybe 1% of the employees could be really self-directed going to the extent of staying very up to date on his area of subject matter expertise because today there's no limit to learn".

Interview Respondent	Agree/ Disagree	Themes SDLO
R3	No	“People have a I don’t care attitude, unless they are highlighted by the management they don’t really care”.
R4	Yes	“I mean like 95% of the BOB employees are self-directed and they are more tolerant of other people’s idea”.
R5	No	“The job market is almost saturated where the rate of employment is (18%) which is large in any context. So even if you have the skills there is no opportunities that’s why people don’t really put the effort to learn and progress”.
R6	No	“Unless there is a challenge, and their jobs are at stake they won’t really bother to take the responsibility of their own learning”
R7	No	“People don’t take up formal training courses even when we provide incentives, I don’t think we can refer them as self-directed. In the past two years we had only one employee apply for this training program”
R8	Yes	“They have become more competitive, and they look for opportunities to learn on their own”.
R9	No	“Unless it related to some sort of recognition or reward, they won’t really take the lead in learning”.
R10	No	“I haven’t come across anyone who take the responsibility to learn on their own”.

**Source:** Developed by the Researcher

## 6. Theme V Designation and Competency Development

Based on the survey responses. Demographic factors (Age, Gender, Designation, Experience) were controlled. Almost all the factors had no effect except for designation. It was found that designation had negative association with competency development. So, in the second phase the aim of the qualitative interview was to understand the reasons for the negative association.

80% of the respondents agreed that as you climb up the career ladder, one become less enthusiastic of any development programs, and most of the time they are overburdened by responsibilities.

...As employees become old or when their job becomes stabilized, we see a decline in motivation to learn new things, whereas the younger (lower level) one or middle will be more eager to develop because they have scope to climb up the ladder and will be more motivated.

(R6, Interviewer, 19 October 2021)

...I am too tied with work, so I don't know if I am developing any competencies.

(R1, Interviewer, 7 October 2021)

...In high position you get confident and at times when you think that you know everything you don't learn so no competence development.

(R3, Interviewer, 17 October 2021)

According to the responses another reason that emanated is when someone reaches higher position, one becomes more knowledgeable and the more one knows, more one feels like you know nothing. As one of the respondents stated:

...Because in higher position people are always self-motivated and self-driven and they feel that they have so much to learn. When you know more you know that there still so much more to learn.

(R4, Interviewer, 10 October 2021)

On the other hand, the (20%) of the respondents indicated that the employees at higher level got more opportunities to learn and they were the ones who valued and enjoyed learning the most. One of the respondents stated:

...This is a surprise for me because what I've seen during my last 31 years of public service is I have seen that employees at the senior level are the ones who enjoy learning and developing competencies.

(R2, Interviewer, 3 October 2021)

Another respondent stated:

...If you're in a higher position you will get more opportunities to meet new people, carry diverse responsibilities and more interaction happens and you get to learn more which ultimately leads to development of competencies.

(R5, Interviewer, 18 October 2021)

Therefore, it can be concluded that majority of the employees at a higher level felt that as you reach higher positions one's competency development declines.

**Table 60 Themes and exemplary quotes related to participants' experiences in Negative association of Designation in competency Development**

<b>Interview Respondent</b>	<b>Agree/ Disagree</b>	<b>Themes Designation</b>
R1	Yes	"I am too tied with work, so I don't know if I am developing any competencies".
R2	No	"This is a surprise for me because what I've seen during my last 31 years of public service is I have seen that employees at the senior level are the ones who enjoy learning and developing competencies".
R3	Yes	"In high position you get confident and at times when you think that you know everything you don't learn so no competence development"



<b>Interview Respondent</b>	<b>Agree/ Disagree</b>	<b>Themes Designation</b>
R4	Yes	“Because in higher position people are always self-motivated and self-driven and they feel that they have so much to learn. When you know more you know that there still so much more to learn”
R5	No	“If you’re in a higher position you will get more opportunities to meet new people, carry diverse responsibilities and more interaction happens and you get to learn more which ultimately leads to development of competencies”.
R6	Yes	“As employees become old or when their job becomes stabilized, we see a decline in motivation to learn new things, whereas the younger (lower level) one or middle will be more eager to develop because they have scope to climb up the ladder and will be more motivated”.
R7	Yes	“Banking field as we go up in senior level you are bogged down so much. We don’t really get the time and have the energy left to do extra”.
R8	Yes	“Because we have already struggled in our times so now, we don’t have much scope in-terms of career growth, plus we don’t have that same energy now.
R9	Yes	“It’s been thirteen years here and till now I have attended only one career development program formally, so there isn’t much encouragement here for seniors”.
R10	Yes	“It could be true, because our profession's reaches a dead end after a certain time, whereas the younger lot they have just begun climbing the stairs”.

**Source:** Developed by the Researcher

### **7. Subtheme I: Learning from Feedback**

Responses to the Phase I survey indicated that learning from feedback was of low importance in relation to IWL. The survey aimed to understand the low relevance of feedback as an IWL mechanism. The respondents pointed out that

majority of the workforce belonged to Generation Z followed by Generation Y. They indicated that most of them are independent and do not like to be pointed out and told. Others attributed the cause to culture and laid back attitude.

As (R2, Interviewer, 3 October 2021) stated:

...This must be coming from the relatively younger lot, because they are independent, and they don't like being told what to do.

(R10, Interviewer, 10 October 2021) stated:

...Because our workforce is quite young and this younger generation don't like being told, they are very independent.

On the other hand, (R8, Interviewer, 10 October 2021) stated:

...They don't really take feedbacks that seriously, no one does here.

Likewise, (R7, Interviewer, 25 October 2021) stated:

...In Bhutan once employed, people don't have further learning interest, they are not so curious and plus the culture is such that they don't take it seriously.

This result is related to the results of the quantitative phase I, in which it was found that the majority of respondents were between 25 and 39 years old. And according to the answers in the interviews, they describe that the younger ones do not like to be told anything and hardly ask for help from their elders. In addition, they do not like it when the feedback giver does not maintain confidentiality and often discuss among colleagues.

**Table 61 Themes and exemplary quotes related to participants' experiences in low ratings for Learning from feedback**

<b>Interview Respondent</b>	<b>Themes: Learning from Feedback</b>
R1	“Because when you get any feedback on something, rather than keeping it with himself the feedback giver often shares. So, they don't like to be pointed that they are wrong”.
R2	“This must be coming from the relatively younger, because they are independent, and they don't like being told what to do”.
R3	“Feedbacks are not taken seriously. We are very casual”.
R4	“No matter how many times you know give them feedback or constructive criticism they really don't pay heed about it they are very comfortable in their own mess”.
R5	“They have the let it be attitude, I don't care.”
R6	“Feedback will be effective only when the person has trust on the feedback giver or if the feedback is not deemed important people really don't care”
R7	“In Bhutan once employed, people don't have further learning interest, they are not so curious and plus the culture is such that they don't take it seriously”
R8	“They don't really take feedbacks that seriously, no one does here”.
R9	“We do seek feedbacks formally from our clients, but how far people incorporate and act on is something I can't really say”.
R10	“Because our workforce is quite young and this younger generation don't like being told, they are very independent”.

**Source:** Developed by the Researcher

### **8. Sub theme 2 Learning by reflecting**

Survey responses resulted in a high score for learning through reflection. When surveyed, the reason respondents gave for their high preference for learning by reflection was staff autonomy. Another reason was that it is a mental process where

there is no humiliation or criticism, which is why they prefer it. Respondents specified:

...It is because they don't have to depend on anyone's feedback and don't have to deal with any discomfort that is why they prefer to learn by reflecting.

(R3, Interviewer, 17 October 2021)

Another respondent stated:

...Learning by reflecting is an inward activity, done without seeking much help from the external agencies, its spontaneous and independent that's why people prefer.

(R6, Interviewer, 10 October 2021)

**Table 62 Themes and exemplary quotes related to participants' experiences in high ratings for Learning by reflecting**

<b>Interview Respondent</b>	<b>Themes: Learning by Reflecting</b>
R1	"They don't have any low feeling or humiliation but difficult to practice. That why they would prefer"
R2	"They prefer learning in a self-driven mode I would like to believe it is related to the paradigm shift in the rational thinking way of doing working".
R3	"It is because they don't have to depend on anyone's feedback and don't have to deal with any discomfort that is why they prefer to learn by reflecting".
R4	"Until and unless you are given feedback, I don't think anybody will learn from it their own reflection. I feel it is contradicting here a bit "
R5	"When their boss acknowledges their work, they get their moral up and get motivated. That could be a reason why they prefer to learn by

Interview	Themes: Learning by Reflecting
Respondent	reflecting”.
R6	“Learning by reflecting is an inward activity, done without seeking much help from the external agencies, its spontaneous an independent that’s why people prefer”
R7	“They may feel that way because it’s a mental process and you don’t have any external ways to measure that”.
R8	“Because they are more independent, they never ask if they are not sure of anything, they keep it to themselves”.
R9	“I don’t know how far they practice, but they it’s something you don on your own, so it’s easier to practice, when you think”.
R10	“don’t have to depend on others and no need to face any criticisms too”

**Source:** Developed by the Researcher

### 9. Sub Theme 3 Social Competencies

Survey responses from phase I revealed a low frequency for social competencies. However, there was not much difference between personal and social competency. Most of the respondents indicated that learning through informal conversations was one of the most practiced IWL methods. Therefore, it became imperative to understand the reasons for the low social skills.

Majority of the respondents suggested in the interview that the work in the banks is systematic, that certain procedures must be followed, and they therefore do not have much to do with each other. On the other hand, some indicated that there is not much initial training or guidelines to improve their interpersonal skills hence they rated it low. For example, R2, R3 and R5 stated simultaneously:

...We don’t have any policy that guides any one on social skills and service regulations, and people here prefer written directives.

(R2, Interviewer, 3 October 2021)

...I have seen employees often struggle when dealing with customer issues. Because we cannot train them on each aspect of how to speak to customer that sometimes depends on their personal traits too.

(R3, Interviewer, 17 October 2021)

...As a bank everything is systematic and there is not much scope to socialize and interact, they must finish a certain percent of task and hence they don't really get time to go around much.

(R5, Interviewer, 10 October 2021)

On the other hand, few interviewees stated that most of them don't like to listen. Which can be attributed to the fact that they don't like taking feedback and hence don't prefer to listen too. Which is important in terms of networking. For instance, R4 stated that:

...Especially with the new people they don't like to listen people talk that's why they are not too good at networking.

(R4, Interviewer, 10 October 2021)

Similarly, R9 stated:

...Today people are so engrossed in their phones, they don't really lift their head up and talk, nor do they listen, so no wonder they lack social skills.

(R9, Interviewer, 10 October 2021)

So, it can be said that the results here are somewhat relate to phase I, where majority of the respondents were between the age group of 25 to 39, who don't prefer to ask or listen to others. The results are also consistent with the fact that employees rated low in terms of preference to learn from feedback. As seeking feedback and listening are prerequisites for social competencies.



**Table 63 Themes and exemplary quotes related to participants' experiences in low ratings for social competencies**

<b>Interview Respondent</b>	<b>Themes Social Competencies</b>
R1	“Social skills cannot be demonstrated in isolation we need to interact and for this most of the times working environment is always restrictive”.
R2	“We don't have any policy that guides any one on social skills and service regulations, and people here prefer written directives”
R3	“I have seen employees often struggle when dealing with customer issues. Because we cannot train them on each aspect of how to speak to customer that sometimes depends on their personal traits too”.
R4	“Especially with the new people they don't like to listen people talk that's why they are not too good at networking”.
R5	“As a bank everything is systematic and there is not much scope to socialize and interact, they must finish a certain percent of task and hence they don't really get time to go around much”.
R6	“Hard skill is always there. soft skill is like an ocean if you get into the world of soft skills that is when you know how much more learning you need to do”.
R7	“There are very few people who would want to rate low in terms of personal or personals skills but since social skills are not given much importance by the banks”
R8	“The work here is usually procedural and must follow certain protocols, so we don't have much scope to interact and talk beyond the task.
R9	“Today people are so engrossed in their phones, they don't really lift their head up and talk, nor do they listen, so no wonder they lack social skills”.
R10	“They hesitate to call high-profile clients and talk to them”.

**Source:** Developed by the Researcher

### 10. Sub Theme 4 Personal Competencies

The next question aimed to understand the reason for the high scores related to personal competencies, in terms of competency development. Personal competencies refer to the ability to handle stress, meet deadlines, the ability to learn and develop, self-confidence and creativity. Again, the difference was not that significant, but it was imperative to understand the reason behind it.

80% of respondents said that this was due to the banks' strict service rules that required them to meet deadlines and targets, and they attributed this to inter-departmental transfers (job rotation) that improved their personal skills. For instance, R5 and R9 stated:

...Everyone is given a target; they need to bring in so and so number of customers within a period that's why they are competent in terms of personal skills.

(R5, Interviewer, 18 October 2021)

...Meeting deadlines, working under pressure is a daily scene here, they are used to handling such situation.

(R9, Interviewer, 10 October 2021)

Similarly, R8 and R10 indicated:

...That's true, because we keep on moving them from one post to other, this helps in developing their personal skills.

(R8, Interviewer, 10 October 2021)

...We keep relocating our employees from one branch to another and keep on changing their departments. This practice makes them competent in terms of personal skills.

(R10, Interviewer, 10 October 2021)

On the other hand, one of the respondents stated that it was due to high self-esteem that they rated high, another stated that the responses might be biased as it was self-evaluation. The respondent stated:

...Because they have High self-esteem, and they are highly focused.

(R1, Interviewer, 7 October 2021)

...No one wants to rate themselves low. It could be biased. Because I don't agree. No one takes any initiative, as soon as they realize that it's not their job, they won't even think of helping.

(R7, Interviewer, 25 October 2021)

However, it can be clearly seen that the reason for high scores in terms of personal competency can be attributed to service regulation. Where they are required to meet certain date line, target and working under pressure was a daily scene. The second reason was the job rotation practice they followed which made the employees gain experience in different departments.

**Table 64 Themes and exemplary quotes related to participants' experiences in high ratings for Personal competencies**

<b>Interview Respondent</b>	<b>Themes</b>
	<b>Personal Competencies</b>
R1	"Because they have High self-esteem, and they are highly focused".
R2	"Banks have a rigorous service regulation also we have to go by the book. So, if these people can solve problems on their own and meet their targets than it is due to the set of guidelines that is already there".
R3	"Since banking is a challenging sector thing can change at any moment. So, we make sure we have proper guidelines. That's why people feel that they are prepared and have good personal skills".
R4	"It is because they are specialized and have undergone training and over

Interview Respondent	Themes
	Personal Competencies
	the period of time, they have become expert because they have been doing the same task repetitively”.
R5	“Everyone is given a target; they need to bring in so and so number of customers within a period that’s why they are competent in terms of personal skills”.
R6	“it’s a requirement and they must have it to survive in the job”.
R7	“No one wants to rate themselves low. It could be biased. Because I don’t agree. No one takes any initiative, as soon as they realize that it’s not their job, they won’t even think of helping”.
R8	“That’s true, because we keep on moving them from one post to other, this helps in developing their personal skills”.
R9	“Meeting deadlines, working under pressure is a daily scene here, they are used to handling such situation”.
R10	“We keep relocating our employees from one branch to another and keep on changing their departments. This practice makes them competent in terms of personal skills”.

**Source:** Developed by the Researcher

### 11. Sub Theme 5 Anticipation and optimization

Similarly, based on the analysis of Phase I, the study found that employees had scored high on anticipation and optimization. Anticipation and optimization mean preparing personally and creatively for future change while striving for the best possible results Heijden (2005).

Therefore, the interview aimed towards understanding the reason behind it. All the employees stated the cause to be the practice of job rotation and the repetitive task they performed. Like some of the respondents stated:

...That is true because, they are often moved from one department to another for example credit, audit, compliance that’s how they are quite well versed and prepared if assigned new roles.

(R3, Interviewer, 17 October 2021)

...That is because they have deadlines they need to meet, and they do the same job day in an out, so they become an expert over time. This gives them the feel that they will be able to adapt to the change and be an expert.

(R4, Interviewer, 10 October 2021)

...Doing the same job day in and day out leads to building expertise, and when your expert you are confident so you feel you can anticipate any change.

(R8, Interviewer, 10 October 2021)

...Repetition of same task leads to expertise, and self-confidence.

(R9, Interviewer, 10 October 2021)

Hence, it can be said that when people perform same task repetitively and move from one department to another it leads to development of personal competencies which ultimately enhances an individual's anticipation and optimization dimension of employability.

**Table 65 Themes and exemplary quotes related to participants' experiences in high ratings for Anticipation and optimization**

<b>Interview Respondent</b>	<b>Themes: Anticipation and optimization</b>
R1	“That is probably because they think that doing repetitive work in that way, they can anticipate what they can expect and since they perform repetitive job it leads to optimization”.
R2	“Moving from one job to another is a practice we follow; this prepares them for the change”.
R3	“That is true because, they are often moved from one department to another for example credit, audit, compliance that how they are quite

Interview	Themes: Anticipation and optimization
Respondent	
	well versed and prepared if assigned new roles”.
R4	“That is because they have deadlines they need to meet, and they do the same job day in an out, so they become an expert over time. This gives them the feel that they will be able to adapt to the change and be an expert.”
R5	“We move employees from one department to another, this helps them to be ready to accept any roles, or tasks”.
R6	“Anticipating change is something that is required to stay employed”.
R7	“Employees be well versed because they must do everything themselves. like jack of all trades. That’s what makes them a complete banker”.
R8	“Doing the same job day in and day out leads to building expertise, and when your expert you are confident so you feel you can anticipate any change”.
R9	“Repetition of same task leads to expertise, and self-confidence”.
R10	“Change is evident, if you want to survive you need to be ready to accept”.

**Source:** Developed by the Researcher

### 12. Sub Theme 6 Corporate Sense

It is always pointed out that working in groups is becoming more and more important in today's working world. Corporate sense is about sharing responsibilities, knowledge, experiences, feelings, successes, failures, goals, etc. Energy is directed toward the performance of the group as a whole as well as being used for one's own career interests van der (2005). However, the analysis of Phase I revealed that among the four dimensions of employability, employees rated corporate sense and occupational expertise lowest, with an R2 value of 87% and 69% respectively. Therefore, the second phase of the survey aimed to understand the reason for the low scores.

Almost 90 % of the respondents stated that employees rated low in terms of corporate sense because the organization does not put much effort in terms of



instilling a sense of sharing responsibility or goals. Further the job description of the employees does not demand much of their involvements in it. As some of the respondents stated:

...We don't have any formal training programs or orientation to familiarize with the corporate roles and goals. Any new strategy or plan is always instructed using a top-down approach so in such culture we cannot expect our employees to have high corporate sense.

(R3, Interviewer, 17 October 2021)

...I don't see anyone sharing any responsibility, no one cares if it's not their job.

(R9, Interviewer, 10 October 2021)

...It's because their job descriptions don't demand much of their involvement in terms of it.

(R10, Interviewer, 10 October 2021)

**Table 66 Themes and exemplary quotes related to participants' experiences in low ratings for Corporate Sense**

<b>Interview Respondent</b>	<b>Themes: Corporate Sense</b>
R1	"Any work is not designed to develop competency to meet industry expectations."
R2	"While onboarding or recruiting new employees there is not much effort put in employees to instill for a deliberate kind of knowledge and skill development on that front"
R3	"Any new strategy or plan is always instructed using a top-down approach so in such culture we cannot expect our employees to have high corporate sense".
R4	"It also seems true to mention that people were not given the correct

<b>Interview</b>	<b>Themes: Corporate Sense</b>
<b>Respondent</b>	exposure or information sharing in terms of what organization wants.
R5	“That is true because people don’t have any high share of emphasis on corporate goals”.
R6	“They have very low job involvement and are not really bothered about the organization”.
R7	“That’s because most of the strategy development and planning is done by the senior level committee”.
R8	“This is there because we don’t really bother to familiarize our employees with the day-to-day activities”.
R9	“I don’t see anyone sharing any responsibility, no one cares if it’s not their job”
R10	“It’s because their job descriptions don’t demand much of their involvement in terms of it”

**Source:** Developed by the Researcher

### **Validity and Reliability**

Reliability in qualitative research refers to the stability of responses. To ensure reliability of qualitative data detailed field notes were taken by recording the conversation and transcribing the digital files. Validity in qualitative research usually have different terms than in quantitative research. The terms used are “trustworthiness” of a study as the naturalist’s equivalent for internal validation, external validation, reliability, and objectivity (Miles & Huberman, 1994). Trustworthiness was achieved by ensuring the credibility, authenticity, transferability, dependability, and confirmability of the respondents. To operationalize the validity, long engagement with the respondents were established and the triangulation of data sources (executives and the top-level managers), were established to ensure credibility.

## Chapter Summary

This chapter presents the statistical analysis using SPSS and AMOS. Prior to the analysis, an initial review of the survey data was conducted. Demographic information and descriptive statistics of the study were presented using ANOVA and the t-test for independent samples. Normality and unbiasedness of the data were ensured by assessing the skewness and kurtosis of the distribution, and Harman test for assessing the common method bias. Another test for multicollinearity was performed by evaluating the VIF (Variance Inflation Factor) and KMO to check sampling adequacy. Finally, the reliability and validity of the instruments used for the study were evaluated.

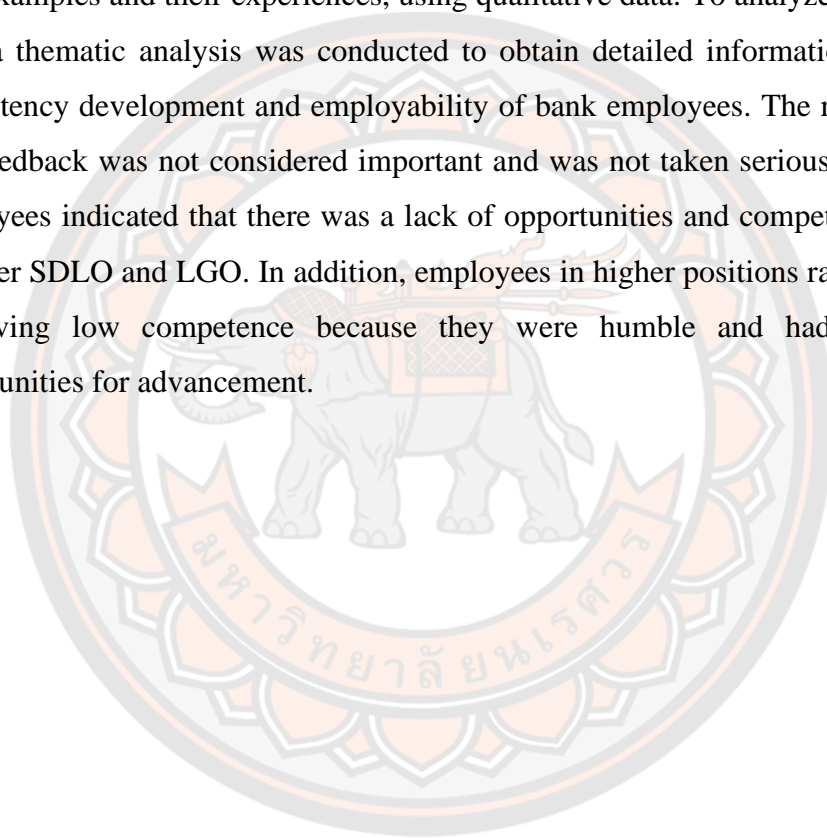
The second phase of the analysis consisted of structural analysis. For each measurement model, both first-order confirmatory factor analysis and second-order confirmatory factor analysis were performed. A model must be deemed fit before further analysis can be conducted. Therefore, the two most common methods (absolute model fit and incremental model fit) were used to assess model fit. The validity and reliability of the CFA model were assessed using measures such as: Average Variance Extracted (AVE), Composite Reliability (CR), Average Shared Variance (ASV), and Maximum Shared Variance (MSV).

In the third phase, structural equation modelling was performed. To create a SEM containing relationships among IWL, competency development, employability, SDLO, and LGO, seven subsequent models were developed, compared, and tested. The R<sup>2</sup> value (predictability of the model) and the strength of the relationship between the constructs within the different models were also considered. Model 7 was used as the final model to test the hypothesis. The next phase of the analysis examined the proposed relationships, or the direct, indirect, and total effects of IWL on competency development and employability, as well as the moderating and controlling effects, using AMOS.

Structural analysis of the final model (Model 7) revealed a significant relationship between IWL and competency development (0.46) with a p-value (< 0.001) supporting Hypothesis 1. Significant relationship between competency development and employability (0.33) with a p-value (< 0.001), significant

relationship between IWL and employability (0.30) with a p-value ( $< 0.05$ ). The model also shows that competency development fully mediates the relationship between IWL and employability. However, there was no moderating effect of SDLO and LGO on the relationship between IWL and competency development (see Model 4a and Model 5a). Therefore, H1, H2, H3, and H4 are supported and H5a and H5b are not accepted.

The next phase of the analysis attempts to validate the quantitative results with examples and their experiences, using qualitative data. To analyze the qualitative data, a thematic analysis was conducted to obtain detailed information about IWL, competency development and employability of bank employees. The results revealed that feedback was not considered important and was not taken seriously. In addition, employees indicated that there was a lack of opportunities and competition, resulting in lower SDLO and LGO. In addition, employees in higher positions rated themselves as having low competence because they were humble and had very limited opportunities for advancement.



## CHAPTER V

### CONCLUSION

This part consists of a detail discussion of results by combining the findings of both quantitative and qualitative. The results of the quantitative analysis and qualitative data analysis, which are discussed in chapter 4, are summarized. It provides an exhaustive analysis of IWL and employability with the mediating role of competency development. In doing so, the findings are connected to the contexts and goals of social learning theory to answer these research questions. Theoretical and practical implications of the study is also discussed. Finally, the limitations of the study and scope of further research is also be addressed.

This chapter comprises of:

1. Summary of Quantitative Results
2. Summary of phase 2 Qualitative Analysis
3. Discussion of Research findings
4. Implications of the Study
5. Recommendations
6. Limitations of the study
7. Implications for future research
8. Chapter Summery

#### **Summary of Quantitative Results**

Quantitative data analysis revealed the relationship between IWL, and employability mediated by competency development, while qualitative data analysis helped explain this relationship in detail. By combining the results of interviews with deputy CEOs and senior HROs increased the validity of the overall data analysis and the final analytical output.

The objective of this research was to examine the impact of IWL on employability considering the mediating role of competency development and to explore the impact of functional and personal characteristics on informal learning

activities and competency development of the respondents. Data were collected from five banks in Bhutan. 512 respondents working in the banking sector answered the questionnaires. Based on their responses, four research questions were answered.

Table 67 shows the summary of the results. IWL had a positive and significant effect on competency development but the direct effect on employability was not significant, however there was a positive significant total effect of IWL on employability. The final results indicate a fully mediated model. However, there was no moderation effect of LGO and SDLO on the relationship between IWL and competency development. Interestingly, the SEM analysis also revealed that designation had an inversely significant effect on competency development.

**Table 67 summary of Phase I Quantitative Analysis**

Hypothesis	Description	Accept/Reject
H1	Employees Informal Workplace Learning affect self-reported competency development	Accept
H2	Self-Reported Competency Development relates positively to Employability	Accept
H3	Competency development mediates the relationship between Informal Workplace Learning and Employability	Accept
H4	Informal workplace learning relates positively to Employability (total effect)	Accept
H5a	Learning goal orientation strengthens the positive effect of IWL on Competency Development	Reject
H5b	Self-directed learning orientation strengthens the positive effect of IWL on Competency Development	Reject

**Source:** Developed by the Researcher



### **Summary of phase II Qualitative Analysis**

The qualitative analysis was mainly conducted to complement the quantitative results, as it focused on explaining the research questions in depth. The interviews explained the observed variables with high R<sup>2</sup> values and the reasons behind them. The interviews also revealed that the reason for the non-significant moderating effect of LGO and SDLO was due to the lower opportunities and lack of competition.

### **Discussion of Research findings**

This discussion is based on integrating the results from the quantitative and qualitative data so that a more comprehensive understanding emerges than with information provided by a single approach. The results of the quantitative data are validated by the qualitative results, as the qualitative data are based on semi-structured interviews that reflect the actual feelings of the employees compared to the survey data. The research objectives are stated in terms of relevant headings and discussed in detail.

#### **1. Effect of Informal Workplace Learning on Self-Reported Competency Development**

##### **H1: Employees Informal Workplace Learning affect self-reported competency development**

The first objective was to identify the effect of IWL on self-reported competence development. The result of this study is in line with previous studies by re-emphasizing the contribution of IWL activities to employee competency development. In this study, professional competencies, personal competencies, and social competencies were identified as important competencies needed by employees in the banking sector. These findings support previous findings that social competencies, professional competencies (Haemer et al., 2017); Hashim (2008); (Rowold, & Kauffeld, 2008) and personal competencies (Naim & Lenka, 2017; Yamazaki et al., 2018) are important competencies required by employees working in financial institutions in particular. Not only are the competencies developed similarly, but the way they acquire these competencies is also quite similar.

It is fascinating to observe that IWL components such as reflection and experience and action (model learning, trying out and applying one's idea) are among the most frequently used methods by respondents to acquire their competencies and that these employees have an extrinsic rather than an intrinsic learning intention. The survey of CEOs and Chief HROs revealed that the majority of respondents who reported learning through observation (model learning) helped develop technical competencies. This was especially true for younger employees when they first joined the company. They sat next to an older employee, observed him, and learned, which helped develop their procedural and technical competencies (technical competencies). These results are important because they show that employees learn through modelling the behaviors (Model Learning). Brandao et al. (2012) found that reflection contributed most to the development of competencies among Brazilian bank employees. Similarly, Cheetham, & Chivers (2001) found in their study that on-the-job training was the largest contributor to competency development among the professionals in their sample. These authors also found that self-reflection was another common method used by respondents.

Takase et al. (2005) emphasized that learning through reflection contributed to the development of their self-reported competency. In addition, learning through practice and learning from others were positively correlated with the self-reported competence of less experienced employees. This was also consistent with the findings of the current studies, as new employees observed and learned from their elders. In contrast, learning through feedback was the least preferred method of IWL.

Among the measured variables of IWL, another variable which had greatest contribution to self-reported competency development was Reflection (anticipatory and subsequent reflection) (see figure 1). Through interviews it was found that learning was always informal, they learned without being aware of it, and some indicated that they learned by thinking. Reflecting on one's work experience is an important catalyst of IWL. The reason for the high preference for learning through reflection was that it provides employees with autonomy. Another reason given was that it is a mental process where there is no humiliation or criticism, so they preferred

it. Reflection permits employees to rebuild their experience, examine, and develop their own understanding of it. (Helyer, 2015; Takase et al., 2015).

Knipfer et. (2013, p.33) stated that "reflection is the major contributor when it comes to transforming experience into learning". Similarly, Helyer (2015) also notes that learning through reflection helps to evaluate what they have practically experienced. which in turn, helps them develop by utilizing the knowledge gained from such experience. In fact, reflection is cited by many professionals as the most important source of informal learning (Berg, & Chyung, 2008; Haemer et al., 2017; Yamazaki et al., 2018).

Another IWL variable frequently mentioned by executives was learning from experience and action. Decius, Schaper, and Seifert (2019) divide experience and action into the two factors of trying out & applying own ideas and model learning. Trying out and applying one's own idea is known as learning by doing, which is also like learning from oneself (Lohman, 2005). On the other hand, model learning in terms of Bandura's (1986) social cognitive theory is understood as learning from others by observing their behaviors and adapting those behaviors. Most learning occurred informally, especially among new employees.

Almost all banks in Bhutan did not have formal training programs. Employees sat alongside experienced staff and learned by observing them and applying what they learned in practice. Not all banks used the term model learning or trying out and applying their own ideas to describe it. They used different terms to describe it, such as learning through informal guidance, sitting by the nelly, learning by doing, and on-the-job attachment.

These results indicate that less experienced employees are more likely to use direct experience as a learning resource to develop their competencies compared to the more experienced colleagues. The findings are in line with previous research that also reported that less experienced professionals learned from practice (Takase et al., 2015), through informal guidance (Sadeghi, 2019), learn from others, learn on the job (Crouse et al., 2011; Hashim, 2008), through trial and error (Haemer et al., 2017), and through experience and action (Decius et al., 2021; Nyhan, 1998; Paloniemi, & Hager, 2006).

On the other hand, learning from feedback had little relationship with self-reported competence. This suggests that employees receive little feedback, so learning from feedback rarely contributes to their assessment of their own competence. Alternatively, as noted in the interviews with the deputy CEO's and president's, feedback is given, but not heeded by most employees. It was observed that most of the employees belonged to Generation Z, followed by Generation Y. They indicated that most of them are independent and do not like being pointed out and told things. Further feedback was seen as of little value by employees. Negative feedback was feared, as those giving feedback often failed to maintain confidentiality.

Other studies also argued that negative feedback has an emotional impact on the recipient and is therefore more likely to be rejected (Eraut, & Hirsh, 2007; London & Smither, 2002). Because less experienced employees are still developing, the feedback they receive is often negative and therefore may not be heeded. This could be another reason why the feedback did not contribute to their self-reported competency development. Similar observations were made by (Takase et al., 2015; Watling, Driessen, van der Vleuten, & Lingard, 2012).

## **2. The effect of Self-Reported Competency development on Employability**

### **H2: Self-Reported Competency Development relates positively to Employability**

The second objective of this study was to determine the relationship between self-reported competency development and employability. Employability is included as the final outcome of competency development in the framework of this study. It shows that professionals who develop competencies increase their employability. It was found that informally developed competency was a by-product of work, which ultimately provided an additional benefit in terms of enriching employability.

This is consistent with the study of (De Vos, De Hauw, & Willemse, 2015; van der Heijden, 2001) (De Vos et al., 2011; Mulder, 2013). The findings also support the idea that competence development is not only related to domain-specific knowledge or skills, but also to more general perceptions of professional expertise and flexibility (De Vos et al., 2011). This finding adds to the literature in which the construct of employability is examined from an individual-level perspective and

interpreted as a competency- based approach or input-based approach (Heijde & Van Der Heijden, 2006).

In the context of enhancing the employability of the worker, the study found that the contribution of professional competency was not as significant compared to personal competence, contrary to expectations. The level of personal competence such as ability to cope with stress, meet deadlines, ability to learn and develop, self-confidence, and creativity is an important predictor of employability. Although the difference was not that significant, it can be interpreted to mean that employees in the banking sector are often given goals and deadlines that they must meet within a certain time frame. Meeting deadlines and working under pressure are therefore commonplace and they are used to dealing with such situations. Another reason is the practice of job rotation that banks engage in.

They transfer their employees from one branch to another and constantly change departments. This practice makes them competent in terms of their personal skills. Hence it can be stated that experience and action in daily work contribute to development of personal competency which ultimately lead to enhanced employability. This finding was consistent with that of (R. Boyatzis, & Boyatzis, 2008; Cheraskin, & Campion, 1996; Khan, Alheety, & Bardai, 2020; Naim, & Lenka, 2017).

On the other hand, social competence had the least contribution to the enhancement of employability. Although there was not much difference between personal competence and social competence. It became necessary to understand the difference. Although most of the respondents indicated that learning through informal conversations was one of the most practiced IWL methods. However, it did not contribute much to improving employability.

This can be interpreted to mean that the work in the banks is systematic, that certain procedures must be followed, and therefore they do not have much to do with each other. Second, there was a lack of guidelines and development activities to improve their interpersonal skills. Finally, most respondents were between the age of 25 and 39 and belonged to Generation Z and Generation Y, who do not like asking for or accepting feedback. Asking for feedback and listening are prerequisites for social competencies (Crouse et al., 2011; Takase et al., 2015). Therefore, this finding adds to



the literature that younger workers lack listening, communication, analytical, and teamwork skills (Abbasi, Ali, & Bibi, 2018; Crouse et al., 2011; Takase et al., 2015).

### **3. Mediating role of Self-reported competency development between Informal Workplace Learning and Employability**

#### **H3: Competency development mediates the relationship between Informal Workplace Learning and Employability**

This study was the first attempt to empirically examine the mediating role of self-reported competency development between informal workplace learning and employability. There were no previous studies that tested the mediating effect. To date, there is only one study by De Vos, De Hauw, and Willemse (2015) that examines the antecedents and outcome of competency development, but from an organizational perspective. The results demonstrate that self-reported competency development fully mediates the relationship between informal workplace learning and employability. This means that informal workplace learning alone does not improve employability. One must develop one's competencies to improve one's employability.

The interviews led to interesting finding that informally acquired competencies are a byproduct of work, which ultimately provides an additional benefit to improving employability. Overall, it can be said that experiential learning led to the development of social and personal competencies and helped in building professional expertise, and anticipation, and optimization. From a theoretical perspective, this study contributes to the literature on the link between IWL, competency development, and employability. Competencies include skills beyond cognitive abilities, such as self-regulation, self-awareness, and social skills. Competencies are fundamentally behavioral and, can be developed through IWL.

This is consistent with the theoretical contribution of (R. E. Boyatzis, Stubbs, & Taylor, 2002; Deist, & Winterton, 2005). Moreover, the results also contribute to Bandura's (1977) theory of social learning. It can be interpreted to mean that people are more likely to be interested in a particular occupation or career path if they have observed someone succeed in their occupational field. Therefore, observational/model learning can either encourage a person to choose a career field like the one observed or discourage them from doing so. The effects of IWL cause a



person's aspirations and expectations about their employability, as well as their assessment of their own competencies, to either increase or decrease.

#### **4. Effect of Informal Workplace Learning on Employability**

##### **H4: Informal workplace learning relates positively to Employability**

We have found that all dimensions of informal workplace learning play major role in optimizing employability. Learning through experience and action and reflection are more positively related to anticipation and optimization compared to other variables used to measure employability. Anticipation and optimization means to prepare personally and creatively for future changes, aiming for the best possible results Heijden (2005). On the other hand, IWL has least positive impact on two dimensions of employability (occupational expertise and corporate sense). However, this supports hypothesis 4.

The result allows us to draw two important conclusions. First, employability competences can be particularly enhanced by diverse informal workplace learning. This is consistent with previous research that has shown that informal learning activities increase the employability of employees (De Vos et al., 2011; D. Froehlich, Segers, & Van den Bossche, 2014; D. E. Froehlich, Segers, Beausaert, & Kremer, 2019; Lecat, Beausaert, & Raemdonck, 2018). Second, the interviews found that people in banks of Bhutan who repeatedly perform the same task and move from one department to another develop personal competencies that ultimately improve the anticipation and optimization dimensions of an individual's employability. This result is similar to the findings of (D. E. Froehlich et al., 2019; Van Der Heijden, Boon, Van der Klink, & Meijs, 2009).

In contrast, of the four dimensions of employability, occupational expertise and corporate sense were found to explain the least variance in employability. Corporate sense is about sharing responsibilities, knowledge, experiences, achievements, feelings, goals, etc. Therefore, the second interview phase aimed to understand the reason for the low scores.

It appears that banks in Bhutan do not make much effort to instill a sense of shared responsibility or purpose. In addition, the job description of the employees does not ask much from them to get involved. Therefore, most employees lack corporate sense. In addition, occupational expertise explained the least variance in

employability. Froehlich et al. (2019) offer explanations for these results. He explains that human working memory is often limited and a large variety of tasks to be completed can hinder the processing and storage of new information, preventing a worker from learning informally. This can lead to lower occupational competence. In addition, informally acquired knowledge may be inaccurate or even incorrect, leading to lower occupational expertise.

It was also noted in the interviews that the work culture in Bhutanese banks is systematic, that certain procedures must be followed, and that therefore anything learned informally cannot be counted as professional expertise. IWL is an important prerequisite for learning, but it is not sufficient by itself to acquire expertise. IWL can only facilitate learning and the development of occupational expertise if employees have already completed formal training or professional specialization.

#### **5. (a) Moderating effect of Learning Goal Orientation on the relationship between IWL and Competency Development.**

##### **H5a: Learning goal orientation strengthens the positive effect of IWL on Competency Development**

The fifth objective of the study was to determine whether learning goal orientation enhances the positive effects of IWL on competency development. This study was the first attempt to examine the moderating effect of LGO between IWL and Competency Development. Most previous studies have shown that LGO is important for IWL participation and (Choi, 2009; Decius et al., 2021; Noe, Tews, & Michel, 2017; Runhaar, Sanders, & Yang, 2010) competency development (Dragoni, Tesluk, Russell, & Oh, 2009; Kabuoh & Otsupius, 2015; VandeWalle, Cron, & Slocum Jr, 2001). These studies examined the direct effect of LGO on IWL and competency development. However, the results of this study show that, contrary to expectations, LGO did not moderate the relationship between IWL and competency development.

This can be explained with the help of the qualitative analysis, where a lack of competition was found and very few were interested in learning unless there was reward or recognition. Most respondents pointed to a culture where most are satisfied with what they have and do not strive for more. Lack of competition in the

work atmosphere and less interested in learning was seen. Most respondents pointed to a culture where most are satisfied with what they have and do not strive for more. Thus, the reason for the non-significant moderating effect of LGO on the relationship between IWL and competency development was a relaxed culture and the absence of challenge and competition. This low value for LGO can be explained by the fact that learning from feedback was the least preferred learning pattern in the Phase I analysis. And as Decius et al. (2021) noted, "LGO is associated with the tendency to view feedback-as a core component of IWL beneficial to learning".

In addition, Li and Tsai (2020) offer explanations for this finding that a competitive climate can increase employees' willingness to learn (i.e., learning goal orientation) and desire to perform well, which positively affects their competence development. This suggests that a competitive climate has a correlative influence on IWL and competency development. If an organization can integrate a competitive climate into its work environment in a progressive and timely manner, it will motivate its employees, which will positively affect or contribute to employees' learning behaviors.

From a theoretical standpoint, this can be explained using the social learning theory of (Bandura 1988). The concept of reciprocal determinism considers the interactions between social, environmental, and cognitive factors of learning as determinants of behaviors specifically related to competence development (Compeau & Higgins, 1995). This triadic model of reciprocal determinism explains that people have innate characteristics, such as self-efficacy regarding one's ability to use these skills well. This self-belief has a critical influence on learning and development of competencies. Moreover, self-efficacy has been shown to be a strong precursor to competence (Compeau & Higgins, 1995; Shih, 2006). Therefore, employees' LGO can be fostered or hindered by organizational culture or the within-organizational environment.

## **5. (b) Moderating effect of Self Directed Learning Orientation (SDLO) on the relationship between IWL and Competency Development**

### **H5b: Self-directed learning orientation strengthens the positive effect of IWL on Competency Development**

The second part of fifth objective of the study was to determine whether SDLO enhances the positive effects of IWL on competency development. This study was the first attempt to examine the moderating effect of SDLO between IWL and competence development. According to Raemdonck, Gijbels, & Van Groen (2014), employees who have an intrinsic intent to learn and develop will engage in higher levels of informal workplace learning. However, the study did not find a moderating effect of SDLO on the relationship between IWL and competency development, as perceived.

The qualitative analysis suggests that there may be a lack of opportunity and competition in the labor market and that people who do not see a purpose or meaning in it are not really trying or taking responsibility to learn for themselves. It was also found that employees have very low intrinsic motivation to learn. Intrinsic intent to learn is the crux or heart of self-directed learning (Bonk, & Lee, 2017).

In a summary of the literature on intrinsic motivation, Pink posits that this intrinsic drive is focused on becoming better at something that is personally meaningful or relevant (Pink, 2011). This suggests that employees in the banking sector in Bhutan have no opportunities or little competition and therefore see no need or purpose in learning. For this reason, intrinsic learning intention is also very low. This indicates that employees are neither self-directed learners nor take responsibility for their learning.

One of the interviewees pointed out that employees rarely take advantage of opportunities, even though the company offers incentives and promotions for participating in formal development programs. This finding is consistent with the findings of (Li, & Tsai, 2020). Thus, SDLO depend on the intention to learn, and this intrinsic motivation only occurs when there is some form of opportunity or competition (Pink, 2011). Thus, this explains why SDLO did not moderate the relationship between IWL and competency development.

From a theoretical point of view (Bandura, & Walters, 1977). The concept of learning orientation helps to understand why people indulge in self-initiated informal learning and helps us to understand why some people develop high competencies and obtain better employment opportunities compared to others (Maurer, Wrenn, Pierce, Tross, & Collins, 2003; Raemdonck, Tillema, de Grip, Valcke, & Segers, 2012; van der Heijde, 2014). From this theoretical standpoint it can be explained that a competitive work environment and stronger intrinsic motivation are needed to promote SDLO.

### **6. Influence of Designation on Competency Development**

The final objective of the study was to determine if the control variables such as designation, experience, and age influenced any of the three variables. Namely, IWL, competency development, and employability. The study found that designation had an inverse relationship with competency development. When senior bank executives were interviewed, it was found that as they move up the career ladder, jobs become more stable, offered fewer opportunities and less preferential treatment in terms of learning, and they were often overburdened by responsibilities. Another interesting reason was that employees in higher positions are always self-motivated and self-directed and feel they have so much to learn. However, when you know more, you feel that there is so much more to learn.

Therefore, it can be said that as one moves up the career ladder or reaches a higher position, the level of competency development decreases. This finding is contrary to the results of (Hashim, 2008; Paloniemi, & Hager, 2006; Pb, 2019), in which it was found that employees with higher designation have higher density of experience and thus higher level of competence development.

However, the case here is different because Bhutanese employees work in an institutional and cultural environment that is very different from that of Western and other Asian countries. Bhutanese employees work in a bureaucratic system based on a vertical command structure and rule-based authority (Jigme, 2021). These findings can be explained using the results of Toney, Pillay and Kelly. Where they found that employees in higher positions were often treated less preferentially in terms of learning and development compared to employees who were at the beginning of their career (Tones, Pillay, & Kelly, 2011).

On the other hand, the reason for low competency development despite self-motivation and self-drive can be attributed to the Bhutanese culture of humility, which plays an important role in shaping people's attitudes (Choden, Wangchuk, & Smart, 2018). According to Hendijani, & Sohrabi, a higher level of modesty can control the level of personal self-confidence and prevent one from falling into the trap of overconfidence, which leads to hubris and arrogance (Hendijani, & Sohrabi, 2019). Another reason can be attributed to Albert Bandura's theory of reciprocal determinism. According to Bandura (1977), reciprocal determinism is influenced by self-efficacy, which is a person's belief in his or her ability to achieve a goal or outcome. And some of the factors that influence self-efficacy are vicarious experiences and verbal persuasion (feedback). whereas the quantitative results show that employees in Bhutanese banking sector preferred less feedback compared to learning from reflections.

This explains the inverse relationship between designation and competency development, i.e., why one feels that, when one knows more, one feels that there is still so much more to learn. Therefore, it can be said that Bhutanese employees especially the senior and ones working in higher position are humble and content therefore they often don't see the need to learn and develop more.

### **Implications of the Study**

The contributions of this study are stated in three parts- theoretical contributions, methodological contribution, and practical contribution.

#### **1. Theoretical Contribution**

This study offers a number of significant contributions from theoretical perspective. One of the core objectives of this study is develop a model of employability enhancement using the competencies acquired from informal workplace learning, that allow a better understanding of IWL, competency development and employability of Banking sector employees in Bhutan. The results of the study contribute as follows:

Firstly, all the studies conducted have studied either only the effect of IWL and Employability or IWL and competency development. But never have they studied all three variables together as well as the mediating effect of competency



development. This study was the first attempt to empirically examine the mediating role of self-reported competency development between informal workplace learning and employability. There were no previous studies that tested the mediating effect. To date, there is only one study by De Vos, De Hauw, & Willemse (2015) that examines the antecedents and outcome of competency development, but from an organizational perspective. The results demonstrate that self-reported competency development fully mediates the relationship between informal workplace learning and employability. This means that informal workplace learning alone does not improve employability. Competencies such as personal, professional and social competencies are important contributors in enhancement of employability.

Secondly the study explained, that informally acquired competencies are a byproduct of work, which ultimately provides an additional benefit to improving employability. Overall, it can be said that learning from experience, reflection, feedback and intent to learn led to the development of social, professional and personal competencies and helped in building professional expertise, and anticipation, and optimization. From a theoretical standpoint, this study contributes to the literature on the link between IWL, competency development, and employability.

Third, the study establishes a structural relationship between IWL, competency development and employability. The prior studies only looked at the impact of IWL on competency development or impact of IWL on employability, but this study looked at their structural relationships and found that IWL can influence employability through the mediating effect of competency development. Using the explanatory sequential mixed method, the study has validated the findings with qualitative opinions of the executive's employees of Banks.

Fourth, this study was the first attempt to investigate the moderating effect of LGO and SDLO between IWL and Competency Development. The results of this study show that, contrary to expectations, LGO and SDLO did not moderate the relationship between IWL and competency development. The reason was the lack of opportunities and the competitive environment in Banking sectors in Bhutan. This can be explained by the fact that the competitive climate can increase employees' willingness to learn (i.e., learning goal orientation and SDLO) and desire to perform well, which has a positive effect on their competence development. This suggests that

a competitive climate has a correlative influence on IWL and competence development. If an organization can integrate a competitive climate into its work environment in a progressive and timely manner, it will motivate its employees, which will positively affect or contribute to employees' learning behaviors.

Fifth, this study utilized the factor designation as control variable to see the influence in IWL, competency development and employability. In almost all prior studies designation had a positive influence. However, this study found an inverse relation between designation and competency development. This adds to the literature that the inverse relationship between designation and self-evaluated competency development may be due to the fact that as employees move up the career ladder, jobs become more stable, offer fewer opportunities and less preferential treatment in terms of learning, and employees are often overburdened by responsibilities. Another interesting contribution to literature is that employees in higher positions are always self-motivated and self-directed and feel that they have so much to learn. However, when you know more, you feel like there is so much more to learn.

Sixth, this finding of inverse relation between designation and competency development also contributes to the concept of reciprocal determinism of Bandura's (1977) social learning theory, which views the interactions among environmental, social, and cognitive factors of learning as determinants of behaviors specifically related to competence development. From the study, it appears that workers' self-assessment of competence development decreases as they advance in their careers. The reason for low competency development despite self-motivation and self-drive can be attributed to the Bhutanese culture of humility, which plays an important role in shaping people's attitudes (Choden, Wangchuk, & Smart, 2018).

This is because, according to Bandura (1977), reciprocal determinism is influenced by self-efficacy, which is a person's belief in his or her ability to achieve a goal or outcome. And some of the factors that influence self-efficacy are vicarious experiences and verbal persuasion. However, the results show that employees preferred less feedback and did not learn as much by modeling others' behavior compared to learning from reflections. From this, it can be seen that most Bhutanese employees in higher career positions get fewer preferences in learning opportunities

and are often inherently humble, which is why they rate their competency development low.

Lastly, this study also contributes in terms of development and validation of a survey instrument. Although this study adopted construct items from many different contexts and applied to the current context of Banking sectors, they were modified and validated accordingly. The contextualization and validation of the established instrument like octagon model (Decius et al., 2021), and competency development scale can be considered as an important theoretical contribution.

## **2. Methodological Contribution**

On the methodological front, this research illustrates the power of quasi explanatory sequential mixed method to answer various research question and objective. This study is built on the methods propounded by (Tashakkori, Teddlie, & Teddlie, 1998). The explanatory sequential mixed method is described in detail from its evolution to practical application.

This methodology called for using sequential platform where majority of analysis was done using quantitative analysis followed by qualitative. The structural equation modelling (SEM) was constructed using AMOS while the qualitative analysis was done manually by generating codes based on existing themes. This study demonstrates the use of platform to link the phase one quantitative analysis with phase two qualitative analysis.

Another contribution of this study unlike the study of Decius et al. (2019), It's not just about measuring learning intent. Rather, this study seeks to understand the relationship between learning patterns and self-reported competency development by statistically analyzing them. This methodological idea is a strength in this context, as the intent simply measures the perception of the need for development and improvement in the workplace

## **3. Practical Contribution**

One of the objectives of the study was to enhance employability using competencies acquired informally. There was no formal research being published pertaining to IWL, competency development and employability in Bhutan. Thus, practical contributions are made in the form of recommendations.

## **Recommendations**

From the findings of the study as well as the observation and experience during the course of the study, following are the recommendations.

### **1. Recommendation to the Banking Sectors**

The findings of this study have crucial implications for the human resources managers, policy developer's practitioners of organizations and for researchers. First of all, it is prominent to note that the findings indicate positive effect of IWL on employability mediated by competency development. The study explained, that informally acquired competencies are a byproduct of work, which ultimately provides an additional benefit to improving employability. Overall, it can be said that experiential learning led to the development of social and personal competencies and helped in building professional expertise, and anticipation, and optimization.

It is interesting to observe that IWL components such as reflection and model learning are among the most frequently used methods by respondents to acquire their competencies, and that these employees have an extrinsic learning intention rather than an intrinsic learning intention. To foster intrinsic learning intent, banks should create a competitive environment with focused growth opportunities.

The interview of CEOs and Chief HROs revealed that the majority of respondents who reported learning through informal guidance and observation helped in developing technical competencies. This was a common practice followed by almost all the banks in Bhutan. Where new recruits sat next to experienced employees observed and learned. Therefore, this awareness helps the Human resource officers to create an environment to encourage more informal workplace learning.

On the other hand, learning from feedback had little relationship with the self-reported competence. This suggests that employees receive little feedback, so that learning from feedback rarely contributes to their evaluation of competence. It was observed that most of the employees belonged to Generation Z, followed by Generation Y. They indicated that most of them are independent and do not like being pointed out and told things. Further feedback was seen as of little value by employees. Negative feedback in particular was feared, as those giving feedback often failed to

maintain confidentiality. Therefore, managers must ensure confidentiality of feedback and try to be constructive while giving feedback.

Further, learning through experience and action and reflection are more positively related to anticipation and optimization compared to other variables used to measure employability. Employees in banks in Bhutan who repeatedly perform the same task and move from one department to another develop personal competencies that ultimately improve the anticipation and optimization dimensions of an individual's employability. It can be explained, that informally acquired competencies are a byproduct of work, which ultimately provides an additional benefit to improving employability. Overall, it can be said that experiential learning led to the development of social and personal competencies and helped in building professional expertise, and anticipation, and optimization. Therefore, the organizations should continue to follow the practice of learning from observation.

It appears that banks in Bhutan do not make much effort to instill a sense of shared responsibility or purpose. In addition, the job description of the employees does not ask much from them to get involved. Therefore, most employees lack corporate sense. In addition, occupational expertise explained the least variance in employability. Froehlich et al. (2019) offer explanations for these results. He states that humans often have limited working memory and when one has large variety of task to be completed it hinders the processing and storage of what they have learned, thus preventing from learning informally. This means it hinders gaining occupational expertise.

In addition, informally acquired knowledge is often flawed or even incorrect, leading to lower occupational expertise, if not verified through reflection. It was also noted in the interviews that the work culture in Bhutanese banks is systematic, that certain procedures must be followed, and that therefore anything learned informally cannot be counted as professional expertise. IWL is an important prerequisite for learning, but it is not sufficient by itself to acquire expertise. IWL can only facilitate learning and the development of occupational expertise if employees have already completed formal training or professional specialization. However, the Human Resource Development policies should recognize the expertise gained rather than the process used to acquire it.

## **2. Recommendations for Policy Makers**

The financial sector, especially the banking sector, has the largest number of employees compared to all other service sectors. Banking institutions that essentially dominate the financial sector of developing countries, such as Bhutan, face a dynamic and competitive environment due to rapid global interconnection. This was evident during the Covid 19 pandemic in Bhutan. It was clear that bank employees often faced changes in the form of working from home and increased digitized transactions (Subba, 2020). However, in this study, it was found that when IWL was practiced, feedback was not taken seriously and was not popular. Employees' intrinsic willingness to learn was also very low. Therefore, policy makers need to develop measures to promote feedback culture.

Most people believe that monetary rewards are the best motivators. But this is a misconception because, according to Pink (2011), the secret to a self-directed learning orientation is intrinsic intent to learn. Thus, to increase intrinsic learning intent, policymakers should develop interventions to promote autonomy, mastery, and purpose-and offer smart techniques to make this happen.

It appears that banks in Bhutan do not make much effort to instill a sense of shared responsibility or purpose. Moreover, the job description of the employees does not ask much of them to get involved. Therefore, most employees lack corporate sense. In addition, occupational expertise explained the least variance in employability. Informally acquired knowledge was considered inaccurate or even incorrect, resulting in lower occupational expertise if not verified through reflection. Further, Interviews also indicated that the work culture in Bhutanese banks is systematic, certain procedures had to be followed, and therefore anything learned informally was not counted as professional expertise. Therefore, policy developers should devise policies to recognize competencies rather than the techniques used to acquire them.

### **Limitations of the Study**

Although the study was carried out with rigor and meticulous care adhering to the standard best practice of an academic research, the study is also subject to the following limitations:



The study first examines the influence of personal characteristics such as learning goal orientation and Self-directed learning on the relationship between IWL and Competency Development. However, organizational conditions may also influence the feedback and reflection components of IWL. Further studies have found that workplace characteristics Kyndt, & Baert (2013) also have an influence on IWL. Therefore, further research on organizational conditions and its effect on IWL is needed, especially for employees working in the financial sector.

Second, this study also has methodological limitations. The study design is sequential and therefore cannot eliminate the bias caused by concurrent data. Future studies may use a longitudinal design in which data are collected at different time periods to eliminate this bias (Podsakoff, & MacKenzie, 2003).

Thirdly, the qualitative interviews are purely based on the subjective opinions of employees. The use of objective measures would ensure high validity and objectivity. Therefore, objective data collection would be recommended for future studies. Future studies can obtain feedback from multiple sources and validate the responses to nullify any biases caused due to subjectivity.

Fourth, the results of this study cannot be generalized because they come from a sample of banks in a specific context. We should also be cautious in generalizing the results to other sectors, given the specific characteristics of the banking sector.

Finally, the length of the questionnaire was also an obstacle to obtaining high quality data, as respondents lost interest halfway through the survey. Respondent fatigue may also have influenced the survey results.

### **Implications for Future Research**

The implied study has several implications for future research. The results point to interesting avenues for further research. Most notably, the role of organizational climate and workplace characteristics that may influence IWL and development of competencies. Thus, further research is needed on the organizational and personal conditions that support IWL, especially for employees working in the financial sector. Since the study found a negative relationship between designation

and competency development, further research is needed to better understand and explain this finding.

Another recommendation would be to study the Bhutanese work culture and people's LGO and SDLO. From the study, it appears that most employees, especially those in higher positions, are modest about their competency development. The study also shows that the moderating effect of SDL and LGO differs from the results of previous studies conducted in the Western context. Future studies can therefore focus more on understanding Bhutanese work culture.

In addition, the study found that employees did not take feedback seriously, did not contribute much to learning, and had very low intrinsic learning intention. Future researchers can therefore investigate more about understanding feedback culture and learning intentions from a Bhutanese perspective.

Finally, the study design is sequential and therefore cannot eliminate the biases caused by concurrent data. Future studies may use a longitudinal design in which data are collected at different time periods to eliminate this bias. In addition, the samples are from Thimphu, although this district has the largest number of workers. However, they may not be representative of other factors such as environmental factors and other factors related to the business environment.

### **Chapter Summary**

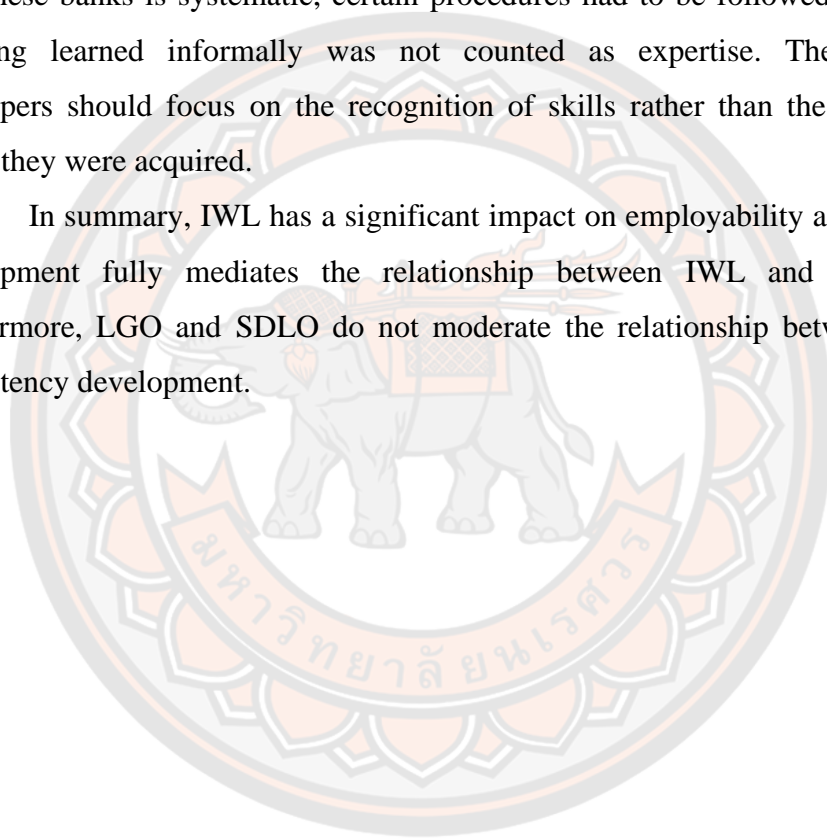
The chapter presented the discussion of the study titled "Informal Workplace Learning and Employability with the Mediating Role of Competency Development among Financial Sector Employees in Bhutan" in which the researcher revisits the primary research question and objectives and links them to the research findings. The main objective of the study is to examine the impact of informal workplace learning on self-reported competency development and employability. The study also aimed to determine the moderating effect of learning goal orientation and self-directed learning orientation. The study controlled for demographic factors such as age, gender, designation, and experience.

The results of the study show that there is a statically significant relationship between informal workplace learning and competency development, as well as a significant direct effect of IWL on employability. However, competency development

fully mediated the relationship between IWL and employability. In addition, the study found no moderating effect of LGO and SDLO on the relationship between IWL and competency development. Furthermore, the study found that designation had an inverse relationship with competency development.

Additionally, theoretical, practical, and methodological implications are explained for readers to act accordingly. Managers need to ensure the confidentiality of feedback and try to be constructive when giving feedback. The work culture in Bhutanese banks is systematic, certain procedures had to be followed, and therefore anything learned informally was not counted as expertise. Therefore, policy developers should focus on the recognition of skills rather than the techniques by which they were acquired.

In summary, IWL has a significant impact on employability and competency development fully mediates the relationship between IWL and employability. Furthermore, LGO and SDLO do not moderate the relationship between IWL and competency development.





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**APPENDIX**

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**APPENDIX A SELECTED LITERATURE ON INFORMAL WORKPLACE LEARNING, COMPETENCY DEVELOPMENT AND EMPLOYABILITY**

SI No	Title	Author	Objectives	Variables	Research Gap	Methodology	Findings
1	Competencies acquisition through self-directed learning among Malaysian managers	Junaidah Hashim Kuala Lumpur, Malaysia, 2007	<p>1. The purpose of this paper is to examine how Malaysian managers acquire job competencies through self-directed learning activities at their workplace.</p> <p>2. It also aims to investigate what types of job competencies are required for the managers,</p> <p>3. how they learn to acquire those competencies, and</p> <p>4. whether the managers have the self-directed learning attributes and capability to acquire job competencies by self-directed learning activities</p>	<p>Job Competencies:</p> <ol style="list-style-type: none"> <li>1. Communication Competencies</li> <li>2. Managerial Competencies</li> <li>3. Job Knowledge Competencies</li> </ol> <p>Learning Methods:</p> <ol style="list-style-type: none"> <li>1. Learning from Others</li> <li>2. self-taught learning</li> <li>3. learning on the job</li> </ol>	<p>The study claims that the government and organizations invest a lot towards HRD, but are people or employees willing and ready to learn. Do Malaysian manager acquire competencies in a similar way as western managers?</p>	<p>The data were collected through survey. the Self-Directed Learning Readiness Scale (SDLRS) developed by Guglielmino. In total 238(purposive sample) First part of the questionnaire had an open-ended question asking to note three main job competencies required for their job. Then they were asked to tick the learning methods that helped them acquire those competencies from the ten list of learning methods.</p>	<p>The present study identified</p> <ol style="list-style-type: none"> <li>1. communication,</li> <li>2. managerial, and</li> <li>3.job knowledge</li> </ol> <p>competencies as the main competencies required by the Malaysian managers. Learning methods: self-directed learning methods such as self-education and working in a team are among the prevalent methods used by the respondents to acquire their competency and these managers do possess the attributes of self-directed learners.</p>

SI No	Title	Author	Objectives	Variables	Research Gap	Methodology	Findings
2	Effects of career-related continuous learning on competencies	Jens Rowold, Simone Kauffeld, 2008	The present study aims to examine how employees' formal (e.g. off-the-job training) and informal (e.g. discussion with colleagues) career-related continuous learning (CRCL) activities affect the development of self-reported work-related competencies.	<p>Competencies:</p> <ol style="list-style-type: none"> <li>1. professional competence</li> <li>2. methods competence</li> <li>3. social competence</li> </ol> <p>Career Related Continuous Learning (CRCL)</p> <ol style="list-style-type: none"> <li>1. Formal CRCL</li> <li>2. Informal CRCL</li> </ol>	The current study is based on self evaluation of competencies which is subject to change based on personality and mood of the individuals. competencies should be rated by supervisors. Objective measures of formal CRCL should be assessed.	The present study relied on a survey instrument, to measure informal CRCL, while additional research methods such as on-site observations and diaries could provide a more encompassing and thus, more realistic picture of informal CRCL.	In contrast to formal off-the-job training, informal continuous learning activities helped employees most to develop their respective work-related competencies. As for formal CRCL, only method competencies were influenced. In contrast, professional training might have not affected subsequent professional competencies
3	Associations between workplace learning patterns, social support and perceived competency	Talich Sadeghi, 2019 Norway	To identify the use of various learning patterns in the Norwegian Labor and Welfare Administration, Their relation with self-reported competency and the possible interacting	<p>i. Learning Patterns:</p> <ol style="list-style-type: none"> <li>1. Workplace courses</li> <li>2. Self-learning</li> <li>3. Team Learning</li> <li>4. Continuing education</li> <li>5. Informal guidance</li> <li>6. Systematic guidance</li> </ol> <p>ii. Self-evaluated Competencies</p>	This study was designed as a cross-sectional survey of employees at the NAV. In total, 1753 employees (64% response rate) completed a web-based survey encompassing	Research in this field has been conducted mostly on private sectors as primary source of theoretical understanding. public sector employees are often constrained by ever changing political goals and tensions,	-Descriptive statistics revealed informal guidance to be the most frequently utilized training method, while continuing education at college was rated as the least frequently used learning pattern.

SI No	Title	Author	Objectives	Variables	Research Gap	Methodology	Findings
			role of social support.	iii. Social Support (Supervisor and peer)	a wide range of items and measures, including their self-reported competency, the types of learning patterns they had been exposed to, the rate of perceived reception of peer and supervisor support, and demographic information such as age and gender.	bureaucratic conditions and annual budgets, constituting complex and ambiguous indicators guiding learning. *Informal guidance showed significant association with perceived competency only when supervisor support was included in the model.	-both formal and informal types of learning patterns were significantly associated with perceived competency. -Results indicated a stronger association Between (Supervisor support and workplace learning, systematic guidance, informal guidance) learning patterns and perceived competency for those who experienced higher degrees of supervisor support. -the findings indicate that informal learning patterns are not significantly connected to perceived competency.

SI No	Title	Author	Objectives	Variables	Research Gap	Methodology	Findings
4	The relationship between workplace learning and midwives' and nurses' self-reported competence: A cross-sectional survey	Miyuki Takase, Masako Yamamoto Yoko Sato, Mayumi Niitani, Chizuru Uemura, Japan, 2015	<p>The objectives of this study were to</p> <ul style="list-style-type: none"> <li>- identify the methods of learning used by less and more experienced nurses, and</li> <li>- to explore what methods of workplace learning would be associated with the self-reported competence of both groups of nurses.</li> </ul> <p>- This was done by controlling for the effect of self-esteem on the nurses' self-reported competence</p>	<ul style="list-style-type: none"> <li>- Learning Methods</li> <li>- Competence</li> <li>- Self Esteem (Controlling variable).</li> </ul>	<p>A cross-sectional survey design was utilized. Settings: The study was conducted at two university-affiliated hospitals in Japan. The Holistic Nursing Competence Scale, the Learning Experience Scale and the Japanese version of Rosenberg's Self-esteem Scale, along with demographic questions, were included in the questionnaire. Hierarchical regression analysis was conducted to investigate the relationship between learning and nurses' self-evaluation of competence.</p>	<p>Majority of the research have remained descriptive and do not go beyond identifying the attributes of nursing competence, the scales to measure it, and the level of competence demonstrated by nurses. Only a limited number of studies have explored the antecedents of competence, such as critical thinking ability. But none of them have explored the impact of learning. Thus, the effect of workplace learning on the development of nursing competence has not yet been determined.</p>	<ul style="list-style-type: none"> <li>-The results showed that learning was correlated with the levels of competence that nurses considered they had.</li> <li>-When the specific types of learning were examined in relation to self-reported competence, there were a similarity and differences between less and more experienced nurses.</li> <li>-For both groups of nurses, learning through reflection was found to relate to their self-reported competence.</li> <li>-In addition, learning through practice and learning from others were positively correlated with the self-reported competence of less</li> </ul>

SI No	Title	Author	Objectives	Variables	Research Gap	Methodology	Findings
5	Workplace learning strategies, facilitators and outcomes: a qualitative study among human resource management practitioners	Paula Crouse a , Wendy Doyle b & Jeffrey D. Young, 2011	1. What types of workplace-learning strategies are utilized by HRM practitioners? (2) What types of barriers to workplace learning are encountered by HRM practitioners? (3) What types of facilitators of workplace learning are encountered by HRM practitioners? (4) What types of individual and organizational learning outcomes are experienced by HRM	1. workplace learning strategies. 2. Barriers to workplace Learning. 3. Facilitators of workplace learning. 4. outcomes of workplace Learning.	Face-to-face, semi-structured, individual, in-depth interviews were conducted with 13 HRM practitioners (including executives, CEO, HR relations, and general HR practitioner. The participants represent a divers employment sectors like; education, health, high tech and professional service firms.	There is several research on workplace learning of different professional group but none has studied the workplace learning of HR professionals. Secondly, different working contexts across various working groups and organizations can result in different HRM function. HRM has evolved from personal mgt to broader HRM perspective. Comment: future study can show the	experienced nurses, - while learning from feedback and training were positively associated with the self-reported competence of experienced nurses. Workplace learning strategies: 1. blend of formal and informal (major emphasize on informal learning). 2. learning by doing the job 3. Interaction with others. Workplace learning barriers: Resources constrain (time, high workload, technology, money, interest) Workplace learning facilitators The strongest facilitators were

SI No	Title	Author	Objectives	Variables	Research Gap	Methodology	Findings
6	Developing human resource competencies: an empirical evidence	Srikanth PB, 2019	<p>practitioners as a result of their workplace learning?</p> <p>1. To what extent does density of work experience enhance incumbents' HR competencies.</p> <p>2. Are executives with certain personality trait(s) likely to influence the density of work experience?</p> <p>3. Among the personal characteristics (i.e. cognitive ability,</p>	<p>1. Density of Work Experience</p> <p>2. Cognitive ability</p> <p>3. Conscientiousness</p> <p>4. Openness to experience</p> <p>5. HR Competencies.</p>	Data were collected from two sources, executives(274) and their supervisors. It was a longitudinal study first phase data(demographic and personality trait) were collected from executives using questionnaire. Second phase questionnaire was distributed to	<p>link between learning and outcomes, what informal learning methods can be used.</p>	<p>learning with and from others, and org and managerial support. Workplace learning outcomes</p> <ol style="list-style-type: none"> <li>1. developing competence and confidence</li> <li>2. personal career development</li> <li>3. improved professional practice.</li> </ol> <p>Being able to perform multiple and changing HR roles.</p>
						<p>While previous research has highlighted the role of HR competencies in determining HR effectiveness, but none have studies the factors that determine the development of HR competencies. Capabilities required by executives to develop HR system</p>	<p>Those who played multiple roles of TL, manager and Individual contributor had high density of work experience and as a result high HR competencies. Even after controlling the overall experience and gender, density of work experience is still related to HR</p>



SI No	Title	Author	Objectives	Variables	Research Gap	Methodology	Findings
			Conscientiousness and openness to experience) and density of work experience, which is the most powerful predictor of HR competencies?		collect info on density of work experience. Third phase e-questionnaire was sent to supervisors to rate their executives HR competencies. Data were collected from telecom, financial institutions, manufacturing, engineering and software service.	have not been studied in India. *Density of experience here refers to the multiple roles carried by an executive in his career, like TL., Manager, and Individual contributor. it is similar to the concept of Developmental Punch provided by individual experience (Ford, and Teachout, 1995)	competencies. -Cognitive ability and density of work experience are two strong predictors of HR competencies. -Conscientiousness was the strongest predictor of the density of work experience. -the results indicate that intellectually smart people are more likely to develop HR competencies, even if they lack experience. For these executives, providing exposure to same challenging tasks with varying levels of involvement and responsibility may influence the development of HR competencies. -there was no relation

SI No	Title	Author	Objectives	Variables	Research Gap	Methodology	Findings
7	Comparing managers and non-managers learning and competencies	Yoshitaka Yamazaki and Michiko Toyama, Andreas Joko Putranto, 2018, Indonesia	<p>1. How do managers differ from non-managers in their level of developed competencies?</p> <p>2. How do managers learn differently from non-managers?</p> <p>3. How does learning style relate to a level of developed competencies?</p>	<p>1. developed Competencies: leadership, relationship, helping, sense making, information gathering, information analysis, theory building, quantitative analysis, technology, goal setting, action and initiative</p> <p>2) learning style: Feeling(CE) Thinking(AC) Reflecting(RO) Acting(AE)</p>	<p>218 participants from the Ministry of Finance and 239 from Ministry of Internal Affairs of Indonesia. Total 457 people participated. Data were collected using questionnaire. To examine competency development for 457 government officers, the present study relied on the Learning Skills Profile (LSP). To analyze how people learn, the study utilized the Learning Style Inventory (LSI) reflecting Kolb's (1984) learning modes.</p>	<p>This study tries to fill this gap by examining competency development based on experiential learning theory, as conceptualized by Kolb (1984). This study is done based on the context that employees seek vertical career path/traditional and therefore this study examine what competencies non managers need to develop to become managers.</p>	<p>between cognitive ability and openness to experience compared managers and non-managers in three areas: (1) developed competencies; Results showed that managers significantly differed from non-managers in 11 learning skills; (2) learning style; managers were more likely than non-managers to prefer thinking over feeling, (3) The learning style with more thinking over feeling affected learning skills development much more than the learning style with more acting over reflecting</p>

SI No	Title	Author	Objectives	Variables	Research Gap	Methodology	Findings
8	Learning strategies at work and professional development	Hannah Deborah Haemer, Jairo Eduardo Borges-Andrade, Simone Kelli Cassiano, 2017	Hypothesis 2 use of cognitive and behavioral learning strategies positively predict, professional development, (Hypothesis 3) older professionals are more inclined to use informal learning strategies at work. (Hypothesis 5) employee's (a) work area and (b) activity mode should predict the use of learning Strategies. work experience after graduation would positively predict the use of learning strategies (Hypothesis 6).	1. (Informal) cognitive and behavioral learning strategies intrinsic and extrinsic reflection, 2) mental repetition, 3) seeking help from others or 4) in written materials, and 5) trial and error behaviors. Formal Learning	A convenience sample of 962 respondents from Brazilian public and private organizations was used. Perceived Current and Evolutionary Professional Development scale was used to measure the perceived evolutionary professional development. The 26-item scale described by Brandao and Borges-Andrade (2011) was Used to measure Learning strategies. SEM was used to Analyse the data.	The present study reports overall results that show, in a wide range of occupations and work contexts, that professional development may be mainly predicted by the use of three learning strategies at work: trial and error, seeking help from others, and intrinsic and extrinsic reflection. These are strategies that may promote the inner psychological process of learning proposed by Illeris (2004, 2011).	The findings indicate that the use of seeking help from others does predict evolutionary development (H2). seeking help from others, and trial and error learning (H2) was the only model with a large effect. professionals with more experience have a tendency to seek more help in written material and use more trial and error learning. Participants with work experience use more of trial and error learning strategies. (H6).

SI No	Title	Author	Objectives	Variables	Research Gap	Methodology	Findings
9	Relationships between Learning, Context and Competency: Multilevel Study (1)	Hugo Pena Brandão Jairo Eduardo Borges-Andrade Katia Puento-Palacios, 2012, Brazil	empirically verify the existence of predictive relationships between: (a) on one hand, bank manager attributes (such as the informal learning strategies they employ and the number of hours they spend on formal learning activities) and the attributes of the bank branches where they work (such as organizational support, for example); and (b) on the other hand, the expression of competencies at work.	1. Learning Strategies at Workplace. 2. Number of hours of T&D attended. 3. Perceived Organizational Support 4. size of branch, complexity of work and profits distributed. 5. gender, Position, education and no of years of experience.	The study was conducted in Bank of Brazil a govt Bank. The sample size consisted of 775 participants measurements: (a) one relative to the average of the workers' perceptions at a branch, pertaining to level 2 of the analysis; (b) the other relative to the deviation variable within the branch (the individual score minus the group average) representing level 1 of the analysis; Multi level regression analysis was used.	Research in the field of workplace learning and competency development lack empirical findings and multi-level analysis. Many existing research have ignored the multi-level structure of organizations and studied the organization levels in isolation. This study has a multi-level analysis.	This study aimed to examine, through a multilevel analysis, if the attributes of managers of the Bank of Brazil (level 1 of analysis) and of the bank branches where they worked (level 2) predicted the expression of mgt competencies at work. - (Level 2) show that the greater the number of hours the branch dedicates to T&D activities, the higher the intensity of expression of competencies at work. - the better the group's (branch) perception those of org support, the greater the expression of the competencies of the branch managers. - Among the variables

SI No	Title	Author	Objectives	Variables	Research Gap	Methodology	Findings
							<p>pertaining to level 1 the learning strategy named extrinsic and intrinsic reflection showed the greatest contribution to competencies. The managers' perceptions regarding the company's perf mgt practices, one dimension of org support, appeared as another important predictor.</p>

SI No	Title	Author	Objectives	Variables	Research Gap	Methodology	Findings
10	Competence development as a key organizational strategy experience of European companies	Barry Nyhan, 1998	The objective of the study is to identify the kinds of competencies developed in these companies and the learning approaches used.	1. Informal Learning 2. Formal Learning 3. developed Competencies	This study is a result of a in depth Project. 11 European companies were studied, five represented mechanical and manufacturing industries and six were concerned with light and heavy process industries. The company case studies are from seven European countries – Belgium, France(3), German(2), Ireland, The Netherlands, Sweden(2) and the UK.	As modern companies see higher levels of worker competence as a key to flexibility and competitive advantage, competence development becomes a strategic issue for management.	The informal learning methods were: -cognitive learning strategies -planned on-the job learning-real-work situations -learning circles (where TNA was done) -Co-operative learning strategies (This meant learning in one's project team, where learning was seen as a by-product of team work.) -One to learning/coaching. The developed competencies are: (1) cognitive; (2) technological; (3) business (entrepreneurial); and (4) social (organizational).



SI No	Title	Author	Objectives	Variables	Research Gap	Methodology	Findings
11	Developing Trainers for a Changing Business Environment: The Role of Informal Learning in Career Development	Kibum Kwon I and Daeyeon Cho, 2017	The purpose of this study is to explore the relationship among skill variety, autonomy, and job involvement with the mediating effect of informal learning.	1.Skill Variety 2.Autonomy 3.Informal Learning: Learning with others, Self- Experimentation, external Scanning. 4.Job Involvement	This study adopts a cross-sectional survey-based research design, drawing on the responses of 226 (snow ball sampling) South Korean trainers to a survey regarding their facilitation experiences. Structural equation modeling is used in order to examine Informal learning. Informal learning was measured using Choi and Jacobs's (2011) 11-item scale. Job involvement. The Job Involvement Questionnaire incorporated 2 items from Kanungo's (1982)	This study debates on who is responsible for career development? The employees themselves or the organizations should govern the career development for their employees.	The results suggest that trainers exhibit higher levels of job involvement when they possess significant skill variety and high levels of autonomy and informal learning. The theoretical justification of the individual development through informal learning comes from situated learning theory. Moreover, informal learning is shown to mediate the relationship between the job characteristics and job involvement, this has been justified by using the Social Exchange Theory. This study also found that informal learning is positively related to

SI No	Title	Author	Objectives	Variables	Research Gap	Methodology	Findings
12	Organizing Learning in Work Contexts	Rob F. Poell,* Karen van Dam and Peter T. van den Berg	Three domains for further research will be presented, at the level of the task, the workplace, and the organisational culture, respectively: (1) the learning potential of work, (2) learning in the workplace, and (3) learning environments	1) the learning potential of work, (2) learning in the workplace, and (3) learning environments	Conceptual Paper The learning-network theory as developed by Van der Krogt (1998) and Poell (2000) provided a theoretical framework for organising various employee learning arrangements at the organisational and group level, respectively. It regarded learning as	Has identified the research gap identifying the common thread that links all three themes.	job involvement, supported by conservation of resources (COR) theory. This study considers informal learning activities to be among the key resources connecting job characteristics and job involvement for trainers who value learning and growth.  Future research should try to depart from a specified model or theory of learning, and combine a qualitative and subjective approach with a quantitative and more objective approach, in order to gain enduring information on relevant learning components. These examples exemplify

SI No	Title	Author	Objectives	Variables	Research Gap	Methodology	Findings
					<p>being embedded in everyday work activities of employees, which could be geared more systematically to learning by self-directed workers themselves, their supervisors, and /or human resource development specialists.</p>		<p>that there is a great need for studies that clarify the relationship between job components (autonomy) and job-related learning. Three broad categories of learning activity can be distinguished (see Poell, 2001). The first one is everyday learning (often referred to as implicit or incidental, see Marsick &amp; Watkins, 1990),</p>

SI No	Title	Author	Objectives	Variables	Research Gap	Methodology	Findings
13	Experience, competence and workplace learning	Susanna Paloniemi University of Jyväskylä, Jyväskylä, Finland	This paper aims to examine employees' conceptions of the meaning of experience in job-competence and its development in workplace context. The aim is to bring out the variety of conceptions related to experience, competence and workplace learning.		The paper is based on interview data from six Finnish small and medium sized enterprises. The data were collected as a part of a larger European Union research project, Working Life Changes and Training of Older Workers (WORKTOW) during spring 1999. The approach chosen for the analysis presented in this paper was phenomenography	The paper shows that differentiating employees' conceptions paves a way to more specific perspectives on the development and utilization of experience-based competence in work communities and organizations.	Competence was developed mainly through learning at work. Thus learning was related to the work community and to the job itself. The most frequently used ways were: competence sharing within the work community, learning on-the-job as such (e.g. problem solving), participation in training, keeping up with the professional literature and other sources of information, co-operation outside the work community, and the utilization of knowledge and skills learned in other life domains

SI No	Title	Author	Objectives	Variables	Research Gap	Methodology	Findings
14	Supporting newly-qualified teachers' professional development and perseverance in secondary education: On the role of informal learning	Stéphane Colognesi, Catherine Van Nieuwenhoven & Simon Beausaert 2019	in this research, it was hypothesised that it is not the formal support structure put in place that determines whether starting teachers feel satisfied in their job and show perseverance but rather the amount of knowledge exchange that takes place	Types of support Types of knowledge exchange eg (info, help, feedback) Feeling competent in the job Perseverance Background variable (gender, age, edu, exp)	First, a quantitative study was conducted on the relation between support systems and job satisfaction and perseverance. Secondly, a qualitative study examined newly qualified teachers' perceptions on differences between formal and informal support systems as well as the conditions necessary for high-quality support. These teachers' perceptions on what constitutes the ideal type of support were also studied.	he results of the quantitative study indicated that different types of informal support take place more often than formal support. Furthermore, the regression analysis confirmed our hypothesis that it is not the type of support offered nor its frequency that relate positively to starting teachers' competences and perseverance. Rather, it is the exchange of feedback with colleagues and with the principal that determine a newly	Starting teachers prefer to choose their own mentor. They prefer their mentor not to be a superior but a close colleague whom they trust, who is teaching the same course in the same year. Our results have especially implications for onboarding of novice teachers. Since social informal learning (e.g. through the exchange of feedback with colleagues) benefits newly qualified teachers

SI No	Title	Author	Objectives	Variables	Research Gap	Methodology	Findings
15	The effects of employees' perceptions of competency models on employability outcomes and organizational citizenship behavior and the moderating role of social exchange in this effect	Hande Serima, Orkun Demirbağb, Uğur Yozgatc.a*, 2014	research goal is to investigate the mediating effect of social exchange on the relationship between competency model and employability outcomes and organizational citizenship behavior.	Employability outcomes were adopted from Van Dam (2004), which uses 10 items to measure two dimensions (employability orientation and activities). Competency model was measured by the scale developed by Bowen, & Ostr off (2006). Participants were	research was conducted in Istanbul by using convenient sampling method on 175 participants working telecommunications, health care, aeronautical and food industries. This study was conducted in Istanbul by using convenient sampling method o		According to the results of the study In banking, employees' perceptions regarding the relevance and fairness of competency models have a positive effect on employability outcomes and organizational citizenship behavior. It has been concluded that social exchange has a moderating role on this positive effect. Competency models encourage positive employee outcomes by outlining the behaviors required for effective performance,



SI No	Title	Author	Objectives	Variables	Research Gap	Methodology	Findings
16	Professional competence and its effect upon employability throughout the career	Beatrice Isabella Johanna Maria van der Heijden 2001	This study describes the relationship between five dimensions of professional expertise and the degrees of employability of individual employees in three different career stages, working in small and medium-sized enterprises	Professional expertise/functional competence is operationalized by means of five dimensions — knowledge, meta-cognitive knowledge, skills, social recognition, and growth and flexibility	Hypotheses have been tested with original survey data from 233 employees and 217 direct supervisors, age was also considered to see if it influences employability. It appears that the degree of employability indeed decreases with the age of the employee, especially when the transition is to a new job field, or to a higher job, or to an equivalent job — but outside the organization or the concern in which the employee is currently employed.	For the measurement of the dependent variable, 'employability', eight items have been used, with the following formulation: 'What is the likelihood of transition to . . .?' The type of transition on the dotted line was respectively: another job in the same domain as the employee's present job; another job in a different domain from the employee's present job; a higher job in the employee's own unit; a higher job in	It appears that the degree of employability indeed decreases with the age of the employee, especially when the transition is to a new job field, or to a higher job, or to an equivalent job — but outside the organization or the concern in which the employee is currently employed.

SI No	Title	Author	Objectives	Variables	Research Gap	Methodology	Findings
17	Understanding and managing employability in changing career contexts	Marilyn Clarke, 2007	<p>– The purpose of this paper is to explore the concept of employability as it has evolved over time and to propose a new definition which reflects the critical variables that contribute to employability at an individual level.</p>	<p>It also offers suggestions for how to manage employability and careers at both an individual and an organisational level.</p>	<p>This paper challenges current definitions of employability by focusing on contextual factors as well as individual characteristics. It suggests a new definition and a range of strategies for managing employability within current career and labour market contexts.</p>	<p>– Employability is as dependent on context as on the individual. Therefore the current emphasis on individual responsibility for employability needs to be re-examined and a greater emphasis placed on how organisations can support employees to manage careers and employability. This shift in emphasis will benefit organisations by creating a more employable labour force as well as contributing to attraction and retention within an increasingly tight labour market.</p>	<p>This paper contains components of employability from the perspective individual characteristics like flexibility, learning motive and so on. Focuses more on individual attitudes.</p>

SI No	Title	Author	Objectives	Variables	Research Gap	Methodology	Findings
18	Personal competencies, organizational competencies, and employability	Franco Civelli, 1998	Conceptual paper to identify the competency needed to develop employability.	Italian perspective		Communication competence and Personal Competence	
19	EMPLOYABILITY SKILLS FOR AUSTRALIAN SMALL AND MEDIUM SIZED ENTERPRISES	Anne McLeish February 2002	Report of the interviews and focus groups with small and medium enterprises	his project's objective was to undertake research with a sample of small and medium sized enterprises to identify their views as to the	This research was conducted in the context of a larger study designed to identify the employability skills relevant to Australian industry in the future.	A Framework of Employability Skill: Personal values Communication Team work Problem solving Initiative and enterprise skills. Planning and organizing Self awareness Learning Technology	
20	Building a sustainable start: The role of career competencies, career success, and career shocks in young professionals' employability	Rowena Blokker*, Jos Akkermans, Maria Tims, Paul Jansen, Svetlana Khapova, 2019	career shocks (i.e., positive and negative unexpected career-related events) in this relationship. To examine the role of career shocks in the relationship between career competencies, career success and employability	This study contributes to the literature on employability by demonstrating that career shocks play an important role in young professionals' early career development in tandem with career competencies and career success.	analyzed data from 704 Dutch young professionals (21–35 years).	Results showed that young professionals who have developed high levels of career competencies reported higher levels of perceived employability.	The relationship between career competencies and perceived employability was partially mediated by subjective career success (i.e., career satisfaction).

SI No	Title	Author	Objectives	Variables	Research Gap	Methodology	Findings
21	The impact of career boundarylessness on subjective career success: The role of career competencies, career autonomy, and career insecurity	Sidika N. Colakoglu (2011)	To identify the role of career boundarylessness to career success	Career competencies: Knowing how, knowing whom, knowing why.	Data were collected from a (MBA) and Executive Master's of Business Administration (EMBA) alumni and current EMBA students in United States.	Colakoglu, S. N. (2011) found that knowing how and knowing why lead to successful pursuit of employability.	this study develops and tests a model in which career boundarylessness affects subjective career success through its effect on three career competencies
22	Informal learning in the workplace: key activities and processes	John Cunningham and Emilie Hillier University of Victoria, Canada, 2013	– the purpose of this paper is to identify the informal learning activities and learning processes that middle managers found most useful in their work and careers	Type of informal learning 1. learning relationships 2. learning opportunities enlarging or redesigning their jobs. 3. learning opportunities enriching their job processes that assist in facilitating informal learning: 1. planning processes, 2. active learning and modelling, 3. relationship dynamics, 4. tying learning to	an interview and survey design to gather data from a sample of the 84 supervisors in the department. Interview (n ¼ 21) and questionnaire (n ¼ 19) respondents were team leaders, labour union and non-union managers,	A climate of fiscal restraint has precipitated the elimination of some management positions coupled with reductions in public service training and development budgets. When it comes to staff development, the department currently cannot rely on conventional human resource mgt methods, such as enrolling existing employees in formal training courses and seeking	The findings illustrate seven broad themes describing learning activities and processes. The first three themes describe the types of informal learning activities that supervisors found valuable: relationships; learning opportunities enlarging or redesigning their jobs; and enrichment opportunities that provided higher levels of managerial learning

SI No	Title	Author	Objectives	Variables	Research Gap	Methodology	Findings
23	Integrating formal and informal learning at work	Integrating formal and informal learning at work	To what extent and under what conditions can computer-based learning and e-learning be used to support workplace learning and an integration between formal and informal learning at work?	specific applications E- Learning Workplace Learning participation	Two case study in industrial and hospital context. Using both questionnaire and interview. 720 employees participated in the study from hospital, and 36 employees from industrial sectors. Two questionnaires were answered by participants and then followed-up with	new recruits. It is within this context that this study investigated the opportunities that informal learning provided for transferring knowledge and skills as well as overall development of careers. Computer- and e-learning have often been discussed as important elements in successful models for workplace learning. Information and communication technology certainly change the conditions for learning, but this both solves and creates problems. The purpose of this article is to shed some light	The findings concluded that one could say that the information and communication technology has worked well and been an important condition for participation. In other cases, it has not functioned satisfactorily, but has rather created difficulties, which had to be solved in some way or another.

SI No	Title	Author	Objectives	Variables	Research Gap	Methodology	Findings
24	Learning from others at work: communities of practice and informal learning	David Boud, Heather Middleton University of technology Sydney,2003	This paper addresses the question of who is involved in workplace learning and the ways in how they learn	Pattern of learning: Mastery of organizational Process, Negotiating the political, dealing with the atypical. Variety of networks	group discussions and seminars. Interviews were carried out with participants, company management, union representatives and study supervisors.	on these problems and to give a few examples of workplaces where attempts have been made to solve the problems.	Whether elements of e-learning have specifically contributed to strengthening motivation and creating meaningfulness amongst participants cannot be determined from the examples studied. There is, however, an overall impression that the different elements in the support structure together gave rise to motivation and feelings of meaningfulness.
					Qualitative Study, use long semi structured-interviews and social network analysis to draw out subjective experience of work and learning. The groups of sample	Informal learning has proved to be more effective than formal and staffs can have difficulties learning formally from supervisors because of their surveillance role.	Who is involved in workplace learning and how do they learn as part of their normal work. Loosely coupled relationship between communities: the



SI No	Title	Author	Objectives	Variables	Research Gap	Methodology	Findings
25	Organisational learning and competence development	Anders Drejer, Senior Lecturer at the Center for Industrial Production, Aalborg University, Denmark. 2000	This paper is concerned with the formulation of a framework for understanding the development and change of the	through learning takes place: Loosely coupled, tightly coupled.	included teachers of floor and wall tile, educational planner, business studies teacher and HR officers.		education planners are more recently created group and have less coherence and sharing of meaning. Tightly coupled relationship between communities: tiling teacher and HR can be described as tightly couples as they have sustained relationship over time and have shared ways of engaging and doing things together. They are familiar about what other know and how they can contribute to their common purpose.
					Conceptual paper explained with the help of two case studies on learning techniques and different levels of learning methods.	Today, there is near universal agreement that the competitiveness of firms rests on the (core) competences that	organizational learning theory is a key to understanding competence development. Based on this, a model for competence

SI No	Title	Author	Objectives	Variables	Research Gap	Methodology	Findings
			competences of firms	competence, organizational, competence, human beings, culture		firms possess. However, little attention has been devoted to the notion of competence development. In the paper, it will be argued that there is, indeed, a need for research and management practice of competence development.	development is proposed. This is the main contribution of the paper. 3. Organisational learning (and competence development) The individual behaviour perspective The decision support perspective The management systems and organisational structure perspective The corporate culture perspective The process of learning Learning takes place as a result of critical reflection and then experience.

SI No	Title	Author	Objectives	Variables	Research Gap	Methodology	Findings
26	Workplace Learning and Learning Theory	Kund Illeris, 2003	to provide a grounding theory for work place Learning and competence development for Danish National Labor Market Authority.	Three dimensions of learning: 1. Cognitive 2. Emotional 3. Social-societal dimension  Two Process of Learning: Cognitive and emotional	The term " Learning Organization is a misnomer, as organizations do not have and cannot develop such qualities. The correct expression for what is meant should be something like, "organizations in which learning is promoted".	Conceptual paper: – developing a grounding theory for workplace Learning and Competence Development	to sum up what has been outlined is concept of learning which basically is constrictive in nature, i.e., the learner himself builds his or her learning as mental structure. learning include three integrated dimensions which may be termed the; 1. Cognitive 2. Emotional 3. Social-societal dimension. Forms of learning; 1. Cumulative, 2. additive or assimilative learning, 3. transformative and 4. Accommodative learning. This theory have identified three groups of workers(adult with secure position, adults

SI No	Title	Author	Objectives	Variables	Research Gap	Methodology	Findings
27	Learning patterns in organizations: towards a typology of workplace-learning configurations	Natalie Govaerts and Herman Baert, 2011	The aim of this study is to identify the notion of 'learning patterns' and to present a provisional typology of learning patterns within organizations.	<ol style="list-style-type: none"> <li>1. Olympic learning pattern</li> <li>2. Helpdesk learning pattern</li> <li>3. Entrepreneurial learning pattern</li> <li>4. Job performance learning pattern</li> <li>5. Agora learning pattern</li> </ol>	<p>exploratory study. A qualitative research approach with multiple case study design served as the methodological base. In total, 32 cases were investigated using 128 interviews.</p>	<p>HRD Policies do not always lead to strategically relevant sufficient learning. Certain hidden form of learning already exists in an organization, which a top down HRD policy could not affect. Therefore, even without explicit HRD policies, learning is taking place at least in an unsystematic or in a routine-driven, organic way. Therefore, this study explores these learning ways further.</p>	<p>needing requalification, young adults) and identified how learning takes place in each group.</p> <p>Findings result in a provisional typology of 5 basic learning patterns</p> <ol style="list-style-type: none"> <li>1. Olympic learning pattern</li> <li>2. Helpdesk learning pattern</li> <li>3. Entrepreneurial learning pattern</li> <li>4. Job performance learning pattern</li> <li>5. Agora learning pattern</li> </ol> <p>In addition, this study showed that agora learning patterns are the most occurring learning patterns</p>

SI No	Title	Author	Objectives	Variables	Research Gap	Methodology	Findings
28	Learning from Others at Work: Communities of Practice and Informal Learning	David Boud, & Heather Middleton 2003	the pa.per poses the question of whether the framework of communities of practice (Lave and Wenger 1991, Wenger 1998) is a useful or sufficient framework for discussions of informal learning at work. According to Wenger (1998), social participation within the community is the key to informal learning	Qualitative techniques draws on interviews long interviews . semi structured interview .	The questions asked who were the primary source of workplace information and how challenges in their jobs were dealt with. Four work group were studied 1)teachers of floor and wall tiling. 2)educational planners 3)HRO 's 4)Business studies teacher who provide training to commercial clients.	The significant areas of learning were: mastery of org process, negotiating relation with everyday work also known as apolitical and atypical issues which has no set procedures. All four levels engage in the different methods of learning but at a varying degree.	Contribution to literature: A common patter illustrated from the findings is that, when a difficulty or query arises a person will seek an answer from documentary source such as the Intranet or recent precedents, where these exist. If this source fails, an expert in the area in question is sought that person is a peer, generally someone physically close to hand. If someone close to hand is unable to answer the query satisfactorily then it is likely that a peer doing a similar job in another geographical location or (in the case of the junior HR clerks) a person in a

SI No	Title	Author	Objectives	Variables	Research Gap	Methodology	Findings
29	Informal learning, organizational commitment and self-efficacy A study of a structural equation model exploring mediation	Dong-Yeol Yoon, Seung-hyun Han, Moonju Sung, & Jun Cho (2018)	This paper aims to explore a mediating effect of self-efficacy between individuals' informal learning and their organizational commitment, this research focuses on effects of informal learning and a mediating role of self-efficacy.	Informal learning: knowledge exchange with others, self-experiment, environmental scanning by Choi and Jacobs (2011),	SCT( Bandura) To address these research questions, this research analyzes survey data of 317 Korean workers. Through structural equation model analysis, the authors examine how informal learning affects employee commitment to organizations, where individual self-efficacy works as a mediator.	The main reasons for the high rate of informal learning through activities such as on-the-job training, coaching, mentoring and community of practice include the increase in the efficiency of learning and reduction in learning costs by integrating learning and work and the effectiveness of informal learning in terms of improving performance. This research seeks to demonstrate how informal learning in the workplace	slightly more senior role will be approached. If this fails, then the supervisor will be approached.  Use of Social Learning Theory



SI No	Title	Author	Objectives	Variables	Research Gap	Methodology	Findings
30	Impact of informal learning in the accounting profession	Michelle M. Kusaila, USA, 2019	This paper aims to examine the impact of informal learning contextual factors in facilitation workplace learning in the auditing profession	Informal learning: management support, peer support, supportive organizational culture and access to work resources	Multiple linear regression analysis was used to look at the relationship between four aspects of informal learning and the impact on workplace learning using data from a cross-sectional survey of 95 audit professionals. Scale by Maringka (2013) used to measure informal learning .Pyramid structure	influences employees' commitment to the organization through self-efficacy significance of a supportive organizational culture suggests the learning culture in public accounting firms' support knowledge dispersion through the feedback and review process.	Correlation analysis identifies men perceive access to time and technology resources differently than women, but regression analysis identifies both genders are impacted by having time to participate in informal learning activities. Older, more experienced auditors' were not as impacted by informal learning activities, but younger auditors were impacted by management support

SI No	Title	Author	Objectives	Variables	Research Gap	Methodology	Findings
31	Ethical leadership: A social learning perspective for construct development and testing	Michael E. Brown a, Linda K. Treviño b, David A. Harrison 2005	We propose social learning theory as a theoretical basis for understanding ethical leadership and offer a constitutive definition of the ethical leadership construct	Learning Theory	According to Bandura (1986) virtually anything that can be learned via direct experience can also be learned by vicarious experience, via observing others' behavior and its consequences. This process seems particularly important when the behavioral target is ethical conduct in organizations. Employees can learn what behavior is expected, rewarded, and punished via role modeling.	Contribution to Literature	Finally, ethical leadership predicts outcomes such as perceived effectiveness of leaders, followers' job satisfaction and dedication, and their willingness to report problems to management.

**APPENDIX B INTEGRATION OF QUANTITATIVE AND QUALITATIVE METHODS**

<b>Hypothesis</b>	<b>Description</b>	<b>Accept/Reject</b>	<b>Qualitative Integration</b>
H1	Employees Informal Workplace Learning affect self-reported competency development	Accept	<p>Table 68 Themes and exemplary quotes related to participants' experiences of relationship between IWL, and competency development.</p> <p>Table 69 Themes and exemplary quotes related to participants' experiences in low ratings for Learning from feedback</p> <p>Table 70 Themes and exemplary quotes related to participants' experiences in high ratings for Learning by reflecting</p>

Hypothesis	Description	Accept/Reject	Qualitative Integration
H2	Self-Reported Competency Development relates positively to Employability	Accept	<p>Table 71 Themes and exemplary quotes related to participants' experiences of relationship between IWL on Employability with the mediating role of competency development</p> <p>Table 72 Themes and exemplary quotes related to participants' experiences in low ratings for social competencies</p> <p>Table 73 Themes and exemplary quotes related to participants' experiences in high ratings for Personal competencies</p>
H3	Competency development mediates the relationship between Informal Workplace Learning and Employability	Accept	Table 74 Themes and exemplary quotes related to participants' experiences of relationship between IWL on Employability with the mediating role of competency development

Hypothesis	Description	Accept/Reject	Qualitative Integration
H4	Informal workplace learning relates positively to Employability (total effect)	Accept	<p>Table 75 Themes and exemplary quotes related to participants' experiences of relationship between IWL on Employability with the mediating role of competency development</p> <p>Table 76 Themes and exemplary quotes related to participants' experiences in high ratings for Anticipation and optimization</p> <p>Table 77 Themes and exemplary quotes related to participants' experiences in low ratings for Corporate Sense</p>

Hypothesis	Description	Accept/Reject	Qualitative Integration
H5a	Learning goal orientation strengthens the positive effect of IWL on Competency Development	Reject	Table 78 Themes and exemplary quotes related to participants' experiences of the moderating effect of Learning Goal Orientation (LGO)
H5b	Self-directed learning orientation strengthens the positive effect of IWL on Competency Development	Reject	Table 79 Themes and exemplary quotes related to participants' experiences of the moderating effect of SDLO



## APPENDIX C SURVEY QUESTIONNAIRE

Questionnaire for Informal workplace learning and Employability: The Mediating Role of Competency Development among Financial Sector Employees in Bhutan

### PART A: Demography of Employees

Sl. No	Items
1.	<p>Please put (✓) in the boxes wherever appropriate.</p> <p>Gender</p> <p><input type="checkbox"/> Male</p> <p><input type="checkbox"/> Female</p>
2.	<p>Job Description</p> <p><input type="checkbox"/> Director</p> <p><input type="checkbox"/> Head of Department</p> <p><input type="checkbox"/> Manager</p> <p><input type="checkbox"/> Banking Officer</p> <p><input type="checkbox"/> Banking Assistant</p>

**PART B: Informal Workplace Learning of Employees in Financial Sectors in Bhutan**

Instructions	Indicate how strongly you agree or disagree with the following statements by choosing the option that best represents your opinion.	Do not agree at all 1	Largely not agree 2	Rather not agree 3	Rather agree 4	Largely Agree 5	Fully Agree 6
I	Trying and applying own ideas						
3.	I try various method to solve new tasks at work.						
4.	I try out my own ideas for new tasks						
5.	I try out my own ideas to improve tasks at work.						
II	Model Learning						
6.	I look at how others work in the company to improve my work.						
7.	I look at how the colleagues work so I do not make the same mistake.						

Instructions	Indicate how strongly you agree or disagree with the following statements by choosing the option that best represents your opinion.	Do not agree at all 1	Largely not agree 2	Rather not agree 3	Rather agree 4	Largely Agree 5	Fully Agree 6
8.	I try things out at my work, which I have learned by observing from my colleagues.						
III	Direct feedback						
9.	I ask my head/manager how well I have worked.						
10.	I ask my head/manager when I am not sure how well I worked.						
11.	I ask my colleagues when I am not sure how well I worked.						
IV	Vicarious feedback						
	I ask my colleagues about their						

Instructions	Indicate how strongly you agree or disagree with the following statements by choosing the option that best represents your opinion.	Do not agree at all 1	Largely not agree 2	Rather not agree 3	Rather agree 4	Largely Agree 5	Fully Agree 6
	experience at work.						
	I ask my colleagues about the methods and strategies they use at work.						
	I obtain tips and hints about work from my colleagues.						
IV	Anticipatory reflection						
	Before starting a new task, I think about how best I can do.						
	Before work, I think about how I prepare my workplace.						
	Before starting a new task, I						

Instructions	Indicate how strongly you agree or disagree with the following statements by choosing the option that best represents your opinion.	Do not agree at all 1	Largely not agree 2	Rather not agree 3	Rather agree 4	Largely Agree 5	Fully Agree 6
	think about the things I need to pay attention to.						
IV	Subsequent reflection						
	When I have finished a new task, I think about how well I have worked.						
	When I have finished a new task, I think about how well I can still improve.						
	When I have finished a new task, I think about the quality of my work.						
III	Extrinsic Intent to Learn						
	I want to learn something new						

Instructions	Indicate how strongly you agree or disagree with the following statements by choosing the option that best represents your opinion.	Do not agree at all 1	Largely not agree 2	Rather not agree 3	Rather agree 4	Largely Agree 5	Fully Agree 6
	at work for myself so that I can pursue my career at the company.						
	I want to learn something new for myself so that I am better at work than my colleagues.						
	I want to learn something new at work for myself so that my head/ manager is impressed by me.						
IV	Intrinsic intent to learn						
	I want to learn something new for myself so that I feel more						



Instructions	Indicate how strongly you agree or disagree with the following statements by choosing the option that best represents your opinion.	Do not agree at all 1	Largely not agree 2	Rather not agree 3	Rather agree 4	Largely Agree 5	Fully Agree 6
	capable to deal with difficulties at work.						
	I want to learn something new for myself so that I can solve problems at work faster.						
	I want to learn something new for myself so that I can do a good job even though the tasks or instructions are difficult.						

### Part C. Competency Development of Employees of Financial Sectors in Bhutan

Instructions	Indicate how strongly you agree or disagree with the following statements by choosing the option that best represents your opinion.	Do not agree at all 1	Largely not agree 2	Rather not agree 3	Rather agree 4	Largely Agree 5	Fully Agree 6
I	Professional Competency Development						
	I have the ability to analyze the project requirements.						
	I have the ability to solve technical problems tactfully.						
	I have the ability to plan, organize, and execute tasks.						
	I have the ability to negotiate with clients/ team-members/ team-leader.						
	I have the ability to complete tasks on time.						
	I have the ability to make critical decisions.						

Instructions	Indicate how strongly you agree or disagree with the following statements by choosing the option that best represents your opinion.	Do not agree at all 1	Largely not agree 2	Rather not agree 3	Rather agree 4	Largely Agree 5	Fully Agree 6
II	Personal Competency Development						
	I have the ability to handle stressful situations like meeting project delivery deadlines.						
	I have the ability to learn and develop as per changing organizational demands.						
	I have the ability to exhibit self-confidence.						
	I have the ability to be creative.						
III	Social competency development						
	I have the ability to communicate effectively.						
	I have the ability to build network or connections.						

Instructions	Indicate how strongly you agree or disagree with the following statements by choosing the option that best represents your opinion.	Do not agree at all 1	Largely not agree 2	Rather not agree 3	Rather agree 4	Largely Agree 5	Fully Agree 6
	I have the ability to resolve conflicts						
	I have the ability to understand organization's culture and values.						
	I have the ability to work in team-environment.						

### Part D. Employability of Employees of Financial Sectors in Bhutan

Instructions	Indicate how strongly you agree or disagree with the following statements by choosing the option that best represents your opinion.	Do not agree at all 1	Largely not agree 2	Rather not agree 3	Rather agree 4	Largely Agree 5	Fully Agree 6
I	Occupational Expertise						
	During the past year, I was, in general, competent to perform my work accurately and with few mistakes.						
	During the past year, I was, in general, competent to take prompt decisions with respect to my approach to work.						
	In general, I am competent to distinguish main issues from side issues and to set priorities.						
	I consider myself competent to weigh up and reason out the						

Instructions	Indicate how strongly you agree or disagree with the following statements by choosing the option that best represents your opinion.	Do not agree at all 1	Largely not agree 2	Rather not agree 3	Rather agree 4	Largely Agree 5	Fully Agree 6
	“pros” and “cons” of particular decisions on working methods, materials, and techniques in my job domain.						
II	Anticipation and Optimization						
	I spend enough time in improving my knowledge and skills that will be of benefit to my work.						
	I consciously devote attention to applying my newly acquired knowledge and skills.						
	During the past year, I was actively engaged in investigating adjacent job areas to see where success						



Instructions	Indicate how strongly you agree or disagree with the following statements by choosing the option that best represents your opinion.	Do not agree at all 1	Largely not agree 2	Rather not agree 3	Rather agree 4	Largely Agree 5	Fully Agree 6
	could be achieved.						
	During the past year, I associated myself with the latest developments in my job domain						
III	Personal Flexibility						
	I can adapt to the changes in my workplace very easily.						
	I adapt to developments within my organization.						
	I can generally anticipate and take advantage of changes in my working environment very quickly.						
	I have lots of variation in the range of duties I						

Instructions	Indicate how strongly you agree or disagree with the following statements by choosing the option that best represents your opinion.	Do not agree at all 1	Largely not agree 2	Rather not agree 3	Rather agree 4	Largely Agree 5	Fully Agree 6
	aim to achieve at my work						
	I have a very positive attitude to changes in my function.						
IV	Corporate Sense						
	I support the operational processes within my organization						
	In my work, I take the initiative in sharing responsibilities with colleagues.						
	In my organization, I take part in forming a common vision of values and goals.						
	I share my experience and knowledge with others.						

### Part E. Learning Goal Orientation of Employees of Financial Sectors in Bhutan

Instructions	Indicate how strongly you agree or disagree with the following statements by choosing the option that best represents your opinion.	Do not agree at all 1	Largely not agree 2	Rather not agree 3	Rather agree 4	Largely Agree 5	Fully Agree 6
I	Learning Goal Orientation						
	I often read materials related to my work to improve my ability.						
	I am willing to select a challenging work assignment that I can learn a lot from.						
	I often look for opportunities to develop new skills and knowledge.						
	I enjoy difficult and challenging task at work where I will						

Instructions	Indicate how strongly you agree or disagree with the following statements by choosing the option that best represents your opinion.	Do not agree at all 1	Largely not agree 2	Rather not agree 3	Rather agree 4	Largely Agree 5	Fully Agree 6
	learn new skills.						
	I prefer to work in situations that require a high level of ability and talent.						

### Part F. Self-Directed Learning Orientation of Employees of Financial Sectors in Bhutan

Instructions	Indicate how strongly you agree or disagree with the following statements by choosing the option that best represents your opinion.	Do not agree at all 1	Largely not agree 2	Rather not agree 3	Rather agree 4	Largely Agree 5	Fully Agree 6
I	Self-Directed Learning Orientation						
	I grab learning opportunities immediately to attain my goals.						

Instructions	Indicate how strongly you agree or disagree with the following statements by choosing the option that best represents your opinion.	Do not agree at all 1	Largely not agree 2	Rather not agree 3	Rather agree 4	Largely Agree 5	Fully Agree 6
	No matter what the odds, if I want to undertake a work-related learning activity I will make it happen						
	When I want to learn something new for my job, I can always find a way to learn						

## APPENDIX D INTERVIEW QUESTIONNAIRE

Interview Guide Questions on employee's perception on the relevance of Informal Workplace Learning Conditions to Competency Development and Employability.

1	Demographic information collection. (Gender, Age, Position, Number of years of Experience)
2	Do you think learning informally can help in developing competencies? Can you share your experiences?
3	Do you believe that employees with better competencies will have better employability options? Why? Can you share your experiences?
4	Do you believe that the employees have a goal to learn? Can you share some of your experiences?
5	Do you also believe that employees are self-directed learners? Can you share your experiences?
6	Do you think that if employees are self-directed learners and are learning goal oriented, would participate more in IWL? As a result, would that lead to competency development? Share your experiences.
7	Does designation play any role in competency development? Why do you think the reason for negative association could be?
8	Why do you think there is low preference for learning from feedback? Why do you think they prefer to learn from reflection?
9	Why do you think employees have rated low in terms of social skills? Why do you think they have rated high in terms of personal skills?
10	Why do you think that they have rated high in terms of anticipation and optimization? Why do you think the employees have rated low in terms of corporate sense?
11	Do you have any suggestion to enhance IWL in Bhutan?



## APPENDIX E ITEM-OBJECTIVE CONGRUENCE

Item-Objective Congruence Evaluation Form for Validation of Questionnaire for Informal workplace learning and Employability: The Mediating Role of Competency Development among Financial Sector Employees in Bhutan.

### PART 1: DEMOGRAPHY OF Employees

Sl.No	Items	+1	0	-1	Suggestions
1.	<p><b>Please put (✓) in the boxes wherever appropriate.</b></p> <p><b>1. Gender</b></p> <p><input type="checkbox"/> Male</p> <p><input type="checkbox"/> Female</p>				
2.	<p><b>Job Position</b></p> <p><input type="checkbox"/> Director</p> <p><input type="checkbox"/> Department Head</p> <p><input type="checkbox"/> Manager</p> <p><input type="checkbox"/> Banking Officer</p> <p><input type="checkbox"/> Banking Assistant</p>				
3.	<p><b>Organization working in</b></p> <p><input type="checkbox"/> Bank of Bhutan Ltd</p> <p><input type="checkbox"/> Bhutan National Bank Ltd</p> <p><input type="checkbox"/> Bhutan Development Bank Ltd</p> <p><input type="checkbox"/> Druk Punjab National Bank Ltd</p> <p><input type="checkbox"/> Tashi Bank Ltd</p>				

**PART 2: Informal Workplace Learning of Employees in Financial Sectors in Bhutan**

Sl. No	Items	+1	0	-1	Suggestions
<b>I. Trying and applying own ideas (Experience)</b>					
1.	I try various method to solve new tasks at work.				
2.	I try out my own ideas for new tasks				
3.	I try out my own ideas to improve tasks at work.				
<b>II Model Learning (Experience)</b>					
1.	I look at how others work in the company to improve my work.				
2.	I look at how the colleagues work so I do not make the same mistake.				
3.	I try things out at my work, which I have copied from my colleagues.				
<b>III Direct feedback</b>					
1.	I ask my head/manager how well I have worked.				
2.	I ask my head/manager when I am not sure how well I worked.				
3.	I ask my colleagues when I am not sure how well I worked..				
<b>IV Vicarious feedback</b>					
1.	I ask my colleagues about their experience at work.				
2.	I ask my colleagues about the methods and strategies they use at work.				
3.	I obtain tips and hints about work from my colleagues.				
<b>V Anticipatory reflection</b>					
1.	Before starting a new task, I think about how best I can do.				
2.	Before work, I think about how I prepare my workplace.				
3.	Before starting a new task, I think about the things I need to pay attention to.				

<b>VI Subsequent Reflection</b>					
<b>Sl. No</b>	<b>Items</b>	<b>+1</b>	<b>0</b>	<b>-1</b>	<b>Suggestions</b>
1.	When I have finished a new task, I think about how well I have worked.				
2.	When I have finished a new task, I think about how well I can still improve.				
3.	When I have finished a new task, I think about the quality of my work.				
<b>III Extrinsic Intent to Learn</b>					
1.	I want to learn something new at work for myself so that I can pursue my career at the company				
2.	I want to learn something new for myself so that I am better at work than my colleagues.				
3.	I want to learn something new at work for myself so that my head/manager is impressed by me.				
<b>IV Intrinsic intent to learn</b>					
1.	I want to learn something new for myself so that I feel more capable to deal with difficulties at work.				
2.	I want to learn something new for myself so that I can solve problems at work faster.				
3.	I want to learn something new for myself so that I can do a good job even though the tasks or instructions are difficult.				

### Part 3. Competency Development of Employees of Financial Sectors in Bhutan

Sl. No	Items	+1	0	-1	Suggestions
<b>I Professional Competency Development</b>					
1.	I have the ability to analyze the project requirements.				
2.	I have the ability to solve technical problems tactfully.				
3.	I have the ability to plan, organize, and execute tasks.				
4.	I have the ability to negotiate with clients/ team-members/ team-leader.				
5.	I have the ability to complete tasks on time.				
6.	I have the ability to make critical decisions.				
<b>II Personal Competency Development</b>					
1.	I have the ability to handle stressful situations like meeting project delivery deadlines.				
2.	I have the ability to learn and develop as per changing organizational demands.				
3.	I have the ability to exhibit selfconfidence.				
4.	I have the ability to be creative.				
<b>III Social competency development</b>					
3.	I have the ability to communicate effectively.				
4.	I have the ability to build network or connections.				
5.	I have the ability to resolve conflicts.				
6.	I have the ability to understand organization's culture and values.				
7.	I have the ability to work in teamenvironment.				

#### Part 4. Employability of Employees of Financial Sectors in Bhutan

Sl. No	Items	+1	0	-1	Suggestions
<b>I Occupational Expertise</b>					
1.	During the past year, I was, in general, competent to perform my work accurately and with few mistakes.				
2.	During the past year, I was, in general, competent to take prompt decisions with respect to my approach to work				
3.	In general, I am competent to distinguish main issues from side issues and to set priorities.				
4.	I consider myself competent to weigh up and reason out the “pros” and “cons” of particular decisions on working methods, materials, and techniques in my job domain				
5.	How would you rate the quality of your skills overall?				
<b>II Anticipation and Optimization</b>					
1.	How much time do you spend improving the knowledge and skills that will be of benefit to your work?				
2.	I consciously devote attention to applying my newly acquired knowledge and skills.				
3.	During the past year, I was actively engaged in investigating adjacent job				
	areas to see where success could be achieved.				
4.	During the past year, I associated myself with the latest developments in my job domain				

Sl. No	Items	+1	0	-1	Suggestions
<b>III Personal Flexibility</b>					
1.	How easily would you say you can adapt to changes in your workplace?				
2.	I adapt to developments within my organization.				
3.	How quickly do you generally anticipate and take advantage of changes in your working environment?				
4.	How much variation is there in the range of duties you aim to achieve in your work?				
5.	I have a very positive attitude to changes in my function.				
<b>IV Corporate Sense</b>					
1.	I support the operational processes within my organization				
2.	In my work, I take the initiative in sharing responsibilities with colleagues.				
3.	In my organization, I take part in forming a common vision of values and goals.				
4.	I share my experience and knowledge with others.				



### Part 5. Learning Goal Orientation of Employees of Financial Sectors in Bhutan

Sl. No	Items	+1	0	-1	Suggestions
<b>I Learning Goal Orientation</b>					
1.	I often read materials related to my work to improve my ability.				
2.	I am willing to select a challenging work assignment that I can learn a lot from.				
3.	I often look for opportunities to develop new skills and knowledge.				
4.	I enjoy difficult and challenging task at work where I will learn new skills.				
5.	I prefer to work in situations that require a high level of ability and talent.				

### Part 6. Self-Directed Learning Orientation of Employees of Financial Sectors in Bhutan

Sl. No	Items	+1	0	-1	Suggestions
<b>I Self-Directed Learning Orientation</b>					
1.	I grab learning opportunities immediately to attain my goals.				
2.	No matter what the odds, if I want to undertake a work-related learning activity I will make it happen				
3.	When I want to learn something new for my job, I can always find a way to learn				

**Interview Guide Questions on employee's perception on the relevance of the Informal Workplace Learning Conditions to Competency Development and Employability.**

Sl. No	Items	+1	0	-1	Suggestions
1.	Demographic information collection.(Gender, Age, Position, Number of years of Experience)				
2.	What perceptions do you have about Informal Workplace Learning?				
3.	In what ways do you think Informal Workplace Learning will contribute to the Development of Competencies?				
4.	What could be your opinion on the Informal Learning Condition_____ having a significant relationship with competency development?				
5	What could be your opinion on the Informal Workplace Learning condition _____ having only a marginal relationship with the competency development?				
6.	What could be your opinion on _____competency having a significant relationship with Employability?				
7.	What could be your opinion on _____competency having only a marginal relationship with Employability?				
8.	How do you think can Informal workplace learning help in Competency Development?				