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RESEARCH ARTICLE

# Unraveling the Nexus: Exploring informal workplace learning, competency development, and employability through a mixed method approach

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## ABSTRACT

This research was carried out utilizing both quantitative and qualitative methods to examine the correlation between Informal Workplace Learning (IWL) and Employability. This investigation considers the role of competency development as an intermediary factor. The study tested a moderated mediation model using data collected from 512 employees from all five banks located in Bhutan. The findings supported initial hypotheses. Utilizing structural equation modelling (SEM), the study found that IWL significantly impacts employability, and this relationship is fully mediated by competency development. However, the expected moderating effects of Self-directed Learning Orientation (SDLO) and Learning Goal Orientation (LGO) on the connection between IWL and competency development were not observed. In simpler terms, the results suggest that IWL contributes to the development of competencies, which in turn enhances employability. Yet, SDLO and LGO do not enhance the influence of IWL on competency development. Additionally, qualitative techniques were employed to gather insights into the experiences related to IWL, competency development, and employability, providing a complementary perspective to quantitative findings. Overall, this study holds significance for shaping human resource policies formulation and strategies related to employee growth and development.

***Keywords:*** informal workplace learning (IWL); competency development; employability; Self-directed Learning Orientation (SDLO); Learning Goal Orientation (LGO); Structural Equation Modelling (SEM); Bhutan

## 1. Introduction

Contemporary business landscape has observed a surge in demand for adult vocational education and workplace learning due to escalating costs and the unpredictable market conditions. In response to budget constraints, many companies have reduced their investment in training and development programs, given the high costs associated with formal training in terms of both financial resources and time away from work. Notably, research underscores that a substantial proportion of workplace learning, ranging from 80% to 90%, occurs informally[1–5]. Thus, sparking significant interest in the realm of IWL and competency development.

A multitude of methods, including networking, modeling, effective leadership, and reflection, have been investigated as means through which employees acquire knowledge and skills within their work environment[6,7]. Integral to informal learning are organizational work experiences and self-directed learning, which play pivotal roles in fostering competencies[8–10]. Moreover, coaching processes complemented by

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feedback mechanisms have emerged as supportive elements in facilitating self-directed learning and competency development[11].

Nonetheless, previous research has primarily centered on the learning process rather than the content learned and its consequent impact on competency development[12–14]. Additionally, the linkage between IWL and employability has predominantly emphasized social learning, which may not always lead to accurate knowledge and occupational competence[12,15]. As a result, there exists a notable lack of understanding when it comes to exploring the direct link between IWL and the enhancement of competencies. Expanding the horizon of understanding, Bandura and Walters social learning approach accentuates the influence of career role models on shaping career choices, with IWL playing a significant yet often overlooked role with long-term implications for career paths and employability[16]. Given the transformation in the employment landscape, characterized by diminishing guarantees of lifelong career success and employment stability by organizations, the concept of lifelong employability has gained paramount importance, necessitating continuous competency development and utilization[12,17].

While existing studies have offered insights into the antecedents and outcomes of competency development, research on the mediate effect of competency development between IWL and employability remains sparse[18]. This current study a combination of methodologies to enhance comprehension of this connection and verify the quantitative results.

Moreover, the research goes beyond a simple measurement of learning motivation, differentiating it from the work carried out by Decius et al.[19]. Instead, it delves into the cause-and-effect relationship between learning behaviors and self-reported competency growth. This investigation contributes significantly to the existing knowledge by shedding light on the role of learning orientation as a vital driver for self-initiated IWL. This, in turn, leads to the enhancement of competencies and improved employment prospects. This perspective aligns with the findings of Froehlich et al.[12], Maurer et al.[20], Raemdonck et al.[21], and van der Heijde[22]. Furthermore, the research underscores the significance of learning orientations, given that individuals who possess a belief in their capacity to learn and progress are more inclined to participate in learning activities, as observed in the study by Decius[23].

The primary aim of the study is to explore how competency development acts as a mediating factor between IWL and employability, underlining its distinctive approach to unraveling the cause-and-effect dynamics between learning behaviors and self-reported competency enhancement. Additionally, the research seeks to examine the potential moderating influence of individual characteristics, such as SDLO and LGO, on the connection between IWL and competency development. In the subsequent section, a literature review is presented for each objective, along with the formulation of hypotheses.

# 2. Review of literature and hypothesis generation

## 2.1. Informal workplace learning and effect on self-reported competency development

IWL is valued for its role in developing competencies, as indicated by various empirical studies. Effective approaches include cognitive learning strategy, on-the-job learning, real work situations, coaching, and cooperative learning[24,25]. Competence sharing, learning on the job, collaboration, and utilizing diverse skills also contribute to competency development[26,27].

Insights from Yamazaki et al.[28] reveal that experiential learning benefits both managers and non-managers, fostering competencies like leadership, relationships, and quantitative analysis. Self-directed learning, including self-study and teamwork, is prevalent among Malaysian managers[29]. Informal learning through discussions with colleagues enhances self-reported work-related competence[30]. Professionals witness

the development of their competencies through a combination of structured formal and informal learning process, learning by doing, and interaction[31]. Networking emerges as a powerful facilitator, enabling feedback-based learning and learning from others[31]. Learning with and from others, feedback, training, and supervisor support significantly contribute to competence development[26]. Trial and error, help-seeking, and reflection are major factors in workplace competency development[32].

Despite previous research, there are still gaps in understanding the relationship between IWL and competency development. Recent studies emphasize knowledge sharing, interaction, and the importance of supervisor and management support[33,34]. Whereas, employee characteristics, such as experience and perceived support, also tends to influence IWL and competence development. Therefore, to fill these gaps, current research explores the collective influence of experiential learning, feedback-based learning, reflective learning, and learning intent on competence development. The hypothesis suggests that these factors positively influence the assessment of IWL and its impact on self-reported competency development.

**Hypothesis 1 ($H_1$):** IWL influences self-reported competency development.

## 2.2. Competency development and employability

This review of literature investigates the connection between the development of competencies and employability exploring this relationship from various perspectives. De Vos et al.[35] found that employees who take part in competency development programs perceive improved employability, and organizations can foster competency growth by creating a supportive atmosphere and allocating resources[5,36]. Serim et al.[37] also noted that workers' perceptions of competency models are connected to better employability results[37]. Van der Heijden underscores the importance of continuous development of competencies throughout an individual's career, as employability decreases with age[38]. Maurier et al. underscored the importance of proactively seeking feedback and learning from others to improve professional competence, which could enhance employability[20].

The review highlights the significance of competency development for boosting employability and competitiveness in today's dynamic workforce. Organizations should provide opportunities for competency development, and individuals should assume responsibility for their own development of competencies. Seeking feedback and learning from others can also improve professional competence and employability. The results of this analysis hold significance for both researchers and professionals aiming to improve employability by focusing on competency enhancement. The literature supports the hypothesis that self-reported competency development is positively related to employability.

**Hypothesis 2 ($H_2$):** Self-Reported Competency Development relates positively to Employability.

## 2.3. Mediating effect of competency development between IWL and employability

Lifelong employability emphasizes workers' responsibility for investing in their human capital to secure jobs and develop their careers. This evaluation investigates how IWL, competency advancement, and employability results are interconnected. Van Der Heijden et al.[22] investigated the impacts of informal and formal learning within social contexts on the employability of individuals in non-academic positions within Dutch universities. Findings showed that interaction with supervisors and networking within the organization were important predictors of employability, particularly for professional competence, flexibility, anticipation, and optimization. However, the extent of perceived informal learning varied across departments, highlighting the value of learning within the work environment. Similarly, Gerken et al.[13] investigated how proactive informal and formal social learning influences the employability of faculty members within a Dutch university. The findings revealed that social informal learning, like seeking external information and responding to

feedback, had a positive impact on employability. However, there was no significant connection found with formal learning[13]. Another study by Lecat et al.[39] highlighted the stronger link between informal learning and employability, especially through feedback utilization. Although pinpointing the exact impact of self-directed learning and the amalgamation of structured and IWL on employability is intricate, studies consistently demonstrate a positive link between IWL, the enhancement of competencies, and the perceived level of employability[12,22]. Recognizing the importance of both IWL and employability, this review highlights a favorable connection between IWL and employability, which is influenced by the development of competencies. Consequently, the study put forth the subsequent hypothesis:

**Hypothesis 3 ($H_3$):** Competency development mediates the relationship between IWL and Employability.

## 2.4. Informal workplace learning and employability

The current literature review delves into the intricate interplay between IWL and employability, a nexus that has gained prominence for its potential to shape individuals' career trajectories. Research conducted among non-academic staff within Dutch universities has examined the effects of both formal and social informal learning endeavors on employability[14]. These investigations shed light on the significant influence of interactions with supervisors and networking within the organization in forecasting various facets of employability, including professional competence, flexibility, anticipation, and optimization. The variation in perceived informal learning across different departments underscores the role of learning embedded in professional setting.

Likewise, Gerken et al. explored the link between proactive social informal and formal learning initiatives and the employability of academic staffs in university of Dutch[13]. Their findings suggest that informal social learning, including activities such as seeking external information and responsive actions, plays a crucial role in enhancing academic staff's employability. However, no direct association was found between formal learning measured by training hours and employability. While these investigations primarily concentrated on the social aspect of informal learning, they highlight the significance of evaluating employability through a competence-based approach[22]. Furthermore, they indicate a favorable connection between employees engaging in workplace learning, initiatives for competency development, and their perceived employability[12,22].

To summarize, the literature underscores the critical importance of employability for both individuals and organizations. IWL emerges as a pivotal element in nurturing employability. Drawing on these insights, this study presents the hypothesis:

**Hypothesis 4 ($H_4$):** There exists a direct relationship between IWL and employability.

## 2.5. Personal characteristics as moderators

Personal characteristics like LGO and SDLO are essential in studying the relation between IWL and competency development. Bandura's social cognitive theory suggests that LGO influences individuals to continuously improve their competencies through learning new tasks[16]. Studies have consistently shown a favorable association among LGO, IWL, and competency development[13,22,24]. Further studies also show that managers with a strong LGO actively engage in new tasks to overcome challenges, highlighting its significance in driving learning behavior[40]. Nonetheless, there is a scarcity of research that has delved into the moderating impact of LGO on the connection between IWL and competency development. As a result, this study postulates that LGO amplifies the constructive influence of IWL on the development of competencies.

**Hypothesis 5 ($H_{5a}$):** LGO strengthens the favorable influence of IWL on competency development.

SDLO is also crucial for thriving in a rapidly changing society[41]. High SDLO involves actively approaching learning activities and taking initiative[24]. Factors like striving for knowledge and the presence of IWL predict SDLO[42]. Research findings indicate that SDLO is linked with increased engagement in learning activities and the acquisition of competencies[24,42]. Individuals who possess a robust SDLO demonstrate a proactive approach to learning, enabling them to effectively adjust to changes[24,40,42]. As a result, the hypothesis posits that SDLO strengthens the favorable influence of IWL on the development of competencies.

**Hypothesis 5 ($H_{5b}$):** SDLO strengthens the favorable influence of IWL on competency development.

To examine the intricate relationships within this context, the present study adopts a model that positions IWL as a predictor of competency development. By exploring a mediation model to predict employability through competency development, the study expands on the tenets of social learning theory proposed by Bandura[16]. Additionally, the study explores the potential moderating roles of SDLO and LGO within the proposed model. Through the incorporation of qualitative methods, the study offers valuable insights into factors characterized by high variance and provides a comprehensive understanding of IWL techniques, the types of competencies developed, and their ultimate impact on employability. See **Figure 1**.

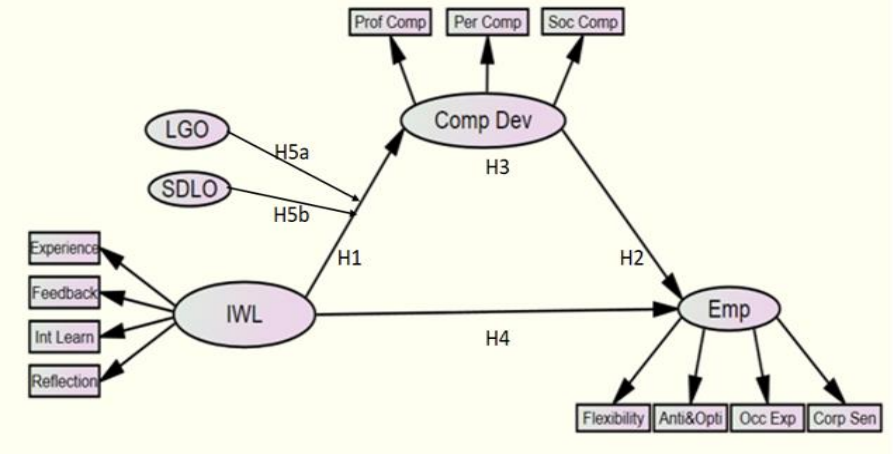


**Figure 1.** A conceptual model of IWL and employability: The mediating role of competency development.

# 3. Methodology

The methodology employed in this research follows a sequential explanatory mixed methods approach, which incorporates both quantitative and qualitative methods to enhance comprehension and complement research outcomes (QUAN → qual)[43]. This approach was used as it allows for a separate analysis of quantitative and qualitative data, with qualitative insights serving to elucidate and address gaps in the quantitative findings. It's important to note that the utilization of the social learning theory and qualitative study in this research builds upon our previous work, as detailed in our earlier publication[44].

**Phase I: Gathering and Analyzing Quantitative Data.**

## 3.1. Participants and procedures

The study encompassed employees representing various job roles within all five Thimphu-based banks in Bhutan. The choice of financial institutions for the survey was informed by the presence of a highly educated and skilled workforce, as indicated in previous research along with the growing competition within Bhutan's financial sector[5,45,46]. To facilitate the structural equation modeling (SEM) analysis, a sample of 345 individuals was selected using a stratified random sampling method to ensure equitable representation across the banks. The survey link was distributed by the CEOs, resulting in a total of 512 responses, with a gender

distribution of 46.1% male and 53.9% female. Notably, the majority of participants (71.9%) fell within the 25–39 age range, with Banking Assistants (40.8%) and Banking Officers (33%) representing the most prevalent job positions.

### 3.2. Measures

IWL was gauged with Decius et al.'s 24-item scale[24]. Competency development used a 15-item scale[47]. LGO followed VandeWalle's scale, reduced to five items by Bonesso et al.[17,48]. SDLO utilized three self-directed approach items from Raemdonck et al.'s scale[24]. All items employed a six-point Likert scale for clarity and data quality. 1 = Do not agree at all, 2 = Largely not agree, 3 = Rather not agree, 4 = Rather agree, 5 = Largely agree, 6 = Fully agree.

**Phase II: Collecting and Analyzing Qualitative Data.**

### 3.3. Participants and procedures

Detailed interviews were conducted with ten executive-level participants, two from each bank, including one Deputy CEO and one Chief Human Resource Officer. Participants were chosen purposefully for their direct involvement in the research themes and experience.

### 3.4. Data analysis method

The research methodology employed in this study seamlessly integrate both quantitative and qualitative approaches, aiming to provide a comprehensive understanding of the research context. The quantitative phase involved the collection and analysis of data to produce numerical results. Following this, in the qualitative phase, an explanatory and interpretive approach was adopted, aligning with Braun and Clarke's thematic analysis method[49]. The qualitative inquiries were structured to delve into participants' experiences with various IWL techniques, the types of competencies developed through IWL, and the impact on employability. Essentially, these qualitative questions were designed to offer insights that could explain both significant and non-significant findings observed in the quantitative research. The qualitative questions included in this research encompassed a range of aspects, beginning with demographic information collection such as gender, age, position, and years of experience. Subsequent questions delved into the participants' perceptions and experiences related to IWL, competency development, employability, LGO, SDLO, and the role of designation in competency development. These inquiries were strategically designed to offer insights into the various facets of the research topic.

The methodology employed in this study involved several essential steps. Initially, verbatim transcriptions of telephone interviews were meticulously organized, with numerical codes assigned to ensure participant anonymity and data confidentiality. The subsequent step involved the generation of initial codes based on the theoretical framework, utilizing a deductive coding approach from the theories incorporated in the study[49]. These codes were then manually applied to the dataset.

The third step of the methodology entailed the examination of the coded and compiled data excerpts to identify themes of general significance, aligning with the deductive analytic approach based on pre-defined themes from the SEM analysis conducted in Phase I of the study. These themes were categorized as Banks IWL, Competency Development, Role of Designation in Competency Development, LGO, SDLO and role of designation in competency development.

Finally, the identified themes underwent a comprehensive review, refinement for coherence and commonality, and were systematically defined and named, supported by relevant data excerpts. This meticulous approach enhanced the quality of the final research report and provided a comprehensive

understanding of the research question. For instance, the first theme, IWL and competency development, elucidated the exemplary quotes and experiences of the respondents, with detailed explanations in the qualitative data analysis section.

# 4. Results

## 4.1. Preliminary analyses

The initial data analysis phase included addressing missing data, reducing the sample size from 515 to 512 participants. Data exhibited normal distribution with skewness values between −0.57 and −1.26 (SE = 0.108) and kurtosis values between −0.05 and 2.86 (SE = 0.215) for all variables[50]. Checks for multicollinearity indicated acceptable tolerance (> 0.10) and VIF values (< 6) for independent and dependent variables, respectively, signifying no problematic multicollinearity[51]. Sample adequacy was confirmed by a Kaiser-Meyer-Olkin (KMO) value of 0.956 for each variable[52]. Common method bias (CMB) was evaluated through the Harman test, revealing negligible CMB impact on data and outcomes. A single factor accounted for 33.926% of total variance[53]. The latent variables displayed strong internal consistency, as evidenced by Cronbach's alpha values spanning 0.81 to 0.95. More specifically, IWL and competency development indicated alpha values of 0.94, employability was at 0.95, while LGO and SDLO had coefficients of 0.81 and 0.82, respectively[54].

## 4.2. Structural Equation Modeling (SEM)

In this research SEM was employed using AMOS to examine the relationships among IWL, competency development, and employability. The research initiated with a base model and tested four different adjusted models, guided by relationship strength and theoretical considerations. Maximum-likelihood estimation was applied for covariance matrix calculations. Model fit was assessed using indices: normalized chi-square ($\chi 2/df$), root mean square error of approximation (RMSEA), mean squared remainder (RMR), Tucker-Lewis Index (TLI), incremental fit index (IFI), comparative fit index (CFI), and normalized fit index (NFI). Acceptable fit was indicated by RMSEA < 0.08, RMR < 0.05, TLI > 0.90, IFI > 0.90, and CFI > 0.80[55–58].

To validate and ensure the reliability of SEM, this study utilized confirmatory factor analysis (CFA). A detail explanation of construction of SEM model and CFA analysis is given in an earlier publication[44]. The results of the analysis validated both convergent and discriminant validity. Convergent validity was established when the average variance extracted (AVE) for each construct exceeded 0.5. Discriminant validity was established by verifying that both the maximum shared variance (MSV) and average shared variance (ASV) remained below the AVE for all constructs. Additionally, the reliability of constructs was assessed using composite reliability (CR) values above 0.7 for each construct, following the approach outlined by Bentler and Bonett[55]. See **Table 1**.

**Table 1.** Validity and reliability test results[44].

| 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 |

### 4.3. Model test

This part displays the results of the model testing process. Initially, Model 1 (see **Figure 2**) served as the baseline model to examine hypotheses $H_1$, $H_2$, $H_3$, $H_4$, and $H_5$. The findings suggest that IWL directly influences employability, while competency development partially mediates the relation between IWL and employability. Subsequently, an alternative model, Model 2 (see **Figure 3**), explored the potential moderation effect of SDLO on the association between IWL and competency development ($H_{5a}$). However, this hypothesis was not supported. Model 2 focused on testing hypotheses $H_1$, $H_2$, and $H_4$. Similarly, a separate SEM, Model 3(see **Figure 4**), examined the moderating effect of LGO ($H_{5b}$). This hypothesis was also not supported. The model tested hypotheses $H_1$, $H_2$, $H_4$, and $H_{5b}$.

Moving forward, Model 4 (see **Figure 5**) investigated the impact of control variables such as age, experience, and designation, while also considering the direct effects of LGO and SDLO on IWL. The findings provided confirmation for hypotheses $H_1$, $H_2$, $H_3$ (indicating full mediation), and $H_4$. Furthermore, the assignment of control variables "age" and "designation" displayed a notable reverse influence on both competency development and employability. To further refine the model, Model 5 (see **Figure 6**) incorporated the latent variable approach. It expanded on Model 4 by including all three control variables and two moderators (SDLO and LGO). Although no moderating effects were found for SDLO and LGO in previous models (Models 2 and 3), direct effects of LGO on competency development and SDLO on competency development and employability were examined. Age and experience did not show any significant effects on competency development and employability, allowing them to be removed to enhance degrees of freedom. Notably, the control variable designation exhibited a substantial inverse effect on competency development (−0.13, $p < 0.001$), but did not exert any notable influence on employability and IWL, in contrast to the observed variable model (Model 4). Model 5's fit indices indicated good fit: X2/df = 2.3, NFI = 0.85, CFI = 0.90, IFI = 0.90, TLI = 0.90, RMR = 0.04, RMSEA = 0.05. This model supported $H_1$, $H_2$, $H_3$, and $H_4$ (contrary to Model 4). $R^2$ values slightly declined (0.67 to 0.59 for competency development, 0.34 to 0.29 for employability), yet exceeded 0.1[59]. Model 5 was chosen for hypothesis testing and drawing conclusions. **Table 2**, explains the SEM Analysis Result comparison for all Models and **Table 3** explains the model fit comparisons of all the five models.

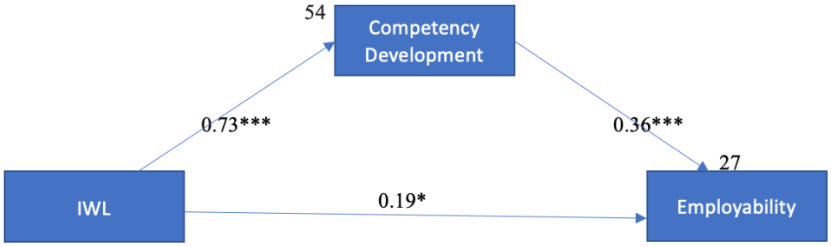


**Figure 2.** Base Line Model (Model 1)[44].

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

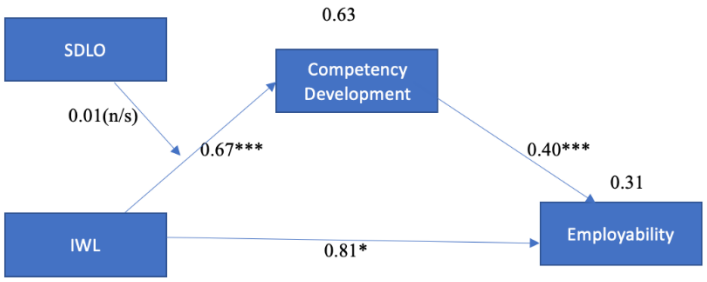


**Figure 3.** Moderating effect of SDLO (Model 2)[44].

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

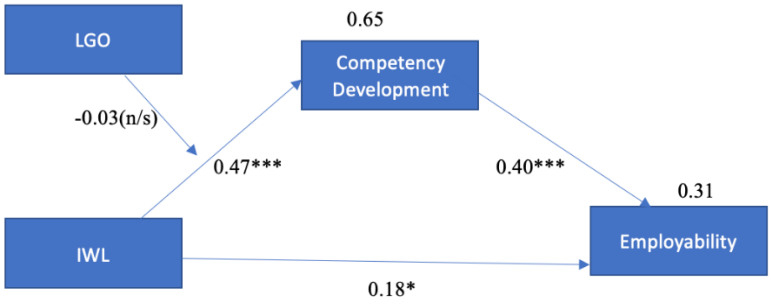


**Figure 4.** Moderating effect of LGO (Model 3)[44].

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

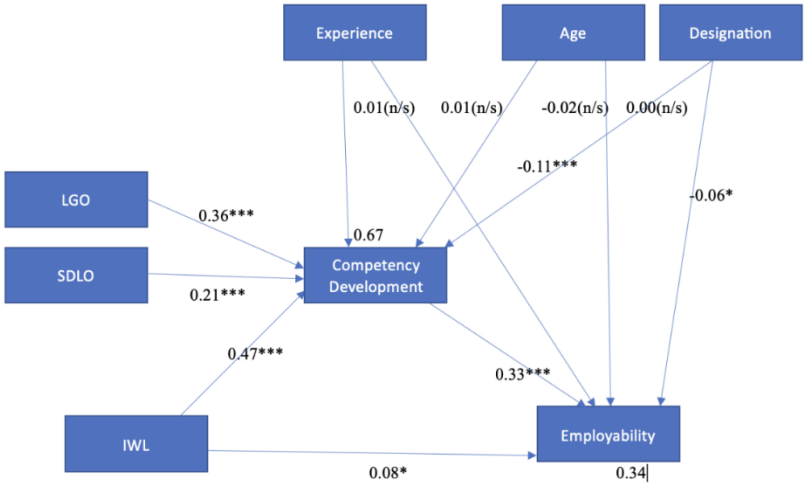


**Figure 5.** Effect of control variables (Model 4)[44].

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

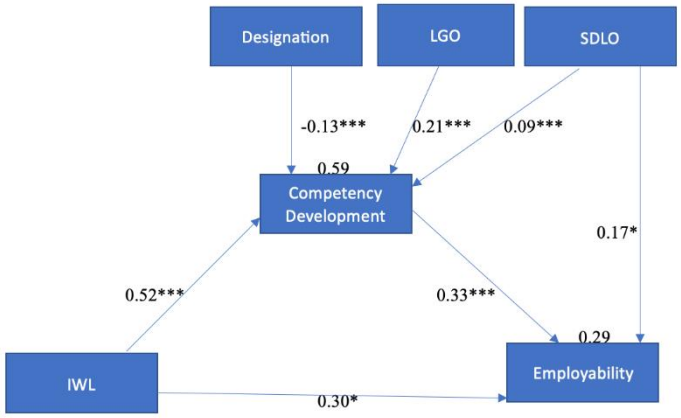


**Figure 6.** The final mediation model (Model 5)[44].

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

**Table 2.** SEM analysis result for all models[44].

| Estimator | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 |
|---|---|---|---|---|---|
| IWL-CD | 0.73*** | 0.67*** | 0.47*** | 0.47*** | 0.52*** |
| CD-Emp | 0.36*** | 0.40*** | 0.40*** | 0.33*** | 0.33*** |
| IWL-Emp | 0.91*** | 0.81*** | 0.18*** | 0.08*** | 0.30*** |
| SDLOxIWL-CD | | 0.01(n/s) | | | |
| LGOxIWL-CD | | | −0.03(n/s) | | |
| LGO-CD | | | | 0.36*** | 0.21*** |
| SDLO-CD | | | | 0.21*** | 0.09*** |
| SDLO-Emp | | | | | 0.17* |
| Age-Emp | | | | −0.02(n/s) | |
| Age-CD | | | | 0.01(n/s) | |
| Exp-CD | | | | 0.00(n/s) | |
| Exp-Emp | | | | 0.01(n/s) | |
| Desg-CD | | | | −0.01*** | −0.13*** |
| Desg-Emp | | | | −0.06* | |

**Table 3.** Model fit comparison[44].

| Fit Measure | Chi-square(X2) | X2/df | NFI | CFI | IFI | TLI | RMR | RMSEA |
|---|---|---|---|---|---|---|---|---|
| Model 1 | 3121.84(p<0.001) | 2.39 | 0.85 | 0.91 | 0.91 | 0.90 | 0.04 | 0.05 |
| Model 2 | 1.342 (p=0.247) | 1.34 | 0.99 | 1.00 | 1.00 | 0.99 | 0.003 | 0.02 |
| Model 3 | 0.979(p=0.323) | 0.97 | 0.99 | 1.00 | 1.00 | 1.00 | 0.002 | 0.00 |
| Model 4 | 1.828(p=0.176) | 1.82 | 0.99 | 1.00 | 1.00 | 0.99 | 0.001 | 0.04 |
| Model 5 | 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 | ≥0.80 | >0.80–0.90 | ≥0.90 | >0.85–0.90 | ≤0.05 | <0.08 |

**Phase II: Gathering and Analysis of Qualitative Data.**

The qualitative results are outlined within five distinct categories:

## 4.4. Theme 1 participants' experiences of relationship between IWL, and competency development

Qualitative analysis revealed participant viewpoints on the interplay between IWL and competency development. Respondent (R1) recounted how a canteen conversation about commercial loan defaulters led to increased social engagement and improved customer insight. R2 highlighted how casual discussions during breaks fostered technical growth. Similarly, R3 noted how informal talks about work culture enhanced interpersonal skills. R4 shared how observing a colleague's meeting behavior facilitated critical thinking. (R5) acknowledged learning through senior interactions, which helped in understanding processes and learning how to manage and prioritize work. (R6) pointed out the absence of formal training for new employees and their attachment to seniors, leading to the acquisition of technical knowledge, relationship skills, and conceptual understanding.

Unanimous agreement among all participants (100%) in Theme 1 reinforces IWL's competency-development role. Participants value insights from workplace interactions. While the study didn't quantify IWL's Competency Development impact, CEO and chief HRO interviews supported this relationship. Networking improved social competencies, informal guidance honed technical skills, and younger employees

learned through observation. Qualitative evidence validates IWL's role in enhancing personal and professional competencies among participants.

### 4.5. Theme 2 participants' experiences of relationship between IWL and employability with the mediating role of competency development

In this qualitative phase, the study explored participants' views on IWL's effect on employability, considering competency development's role. The goal was to determine if IWL-derived competencies enhance employability. Among ten participants, eight (80%) agreed that IWL and competency development bolster employability. Notably, two participants differed in opinion. They acknowledged IWL's theoretical potential but had reservations grounded in personal experiences.

For example, one respondent (R5) stressed experience's role in career growth and practical knowledge. They observed limited willingness in Bhutan for venturing outside comfort zones. Similarly, another participant (R7) noted rare instances of exceptional competencies leading to better job offers.

Overall, respondents revealed IWL experiences fostered social and professional competencies, improving employability. Though not using technical terms, their responses conveyed similar meanings. For instance, mentioning how experience and theory honed skills for career growth implied experiential learning, enhancing social and personal abilities, professional expertise, adaptability, and strategic thinking. Findings suggest IWL indeed boosts employability, nurturing valuable competencies beyond formal education. However, contextual factors and individual attitudes might influence how these competencies translate into career benefits.

### 4.6. Theme III the moderating effect of Learning Goal Orientation (LGO) on the relationship between IWL and competency development

Theme III in the qualitative research analysis centered on exploring the moderating influence of LGO on the correlation between IWL and Competency Development. The findings revealed that LGO did not strengthen this relationship, with only two out of ten respondents agreeing that employees in the banking sector of Bhutan exhibited a learning goal-oriented mindset. Most participants disagreed and attributed this lack of interest in learning to a relaxed organizational culture and a contentment with current skill levels.

For instance, Respondent (R1) 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." Similarly, (R3) mentioned, "If they don't see any reward attached to it, they don't usually put the effort to learn." These responses reflected the majority's sentiment, as most participants disagreed that employees in the banking sector of Bhutan exhibited a learning goal-oriented mindset.

Participants observed that employees showed little drive to strive for further improvement unless incentivized with rewards or recognition. The absence of a significant moderating effect of LGO could be linked to the fact that learning from feedback was the least preferred learning pattern among respondents in the quantitative analysis. This suggests that employees' willingness to actively participate in challenging activities for competency development may not be prevalent within the organizational context.

### 4.7. Theme IV Moderating effects of SDLO and LGO on IWL-competency development relationship

Theme IV delved into participants' experiences regarding the moderating influence of SDLO and LGO on the connection between IWL and Competency Development. Findings revealed that the anticipated reinforcement from SDLO and LGO on this relationship did not manifest as expected. Only two participants

acknowledged their workforce's self-directed learning inclinations and learning goal orientation. R4 notably stated, "Around 95% of our employees display self-directed attributes and are receptive to diverse ideas."

However, contrasting viewpoints emerged. (R5) indicated, "The job market is highly saturated with an 18% employment rate, causing skill-acquisition efforts to bear limited opportunities for progression." Similarly, (R6) noted, "Unless confronted with challenges threatening job security, employees display reluctance in assuming responsibility for their own learning." Another participant, (R9) highlighted, "With the abundance of free resources in Bhutan, individuals find contentment in their current state."

These responses underscored the divergence among participants' perspectives. Nevertheless, majority of respondents perceived diminished enthusiasm for SDLO and LGO among employees. This perception was linked to constrained openings and intense competition within the labor market. Moreover, a deficiency in substantial incentives or rewards was noted. The prevailing sentiment of a saturated job market translated into reduced enthusiasm for personal development. The "I don't care" attitude seemed prevalent, indicating limited motivation for learning without explicit acknowledgment or incentives. Even with formal developmental programs that provided inducements and promotional avenues, employees scarcely engaged with such opportunities, reinforcing the notion of an absence of proactive learning tendencies within the organizational context.

Collectively, both LGO and SDLO exhibited restricted moderating effects on the IWL-Competency Development connection within Bhutan's banking sector. The findings underscore the influence of the organizational culture, absence of competitive vigor, and the sense of contentment in current skill levels as deterrents to employees' inclination toward proactive learning and growth. This nuanced understanding can guide the formulation of targeted strategies and interventions aimed at nurturing a custom of IWL and competence elevation within the organization.

### 4.8. Theme V designation and competency development

Theme V probes the link between job designation and competency development by analyzing factors like age, gender, work experience, and designation. Surprisingly, most factors had minor influence except job designation, which showed a negative connection. Qualitative interviews aimed to unveil this link's reasons.

In interviews, 80% shared that career advancement often reduces interest in personal development due to increased workload. Work responsibilities make it tough for higher-position individuals to invest in personal growth. Accumulating knowledge paradoxically makes them feel less knowledgeable, diminishing motivation. A participant (R4) emphasized higher positions' self-motivation to learn more.

Conversely, 20% suggested higher positions offer more learning chances and appreciation for learning. Still, many in elevated roles perceive declining competency development. For instance, R4 noted older employees' reduced motivation, while younger/mid-level employees are eager for career growth. Similarly, R8 mentioned energy level changes due to facing earlier challenges.

In conclusion, higher-position individuals might show lower enthusiasm due to responsibilities and perceived knowledge saturation. Though some value learning, the consensus points to declining competency development with organizational ascent.

## 5. Discussion, integration of qualitative and quantitative findings

The research indicates a significant positive impact of IWL activities on employee competency development, particularly within financial institutions[1,4,28,32,47]. Respondents predominantly rely on reflective practices and learning from experience and action to enhance their competencies. This aligns with qualitative

interview results highlighting the significance of model learning for younger employees' technical competency development. Among the preferred methods, reflection emerges as the foremost choice due to its autonomy and supportive learning environment[26,60,61]. Learning from experience and action, encompassing learning by doing and model learning, also prevails[19]. Less experienced employees particularly depend on direct experience, as formal training programs are limited in the studied banks. Informal guidance and learning from experienced colleagues play a pivotal role. However, the influence of learning from feedback remains limited, possibly due to scarcity of feedback or reluctance in accepting constructive criticism[62–64].

The study's second hypothesis explores the connection between self-reported competency development and employability. It reveals that individuals enhancing their competencies concurrently enhance their employability, as competencies acquired through IWL provide an added advantage. This finding corresponds with previous research by De Vos et al.[36], Hendijani et al.[38], and Mulder[65], supporting the notion that competency development encompasses professional expertise and adaptability beyond domain-specific skills and knowledge[36,38,65]. Intriguingly, the study finds that personal competence holds a more significant role in enhancing employability than professional competence, contrary to expectations. Notably, personal competence includes stress management, meeting deadlines, learning aptitude, self-assurance, and creativity. These skills are enriched in the banking sector due to frequent exposure to goals, deadlines, and job rotations. This observation aligns with studies by Boyatzis and Boyatzis[47], Khan et al.[66] and Naim & Lenka[67]. However, social competence's contribution to employability enhancement is relatively minimal, despite its informal practice through conversations. This is attributed to the systematic nature of banking work, which reduces interpersonal interaction, lack of skill-enhancing guidelines, and the feedback-averse tendencies of younger employees. This corresponds with existing literature indicating a deficit in listening, communication, analytical, and teamwork skills among younger professionals[26,31,68].

The third hypothesis examined Self-reported competency development's mediating role between IWL and Employability. This pioneering study investigated this mediation empirically, with no prior research delving into this area. A lone study by De Vos et al.[36] approached competency development from an organizational perspective, with no mediating assessment. Findings reveal that self-reported competency development wholly mediates IWL's employability impact. This implies that mere IWL doesn't suffice for employability enhancement—competency development is required.

Interview insights unveiled the intriguing discovery that informally acquired competencies emerge as work byproducts, offering an added edge to employability. In essence, experiential learning nurtures personal, social, and professional competencies, including anticipation and optimization. The study enriches the literature on IWL, competency development, and employability, spotlighting competencies extending beyond cognitive prowess (self-regulation, self-awareness, social skills). These competencies, fundamentally behavioral, result from IWL a notion aligning with Boyatzis et al. and Deist & Winterton[66,69]. Additionally, the results align with Bandura's concept of learning from others. Observing someone succeed in a job can influence the individual's career aspirations and perception of job prospects and skills[70].

Fourth aim was to understand how IWL affects Employability. Findings reveal that different aspects of IWL significantly contribute to improving employability. Learning from hands-on experiences and reflecting on actions are particularly linked to enhancing anticipation and optimization, which involves preparing for future shifts with ingenuity for optimal results[71]. However, IWL has a lesser impact on two employability aspects, occupational expertise, and corporate sense. This outcome supports the fourth hypothesis.

These results lead to two important conclusions. First, diverse IWL can significantly enhance employability skills, consistent with past studies that highlighted the positive impact of IWL on employees'

employability[12,35,72]. Second, interviews among Bhutanese bank employees highlighted that those engaged in varying tasks across different departments develop personal skills that ultimately boost anticipation and optimization in their employability. This echoes the findings of Froehlich and Van der Heijden[12,14].

On the contrary, within the realm of the four employability facets, occupational expertise and corporate sense explained the smallest portion of employability variance. The notion of corporate sense involves sharing responsibilities, experiences, goals, etc. Interviews aimed to explain the low scores in these areas. Bhutanese banks seem to lack efforts to instill shared responsibility, possibly due to job descriptions not demanding active involvement. Similarly, occupational expertise's low contribution is explained by cognitive limitations hindering new information processing and storage, resulting in reduced competence[12]. Additionally, informally acquired knowledge might not always be accurate, impacting occupational expertise.

Interviews also highlighted that Bhutanese bank culture's systematic nature downplays IWL's contribution to professional expertise. IWL is crucial for learning but insufficient on its own for expertise. IWL can facilitate expertise development if combined with prior formal training or specialization.

The fifth hypothesis delves into the moderating impact of LGO and SDLO on the connection between IWL and Competency Development. Hypothesis $5_a$ anticipated that LGO would amplify the positive influence of IWL on competency development. However, contrary to prior expectations, the findings reveal that LGO does not moderate this relationship. Qualitative insights suggest a lack of competitive environment and diminished interest in learning without incentives, attributed to a contented and non-competitive organizational culture. The preference for learning from reflection over feedback implies a need for diverse learning approaches. The study highlights the intricate interplay between LGO, IWL, and competency development, underscoring the significance of organizational culture and motivation. Hypothesis $5_b$ postulated that SDLO would intensify the positive effects of IWL on competency development. However, the study does not observe a significant moderating impact of SDLO. Qualitative analysis points towards a deficiency of opportunities and labor market competition, leading to reduced intrinsic motivation for learning. The absence of intrinsic intent hinders SDLO, possibly due to a relaxed work environment with limited growth prospects. This aligns with the significance of intrinsic motivation proposed by Pink, driven by personal significance and relevance[73]. The findings underscore the necessity of cultivating intrinsic motivation and fostering a competitive atmosphere for effective SDLO and its moderating potential on IWL and competency development.

The study reveals an inverse connection between job designation and competency development in Bhutanese banking. As employees rise in the hierarchy, competency development declines due to increased stability but decreased learning opportunities from overwhelming responsibilities. Higher positions emphasize continuous learning, contrasting prior findings[1,27,74]. Bhutan's distinct institutional and cultural setting, a vertical structure, and rule-based approach contribute to this[75]. Senior roles often receive fewer learning opportunities, echoing Tones et al.[76]. Paradoxically, Bhutanese humility shapes attitudes[77]. This aligns with Hendijani and Sohrabi[38], indicating modesty curbing overconfidence. Bandura's reciprocal determinism theory further informs, emphasizing self-efficacy shaped by experiences and feedback. Intriguingly, Bhutanese banking employees prefer fewer feedback-based learning approaches. These insights clarify the inverse job designation-competency development link and suggest Bhutanese banking professionals' humility and contentment, reducing the perceived need for extensive learning.

## 6. Conclusions and recommendations

In conclusion, this study has rigorously adhered to academic standards while investigating the complex interplay between IWL, competency development, and employability within the Bhutanese banking sector. While providing valuable insights, the study also acknowledges certain limitations that warrant consideration.

Notably, the study suggests the need for further investigation into the impact of organizational conditions on IWL's feedback and reflection aspects. Additionally, reliance on qualitative interviews underscores the necessity for objective data collection and validation through diverse sources to ensure robustness and objectivity.

The study's practical implications offer guidance for enhancing employability through IWL and competency development within the Bhutanese banking sector. The significance of fostering LGO and SDLO, promoting a feedback-rich climate, and addressing the inverse relationship between job designation and competency development are key takeaways for organizations. Moreover, the study underscores the role of cultural values in shaping effective learning interventions that align with Bhutanese work culture.

Building upon the insights garnered from this study, several avenues for subsequent studies emerge. In response to the constraints of the present study, a comprehensive exploration of how organizational conditions influence IWL's feedback and reflection components is imperative. This can encompass in-depth analyses of specific organizational factors that impact learning outcomes and contribute to the design of targeted interventions for enhanced IWL.

Further research avenues include exploring Bhutanese feedback culture, learning intentions, and the influence of job designation on competency development. These aspects could be investigated through mixed-method approaches, combining qualitative insights with quantitative measures to ensure a comprehensive understanding.

Ultimately, future research should also delve into the broader implications of the research's outcome, extending its applicability of the insights to diverse sectors and organizational contexts. By attending to these suggested paths for future exploration, researchers and professionals have the opportunity to enhance their grasp of IWL, competency development, and employability. They can also devise interventions that align with the distinctive work culture and organizational dynamics in Bhutan.

## Author contributions

Conceptualization, MSP and VR; methodology, MSP and FP; software, MSP and FP; validation, MSP, VR and FP; formal analysis, MSP; investigation, MSP; resources, MSP; data curation, MSP; writing—original draft preparation, MSP; writing—review and editing, MSP; visualization, MSP, FP and VR; supervision, VP and FP; project administration, MSP, VR and FP; funding acquisition, MSP. All authors have read and agreed to the published version of the manuscript.

## Conflict of interest

The authors declare no conflict of interest.

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