Global Management Journal for Academic & Corporate Studies (GMJACS)
Fall 2021, Vol 11, No. 2, pp. 166-181
ISSN: 2219-6145 (Print), 2305-0756 (Electronic)
Published By Bahria University Karachi Campus

Influence of personal and work characteristics on employees'Self-guided Development

Dr. Muhammad Qamar Zia[1], Dr Shabroz[2], Erum Khan[3]

Abstract

In last two decades, the organization has faced numerous new challenges due to rapid changing environment at workplace and globalization. These challenges forced the management to curtail the training expenses and develop the employees with minimum cost. Currently, companies are in dire need to reduce the cost of formal training by increasing focus on self-development. However, research is lacking to investigate the possible factors of employee involvement and participation in self-guide development. This study tested a conceptual model that helps to boost the participation of workers in self-guide d development. Three hundred and seventy (370) questionnaires were distributed to the employees of education sector. A total of 285 respondents out of 370 returned thecompleted surveys with a response rate of 77%. The findings indicated that two work characteristics; empowering environment and feedback orientation are significant predictors of SGD. The results also supported that personal characteristics such as proactive personality and LGO are also linked to employees' self-guided development. On the other hand, the study failed to find a significant linkage between career insight and self-guided development. This article also provided implications and recommendations for future research.

Keywords: Work context, career insight, self-guided development, proactive personality

[1] College of Business Management, Institute of Business Management, Karachi, Pakistan

[2] Lecturer, Sindh Madressatul Islam University

[3] Sindh Madressatul Islam University

1. Introduction

The significance of employee learning and development at work area has been enlarged and it became main source of organizational success due to globalization, competitive environment, and technological advancement (Decius et al., 2021; Zia et al., 2020; Zia et al., 2021a). In last few decades, the learning focus at workplace has been increased around the globe (Clarke, 2005; Senge, 1990). Thus, change in current environmental setting demands that employee should be ready to learn at the workplace for his development through formal, informal or non-formal development programs (Enos et al., 2003; Ilgen & Pulakos, 1999; Lohman, 2006; Van Merriënboer et al., 2009).

Organizations are in effort of becoming more productive, demanding increase of knowledge, skills, and professional development from its employees (Senge, 2006). Neelan and Kirschner, (2017) in their blog at ATD (Association for Talent Development) stated that employees must constantly develop and improve their skills and knowledge, and adapt to fast changing of societal, economical and technological environment in order to not become antiquated. Organizations also realized that to be competitive in this environment, they should adopt different strategies to develop their employees at low cost and thus encouraging employees' participation in self-guided development programs (Dachner, 2013). Resultantly, employee focus has been increased towards self-guided development (SGD) and being considered an important source to balance formal training (Orvis & Ratwani, 2010).

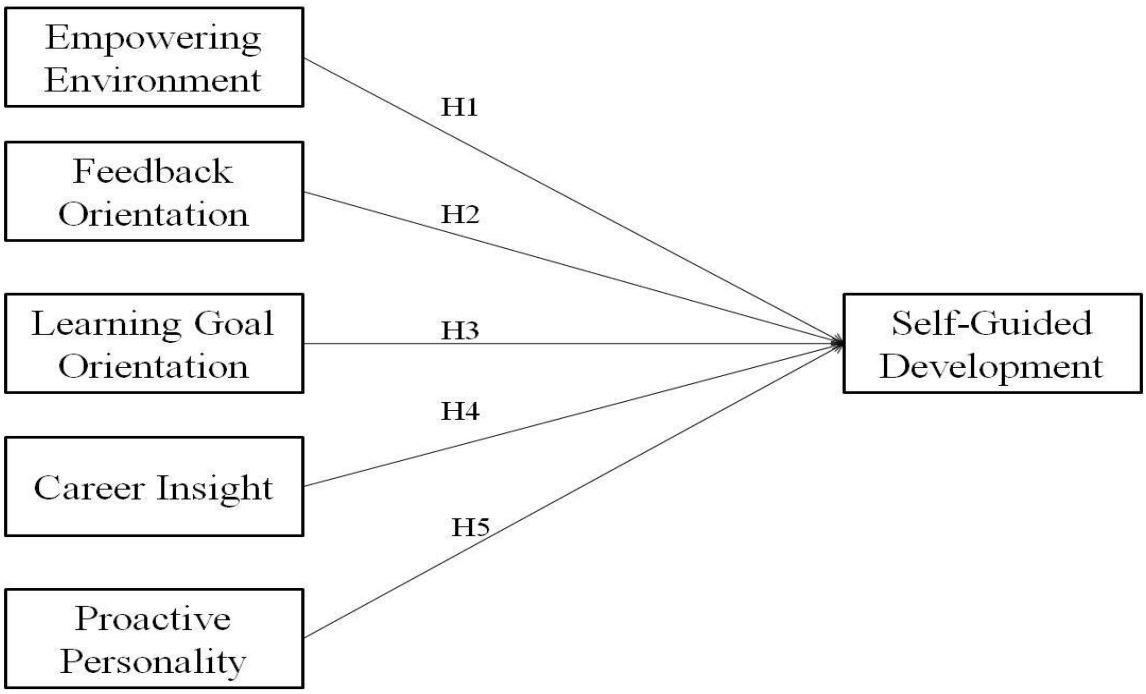
Employee development has become very important for individual career as well as organizational success (Pedler et al., 2013). Employees development takes place from many sources which includes both form training (classroom learning) and informal methods (self-initiated), but most of learning happens (more than 70%) through informal methods (Azulay, 2012). Research scholars are focusing on this issue and making efforts to increase the role of SGD at job place, but they are also taking it as a supplement to formal training rather than replacing (Choi, 2009; Dachner, 2013; Ellinger, 2005; Orvis & Leffler, 2011). Curado et al. (2015) explained that the individuals willing participation increases their learning more as compared to forced training. Companies are also identifying that to enhance their efficiency, the promotion of SGD is mandatory, and their workers should start their self-guided development (Ellinger, 2005; Ellinger, Ellinger, Yang, & Howton, 2002;Orvis & Ratwani, 2010).

SGD is self-power, self-administrated and self-motivated learning and this development is completed individually by the employee (Azulay, 2012). The unique factor of self-guided development is its voluntary nature and employee develop themselves by reading, listening, and watching prerecorded, printed information and instruction to complete a task (Azulay, 2012). Through self-guided development, employees learn in flexible method and employee learnsdifferent skills from different alternative methods according to his interest (Conlon, 2004). Thus, companies can use these techniques to develop their

employees at low cost and this SGD can be supplement to formal training. Although, self-guided development is an important element of employee deployment, yet literature has not comprehensively investigated the triggers of self- guided development (Maurer, Weiss, & Barbeite, 2003). There is a need of research to examine the impact of personal attributes and work characteristics on employees' SGD (Cerasoli et al., 2018). To better understand the SGD, we proposed and tested a theoretical model that contains triggers of SGD. The purpose of this study is to identify the personal and work characteristics influencing employees' involvement in self-guided development.

The gaps identified in previous studies are of unique nature. First, only few studies examined the together linkage of personal and work contexts (Boyce, Zaccaro, & Wisecarver, 2010; Orvis & Leffler, 2011). Second, focus of pervious research remains on one aspect of self-development either general personality characteristics or characteristics of past experiences (Maurer, Lippstreu,& Judge, 2008). SGD is expected to be the product of both personal and work context. Third, even less is known that how work contexts are related to employee SGD. Few, if any, models on development include the work context of self-guided development (Thompson, 2013). Thus, purpose of this research is to identify, the personal and work characteristics influencing employees SGD. The study model is presented in Figure 1.

Figure 1: Study Model



2. Literature Review

2.1. Empowering Environment and Self-Guided Development

Empowering environment for self-development states that when employees feel empowerment, authority and freedom at work area they put their maximum efforts for achievement of personal and organizational goals (Thompson, 2013). Self-determination theory states that motivation can be achieved by involving the individual in those tasks and goals which are personally meaningful, engender feelings of competence, and convey free choice (Ryan & Deci, 2000). The elements which support empowerment address all of these needs (Thomas & Velthouse, 1990). London and Smither, (1999) also based on self-determination theory found a positive relationship between empowering environment and SGD. Empowerment makes the choice to individual in taking initiative and effective action and increases employees' confidence and motivation for self- development (Seibert, Wang, & Courtright, 2011).

Prior studies stated that empowerment is necessary for employees' engagement in SGD (Matthews, Michelle Diaz, & Cole, 2003; Maurer, Lippstreu, & Judge, 2008; Orvis, Fisher, & Wasserman, 2009; Seibert, Wang, & Courtright, 2011, Duda ,2013). Self-guided development is strongly influenced by empowering/supporting environment (Bancheva & Ivanova, 2015). A positive and significant correlation was also found between empowering environment and SGD by (Orvis & Leffler, 2011; Thompson, 2013).

H1: There is positive relationship between empowering environment and SGD.

2.2. Feedback Orientation and Self-Guided Development

Feedback orientation is defined as employees seeking response from their superiors and colleagues to improve their performance (London & Smither 2002). The feedback for self-guided development refers to the extent where supervisors grant information to their workers for learning, development and improvement at job (Zhou, 2003). A strong feedback culture positively links with continuous learning and effective performance management (London & Smither, 2002). Feedback is critical for employee learning because it provides information to the individuals that how they will meet the job expectations and attain the objectives (Drawbaugh et al., 2021).

Feedback orientation is positively related to self-guided development and feedback also supportsto the employees in improving their skills and performance as well as self-regulation (Crommelinck and Anseel, 2013). Prior studies highlighted this relationship and found that both are positively related (London & Smither, 1999; Mulder, Ellinger, & Mulder, 2013; Orvis, 2007; Thompson, 2013). An individuals' feedback orientation distinguishes overall accessibility which boost employees' participation in learning programs (Linderbaum & Levy, 2010).

H2: There is positive relationship between feedback orientation and SGD.

2.3. Learning Goal Orientation and Self-Guided Development

LGO construct was originally created to explain differences in school children's learning behaviors (Dweck, 1986). She further added in her goal orientation theory that individuals with supporting learning goal orientation will seek challenging task. Since then, it has often been used to study employee motivation, self-regulation, and performance. In this context, goal orientation is often characterized as a comparatively unwavering character trait which predisposes individuals to pursue or not to pursue goals for different types of achievements. LGO is important indicator of employee learning and development, and positive connection exists between LGO, inspiration to learn, self-development and informal learning (Colquitt & Simmering, 1998; Noe et al., 2017; Zia et al., 2020).

Colquitt and Simmering (1998) stated that the leaders with high levels of learning orientation approached development opportunities with enthusiasm and displayed high levels of persistence. Thus, according to these finding, leaders with high level of orientation willingly participate in development activities and without waiting of any organizational plans of development. The LGO was found positively related to various forms of self-guided development. For example, Noe et al., (2017) found that LGO promotes informal learning and Zia et al., (2020) found that it is positively related to self-development. Thus,

H3: There is positive relationship between LGO and SGD.

2.4. Proactive Personality and Self-Guided Development

Personality and its traits have significant linked to employee development and learning. However proactive personality is defined, "a measured individual who engages himself in active roles: taking some initiative, holding them for bringing an important change and influencing their environment" (Seibert et al., 1999). Theory of person-situation interaction (Mischel & Shoda, 1995) states that proactive employees are likely to participate in SGD when job environment is supportive. Employees with proactive behavior shows more interest in participating learning and development activities (Noe et al., 2014). Individuals with high proactive personality try to change current situation and seek opportunities, adopts them and take action to bring about meaningful changes (Crant, 2000).

Vicki Culpin and colleagues (2015) also originated strong constructive connotation between proactive character and self-guided development in accordance with newcomers in job sector. Self- guided development is an occasion for proactive behaviors employees as they themselves willingly take initiative for their self-guided development. This desire for change in career and future recommends urges peoples to engage and learn new skills and knowledge when they possess proactive behavior (Li et al., 2010) more actively.

H4: There is positive relationship between proactive personality and SGD.

2.5. Career Insight and Self-Guided Development

Career insight is defined as a process where employees are aware about their career related knowledge, skills, weakness, and current situation (London, 1983; Maurer & Tarulli, 1994). Career Insight is basically being knowledgeable of individual about himself or herself and environment (Werner & DeSimone, 2011). A positive relationship between career insight and self-guided development suggests that self-guided development enhances employee skills and knowledge than other development methods (De Vos & Soens, 2008). Both self-guided development and career insight are related to individual and based on the willing behavior and participation. Thus, it isexpected that career insight will be positively related to SGD. In this connection, Thompson (2013) found that career insight is positively related to employees' participation in SGD. Further, Cavanaugh (2016) also found a positive linkage between these two constructs. Thus, it is hypothesized as:

H5: There is positive relationship between career insight and SGD.

3. Methodology

3.1. Sample

The data of the study were collected from the education sector through purposive sampling. The target population was secondary school teacher of public sector from the largest city of Pakistan (Karachi). Karachi is the biggest city of Pakistan, and its population includes all ethnic and cultural groups. A total of 285 of 370 (77% response rate) secondary school teachers participated and completed the survey. As concern for gender, at about 56% (160) male and 44% (125) female employees participated in the survey. Majority of employees (106) belong to the age group of 35-
44. A total of 112 employees hold the master's degree whereas employee experience of 6-10 years was highest 106 (41%).

3.2. Measures

The questionnaire includes both demographic and items of six constructs and these items were assessed at five point's likert scale. All established scales were used for data collection and language of the survey was English as employees were fluent with English language. A five items scale was used to measure the empowering environment scale taken from Matthews, Michelle Diaz and Cole (2003). A sample item is "My organization provides information on what the organization wants to accomplish in the future". The reliability scale of this scale is 0.82. Employees' LGO was assessed through four items scale adapted from VandeWalle (1997). The reliability scale of this scale is 0.85. Sample item is: "I enjoy challenging and difficult tasks at work where I'll learn new skills".

Noe et al., (1990) developed the scale of career insight and this study taken 4 items from the same scale. The internal consistency of these items is 0.80 (Jung & Tak, 2008). A Sample item from this scale is "I have a specific career goal". Feedback Orientation was assessed by three items of Linderbaum and Levy

(2010) and one item of this scale is “I know that I can handle the feedback that I receive”. The reliability of this scale is 0.82. Finally, the self- guided development was assessed with seven items and these items were taken from Orvis and Leffler (2011). I am always looking for better ways to do things”. The reliability of this scale is 0.84.

4. Results

The analysis of this study is carried out through CB-SEM (Covariance Based-Structural Equation Modeling) by using SPSS and AMOS 24. The SEM analysis is conducted further through two models namely, measurement model and structural model. The measurement model or inner model explains about the reliability and validity of data whereas structural model explains the strength of relationships between the constructs.

4.1 Descriptive Statistics

The normality of data is prerequisite for CB-SEM, thus normality of data was assessed through skewness and kurtosis. Table 1 presents the summarized descriptive results. Table 1 below shows that career insight (M=3.55, SD=0.74) has the highest skewness (-0.92) whereas lowest skewness (-0.30) was noted for feedback orientation (M=3.61, SD=0.70). On the other hand, the highest kurtosis (1.73) was found for empowering environment (M=3.60, SD=0.69) and feedback orientation (M=3.61, SD=0.70) has lowest kurtosis (0.29). Overall it was noted that skewness and kurtosis values of all construct was within threshold value ±3.5(Hair et al., 2006) which shows the data has no issue of normality. The internal consistency of the items were also presented in Table1 which ranged from 0.80 to 0.87 (α >0.70) which shows that data has also no issue of reliability as internal consistency was good between the items of constructs (Leech & Onwuegbuzie, 2009).

Table 1: Descriptive analysis

Constructs	ɑ	Mean	Std. Dev	Skewness	Kurtosis
Self-Guided Development	0.84	3.54	0.68	-0.77	1.46
Career Insight	0.80	3.55	0.74	-0.92	1.10
Empowering Environment	0.85	3.60	0.69	-0.91	1.73
Feedback	0.87	3.61	0.65	-0.32	0.29
Proactive Personality	0.82	3.52	0.70	-0.56	0.70
Learning Goal Orientation	0.83	3.43	0.65	-0.50	1.28

4.2 Assessment of measurement model

The measurement model was assessed through confirmatory factor analysis. The reliability was reestablished through composite reliability (CR) whereas validity of the constructs was assessed through convergent validity and discriminant validity. CFA reflected a good model fit; CMIN/Df= 1.36, Df = 362,

CFI = .96, TLI= .95, IFI = .96, RMESEA = 0.036, SRMR =.047 which also meet the threshold value of Hu and bentler (1999). The correlation of the constructs was also checked because correlation analysis explains the internal linkage of constructs and it also explains whether multicollinearity exists between the variables or not (Bryman & Bell, 2015). The acceptable range of correlation between the constructs is 0.10-0.90 (Bryman & Bell 2015). Table 2 shows that correlations of the constructs are within acceptable range and highest correlation exists between proactive personality and empowering environment (r = 0.46) and lowest correlation was found between feedback orientation and empowering environment (r = 0.14).

The composite reliability ranged between 0.81 to 0.87 which is above the threshold value (0.70) (Hair et al., 2014) which explains that study has no issue of reliability. The convergent validity was established as the factor loading of all constructs was greater than 0.60, AVE is greater than 0.50 and CR is also higher than AVE (Hair et al., 2014). These all evidence show that study has no issue of convergent validity. Further, the construct validity was also established as square root of AVE was higher than the correlation of the constructs. Table 2 summarizes the results of reliability and validity.

Table 2*:* Correlation, reliability and validity

Constructs	CR	AVE	1	2	3	4	5	6
1. Self-guided Development	0.84	0.519	**0.72**					
2. Career Insight	0.81	0.520	.198**	**0.72**				
3. Empowering Environment	0.84	0.506	.419**	.316**	**0.71**			
4. Feedback Environment	0.87	0.524	.315**	.138*	.304**	**0.72**		
5. Proactive Personality	0.83	0.499	.384**	.173**	.461**	.280**	**0.71**	
6. Learning Goal Orientation	0.83	0.552	.270**	.192**	.211**	.255**	.250**	**0.74**

4.3 Assessment of structural model

The structural model explains the strength of linkage between the variables. The hypothesis is accepted or rejected on the basis of structural model. The results in table 3 below shows that empowering environment is positively related to self-guided development (ß = 0.24, p < .05), supporting hypothesis one. The second hypothesis was about the relationship of feedback orientation and SGD and study found feedback orientation (ß = 0.17, p < .05) is significantly and positively related to SGD which provided support to H2. Table 3 and figure 2 also shows that LGO has positive linkage with SGD (ß = 0.13, p < .05). The results further indicates that career insight (ß = 0.04, p > .05) is weekly related to self-guided development. The p-value was also high than 0.50, thus hypothesis four was rejected. The hypothesis five was accepted as table 3 shows that proactive personality (ß = 0.18, p < .05) is positively related to self-guided development. The value of R^2 is 0.34 which explains that predictors of self-guided

development have explained 34% variance. The summarized results are presented in table 3 and figure 2.

Figure 2: Structural Model

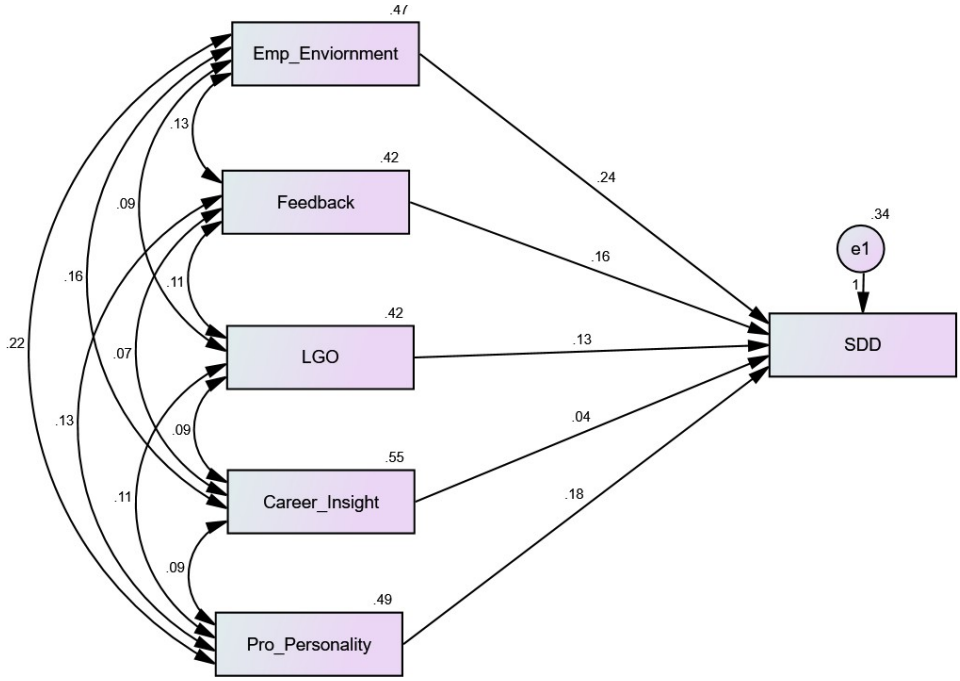


Table 3*:* Results of Hypothesis

Hypothesis	β	S.E.	C.R.	P	Results
H1. Empowering Environment SGD	0.24	0.06	4.05	0.000	Accepted
H2. Feedback Orientation SGD	0.16	0.06	2.71	0.007	Accepted
H3. LGO SGD	0.13	0.05	2.28	0.022	Accepted
H4. Career Insight SGD	0.04	0.05	0.79	0.432	Rejected
H5. Proactive Personality SGD	0.19	0.06	3.23	0.001	Accepted

5. Discussion

The organizational structure has been changed by globalization and rapid advancement and it has become the need of employees to adopt new changes to improve his performance and development. (Cascio, 1995; 2008). Employee development also increases employee performance and engagement (Boyce et al., 2010; Maurer et al., 2003; Zia et al., 2021). However, research has not provided the enough evidence that how employee development can be enhanced and how it is influenced by personal and organizational constructs. This study has addressed these gaps and made few notable contributions.

First, in relation of work context factors and self-guided development, this study proposed that when employee perceives that environment is empowering and they can take decisions with more freedom. The results support this idea that empowering environment is positive predictor of self- guided development, and that empowering environment will enhance the employee engagement in SGD activities. These findings are relevant to the existing studies as Zia et al., (2020) found that empowering environment is an important trigger of self-development. The second hypothesis is also related to work context, and it explains that employees in favorable environment more actively participates in self-development activities. The results also supported this hypothesis and found a positive association between feedback orientation and SGD. The findings also relevant to prior studies which indicated that feedback is a positive phenomenon which helps in employee participation in SGD or in other words it can be stated that when employee perceive positive feedback orientation, they are more likely to engage in SGD activities. These findings also supported by the literature of (London et al., 1999; Linderbaum & Levy, 2010; Gamlem, 2015) as they found that feedback orientation is an important indicator of self-development, informal learning,and employee development. In short, the study found that both empowering environment and feedback orientation are important contextual indicators of self-guided development and helps in promoting self-development at workplace.

Second contribution of this research is about the impact of individual factors on SGD. In this connection, the study proposed that two individual factors LGO and proactive personality promotes self-guided development. In other words, it can be stated that employees with positive proactive personality and high LGO engages in SGD activities more as compared to those having less LGO and reactive personality. The findings supported these hypotheses and found that LGO and proactive personality are positively related to SGD. These findings also supported with the evidence of existing research as recently, Zia et al., (2020) found that LGO and proactive personality is good predictor of self-development.

Third, the study further contributed to existing body of knowledge by investigating both personal and work context which was previously not investigated clearly. As self-guided development is based on self-initiated activities, the researchers mostly investigated the relationship of personal/individual characteristics of informal learning (Park & Choi, 2016; Klink et al., 2012). Noe and Colleagues (2017) recommended that informal learning or self-development is not only initiated by the individual but also requires support from situational/environmental factors. Self- development studies encapsulate that dearth of studies has empirically investigated the collective relationship of these aspects (Kyndt et al., 2009, 2016). In this respect, Jeong et al., (2018) argued in future calls to examine the mix of personal and situational level aspects. This study attempted to test the relationship of both individual and situational factors together and found that SGD is a product of individual and situational variables.

5.1 Implications

The present study of self-guided development is meaningful for the organizations with the expectation

that it will guide the organization in formulating the employees' development programs. This study provided few practical implications for HRD professionals, management and organizational leaders. For example, findings suggested that individual factors are important for self-guided development and management requires a comprehensive refined process of recruitment and selection where they should enroll those employees that have high level of goal orientation and proactivity. In this connection management can use different personality test to gauge the proactivity and goal orientation as recommended by Ones et al., (2007).

5.2 Limitations and Future Directions

Regardless of the many strengths and contributions of this study to literature, it is also prominent to consider this study's limitations as no study is without limitation. This study is constrained by few limitations, but these limitations provide guidelines for future studies. First, from methodological aspects, same person rated the same questionnaire. As data were collected from one source, this raises the questions of common method bias as Podsakoff et al., (2003) stated that to control the common method bias, data should be collected from different sources. Thus, it is recommended that in future data from different level should be gathered.

Second, the data of the study is self-reported. Recent studies recommended that multilevel data provide better results. However, this study has the most related variables to individual assessment, such as goal orientation, proactive personality, etc. These factors are related to discretionary behavior, and supervisors might not always fully observe and evaluate these behaviors. Thus, for multilevel study, some other variables should be added, especially related to outcomes that should be assessed by the supervisor or management like OCB and job performance (Choi et al., 2019).

Finally, other individuals and situational factors that are not included in this study are also expected to positively link with SGD. Some key important individual factors such as motivation to learn, proactive behavior, openness to experience and consciousness were found to be more significant in learning and development. Similarly, workplace support and learning climate are also good predictors of learning and development. It would be interesting to examine these factors for SGD. Moreover, the role of age, gender, and organizational hierarchy is also important in learning and expected to differ for different groups. Thus, future studies should empirically examine the role of age, gender and organizational hierarchy for informal learning.

References

Azulay, H. (2012). *Employee development on a shoestring*. American Society for Training and Development.

Bancheva, E., & Ivanova, M. (2015). Informal Learning in the Workplace. In *Private World (s)* (pp.

157–182). Springer. http://link.springer.com/chapter/10.1007/978-94-6209-971-5_12 Boyce, L. A., Zaccaro, S. J., & Wisecarver, M. Z. (2010). Propensity for self-development of

leadership attributes: Understanding, predicting, and supporting performance of leader self-development. *The Leadership Quarterly*, *21*(1), 159–178.

Bryman, A., & Bell, E. (2015). *Business research methods*. Oxford University Press, USA.

Cascio, W. F. (1995). Whither industrial and organizational psychology in a changing world of work? *American Psychologist*, *50*(11), 928.

Cascio, W. F. (2008). To prosper, organizational psychology should… bridge application and scholarship. *Journal of Organizational Behavior*, *29*(4), 455–468.

Cerasoli, C. P., Alliger, G. M., Donsbach, J. S., Mathieu, J. E., Tannenbaum, S. I., & Orvis, K. A. (2018). Antecedents and outcomes of informal learning behaviors: A meta-analysis. *Journal of Business and Psychology*, *33*(2), 203–230.

Choi, W. (2009). *Influences of formal learning, personal characteristics, and work environment characteristics on informal learning among middle managers in the Korean banking sector*.The Ohio State University.

Choi, W., Noe, R., & Cho, Y. (2019). What is responsible for the psychological capital-job performance relationship? An examination of the role of informal learning and person- environment fit. *Journal of Managerial Psychology*.

Clarke, N. (2005). Workplace learning environment and its relationship with learning outcomes in healthcare organizations. *Human Resource Development International*, *8*(2), 185–205.

Colquitt, J. A., & Simmering, M. J. (1998). Conscientiousness, goal orientation, and motivation to learn during the learning process: A longitudinal study. *Journal of Applied Psychology*, *83*(4), 654.

Conlon, T. J. (2004). A review of informal learning literature, theory and implications for practice in developing global professional competence. *Journal of European Industrial Training*, *28*(2/3/4), 283–295.

Crant, J. M. (2000). Proactive behavior in organizations. *Journal of Management*, *26*(3), 435–462.

Crommelinck, M., & Anseel, F. (2013). Understanding and encouraging feedback-seeking behaviour: A literature review. *Medical Education*, *47*(3), 232–241.

Curado, C., Henriques, P. L., & Ribeiro, S. (2015). Voluntary or mandatory enrollment in training and the

motivation to transfer training. *International Journal of Training and Development*,*19*(2), 98–109.

Decius, J., Schaper, N., & Seifert, A. (2021). Work Characteristics or Workers' Characteristics? An Input-Process-Output Perspective on Informal Workplace Learning of Blue-Collar Workers. Vocations and Learning, 1-42.

Drawbaugh, M. L.,& Gianelloni, J. E., (2021). 13 The Role of the Feedback Environment in Self-Development. The Oxford Handbook of Lifelong Learning, 275.

Dachner, A. M. (2013). *Self-Guided Development: A proactive approach to employee development*.

The Ohio State University.

De Vos, A., & Soens, N. (2008). Protean attitude and career success: The mediating role of self-management. *Journal of Vocational Behavior*, *73*(3), 449–456.

Dweck, C. S. (1986). Motivational processes affecting learning. *American Psychologist*, *41*(10),1040.

Ellinger, A. D. (2005). Contextual factors influencing informal learning in a workplace setting: The case of "reinventing itself company." *Human Resource Development Quarterly*, *16*(3), 389–415.

Ellinger, A. D., Ellinger, A. E., Yang, B., & Howton, S. W. (2002). The relationship between the learning organization concept and firms' financial performance: An empirical assessment. *Human Resource Development Quarterly*, *13*(1), 5–22.

Enos, M. D., Kehrhahn, M. T., & Bell, A. (2003). Informal learning and the transfer of learning: How managers develop proficiency. *Human Resource Development Quarterly*, *14*(4), 369–387.

Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., Tatham, R. L., & others. (2006). *Multivariate data analysis* (Vol. 6). Pearson Prentice Hall Upper Saddle River, NJ. http://library.wur.nl/WebQuery/clc/1809603

Ilgen, D. R., & Pulakos, E. D. (1999). *The Changing Nature of Performance: Implications for Staffing, Motivation, and Development. Frontiers of Industrial and Organizational Psychology.* ERIC. https://eric.ed.gov/?id=ED440304

Jeong, S., Han, S. J., Lee, J., Sunalai, S., & Yoon, S. W. (2018). Integrative literature review on informal learning: Antecedents, conceptualizations, and future directions. *Human Resource Development Review*, *17*(2), 128–152.

Jung, J., & Tak, J. (2008). The effects of perceived career plateau on employees' attitudes moderating effects of career motivation and perceived supervisor support with Korean employees. *Journal of Career Development*, *35*(2), 187–201.

Kyndt, E., Dochy, F., & Nijs, H. (2009). Learning conditions for non-formal and informal workplace learning. *Journal of Workplace Learning*, *21*(5), 369–383.

Kyndt, E., Vermeire, E., & Cabus, S. (2016). Informal workplace learning among nurses: Organisational learning conditions and personal characteristics that predict learning outcomes. *Journal of Workplace Learning*, *28*(7), 435–450.

Leech, N. L., & Onwuegbuzie, A. J. (2009). A typology of mixed methods research designs. *Quality & Quantity*, *43*(2), 265–275.

Li, N., Liang, J., & Crant, J. M. (2010). The role of proactive personality in job satisfaction and organizational citizenship behavior: A relational perspective. *Journal of Applied Psychology*, *95*(2), 395.

Linderbaum, B. A., & Levy, P. E. (2010). The development and validation of the Feedback Orientation Scale (FOS). *Journal of Management*, *36*(6), 1372–1405.

Lohman, M. C. (2006). Factors influencing teachers' engagement in informal learning activities.

Journal of Workplace Learning, *18*(3), 141–156.

London, M., Larsen, H. H., & Thisted, L. N. (1999). Relationships between feedback and self-development. *Group & Organization Management*, *24*(1), 5–27.

London, M., & Smither, J. W. (2002). Feedback orientation, feedback culture, and the longitudinal performance management process. *Human Resource Management Review*, *12*(1), 81– 100.

Matthews, R. A., Michelle Diaz, W., & Cole, S. G. (2003). The organizational empowerment scale.

Personnel Review, *32*(3), 297–318.

Maurer, T. J., Lippstreu, M., & Judge, T. A. (2008). Structural model of employee involvement in skill development activity: The role of individual differences. *Journal of Vocational Behavior*, *72*(3), 336–350.

Maurer, T. J., Weiss, E. M., & Barbeite, F. G. (2003). A model of involvement in work-related learning and development activity: The effects of individual, situational, motivational, and age variables. *Journal of Applied Psychology*, *88*(4), 707.

Mischel, W., & Shoda, Y. (1995). A cognitive-affective system theory of personality: Reconceptualizing situations, dispositions, dynamics, and invariance in personality structure. *Psychological Review*, *102*(2), 246.

Mulder, R. H., Ellinger, A. D., & Mulder, R. H. (2013). Exploring feedback incidents, their characteristics and the informal learning activities that emanate from them. *European Journal of Training and Development*, *37*(1), 49–71.

Neelan, J., & Kirschner, A. P. (2017). *How to support self-directed learning in a learningorganization*.

Noe, R. A., Clarke, A. D., & Klein, H. J. (2014). Learning in the twenty-first-century workplace.

Annu. Rev. Organ. Psychol. Organ. Behav., *1*(1), 245–275.

Noe, R. A., Noe, A. W., & Bachhuber, J. A. (1990). An investigation of the correlates of careermotivation. *Journal of Vocational Behavior*, *37*(3), 340–356.

Noe, R. A., Tews, M. J., & Michel, J. W. (2017). Managers' informal learning: A trait activation theory perspective. *International Journal of Training and Development*, *21*(1), 1–17.

Ones, D. S., Dilchert, S., Viswesvaran, C., & Judge, T. A. (2007). In support of personalityassessment in organizational settings. *Personnel Psychology*, *60*(4), 995–1027.

Orvis, K. A. (2007). *Supervisory performance feedback as a catalyst for high-quality employee self-development* (Vol. 68).

Orvis, K. A., Fisher, S. L., & Wasserman, M. E. (2009). Power to the people: Using learner control to improve trainee reactions and learning in web-based instructional environments. *Journal of Applied Psychology*, *94*(4), 960.

Orvis, K. A., & Leffler, G. P. (2011). Individual and contextual factors: An interactionist approach to understanding employee self-development. *Personality and Individual Differences*, *51*(2), 172–177.

Orvis, K. A., & Ratwani, K. L. (2010). Leader self-development: A contemporary context for leader development evaluation. *The Leadership Quarterly*, *21*(4), 657–674.

Park, Y., & Choi, W. (2016). The effects of formal learning and informal learning on job performance: The mediating role of the value of learning at work. *Asia Pacific EducationReview*, *17*(2), 279–287.

Pedler, M., Burgoyne, J., & Boydell, T. (2013). *A Manager's Guide to Self-development*.

Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies.

Journal of Applied Psychology, *88*(5), 879.

Qamar Zia, M., Naveed, M., Iqbal, A., & Ghauri, S. (2021a). Predictors and outcomes of self- directed development: an investigation of individual and contextual factors. International Journal of Training Research, 1-20.

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, *55*(1), 68.

Seibert, S. E., Crant, J. M., & Kraimer, M. L. (1999). Proactive personality and career success.

Journal of Applied Psychology, *84*(3), 416.

Seibert, S. E., Wang, G., & Courtright, S. H. (2011). Antecedents and consequences of psychological and team empowerment in organizations: A meta-analytic review. *Journal ofApplied Psychology*, *96*(5), 981.

Senge, P. (1990). *The Fifth Discipline. The Art and Practice of the Learning Organization. New*

York: Bantam Doubleday Dell Publishing Group. Inc.

Senge, P. M. (2006). *The fifth discipline: The art and practice of the learning organization*.

Broadway Business.

Tannenbaum, S. I., Beard, R. L., McNall, L. A., & Salas, E. (2010). Informal learning and development in organizations. *Learning, Training, and Development in Organizations*, 303–332.

Thomas, K. W., & Velthouse, B. A. (1990). Cognitive elements of empowerment: An "interpretive"model of intrinsic task motivation. Academy of management review, 15(4), 666-681.

Thompson, D. J. (2013). *Understanding the Contextual, Cultural, and Individual Antecedents of Self-directed Development* [University of Akron]. http://rave.ohiolink.edu/etdc/view?acc_num=akron1386168229

Van der Klink, M., Boon, J., & Schlusmans, K. (2012). *All by myself. Research into employees' informal learning experiences*.

Van Merriënboer, J., Kirschner, P. A., Paas, F., Sloep, P. B., & Caniels, M. (2009). Towards an integrated approach for research on lifelong learning. *Educational Technology Magazine:The Magazine for Managers of Change in Education*, *49*, 3–15.

VandeWalle, D. (1997). Development and validation of a work domain goal orientation instrument.

Educational and Psychological Measurement, *57*(6), 995–1015.

Vicki Culpin, D., Carla Millar, P., Kai Peters, P., Van der Heijden, B. I., Van Vuuren, T. C., Kooij, D.T., & de Lange, A. H. (2015). Tailoring professional development for teachers in primary education: The role of age and proactive personality. *Journal of Managerial Psychology*, *30*(1), 22–37.

Werner, J., & DeSimone, R. (2011). *Human resource development*. Cengage Learning.

Zhou, J. (2003). When the presence of creative coworkers is related to creativity: Role of supervisor close monitoring, developmental feedback, and creative personality. *Journal ofApplied Psychology*, *88*(3), 413.

Zia, M. Q., Bashir, M. A., Mangi, R. A., & Shamsi, A. F. (2021b). A person-situation perspective of informal learning: The role of supervisor feedback environment". *European Journal of Training and Development*.

Zia, M. Q., Naveed, M., Bashir, M. A., & Shamsi, A. F. (2020). The interaction of situational factors on individual factors and self-development. *European Journal of Training and Development*.