

**CAREER ORIENTED HUMAN RESOURCE DEVELOPMENT SYSTEM**

**Learning and Development Factors Affecting Career Success Using Artificial Intelligence:  
The Evidence from Law Enforcement Agencies**

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**PROPOSAL FOR THESIS**

**PhD**

**In HUMAN RESOURCE MANAGEMENT**

**To**

**FACULTY OF MANAGEMENT SCIENCES**

**(PhD Management Sciences)**



**NATIONAL UNIVERSITY OF MODERN LANGUAGES ISLAMABAD**

**JULY 2023**

**DEDICATION**

I dedicate this thesis to my Mother late

**"Makhmul Jan"**

Mother, you were the one who supported me the most throughout my life and paved my way to success. In every step forward in my life, I owe you all the things that contributed to who I am. My sole concern in life was for you to always be proud of me

May Allah Bless Your Soul

Your' Son

Tariq

## **ACKNOWLEDGMENTS**

First of all, I would like to express special gratitude to Almighty Allah, who gave me the patience and strength to successfully complete all the stages of this research. The completion of this thesis would not have been possible without the support and able guidance of my teachers and supervisor. I wish to convey my special and sincere gratitude to my thesis supervisor, Dr. Nadeem Talib for his priceless contribution, inspiring guidance and dedication that added immensely to the completion of my research work. His methodical knowledge and in-depth understanding of the research were instrumental in the success of my research effort. I am also thankful to Dr. Sajid Saleem who supported me in analysis of data through Artificial Intelligence.

I thank my whole family as well for supporting and encouraging me on every step. I am also grateful to all my friends who helped me in distributing and collecting the surveys and exerted their efforts in facilitating my work.

**(Tariq Hussain Khan)**

**LEARNING AND DEVELOPMENT FACTORS AFFECTING CAREER SUCCESS USING  
ARTIFICIAL INTELLIGENCE: THE EVIDENCE FROM LAW ENFORCEMENT AGENCIES  
ABSTRACT**

The improvement of employees' professional competence through learning and development (L & D) is the most important goal of any organization. For this purpose, organizations need to pay special attention to developing the skills of their young professionals (YPs) to replace aging workforce. Young professionals should learn and grow at work in a way that it must influence their careers progression. However, not much is known about the way it occurs. Like all other hierarchical larger organizations, law enforcement agencies (LEAs) also have to stay current on career-oriented L&D processes. Hence, the subject is more critical and growing field of study for the Law Enforcement that needs to be explored. To fill this research gap, learning and development-related issues of YPs of LEAs have been focused in this empirical study. The theoretical framework has been studied in two different contexts i.e. the Police and the Civil Armed Forces (CAFs). The extent to which L&D factors like career guidance and dialogues, team-based learning, and mental modal development practices, affect the career success of YPs in LEAs based at Islamabad, Punjab, Sind, Khyber Pakhtukhwa (KPK), and Baluchistan regions has been investigated. The two-stage sampling approach i.e. stratified sampling followed by systematic random sampling method was employed to collect the data. Only 750 of the 1000 professionals responded correctly. Various tests were performed using SPSS, including regression tests to observe the direct effect of L&D factors as well as indirect effect, using attitude to continuous learning as mediator on CS of YPs. The findings revealed that identified L&D factors have a significant positive effect on career success when mediated by attitude to continuous learning. Artificial Neural Network (ANN) technique was applied on the same data to predict outcome of L&D factors on career success and the result was favorable. According to the study, LEAs can develop their YPs effectively by choosing a correct and practical L&D approach instead of following traditional methods. Such measures will not only help the professionals individually but will also strengthen the organizations as a whole. Since LEAs have a vital role in maintaining law and order, highly essential for the stability and economic strength of the countries like Pakistan therefore, the subject needs to be explored further in future studies.

**Keywords:** *Learning and Development, Career Success, Law Enforcement, Artificial Intelligence.*

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## LIST OF ABBREVIATIONS

S/No.	Abbreviation	Meaning
1.	<b>ASTD</b>	American Society for Training and Development
2.	<b>ASP</b>	Assistant Superintendent of Police
3.	<b>Adm</b>	Administration
4.	<b>ATCL</b>	Attitude to Continuous Learning
5.	<b>ASI</b>	Assistant Sub Inspector
6.	<b>AJK</b>	Azad Jammu and Kashmir
7.	<b>BAB</b>	Below Average Benchmark
8.	<b>Brig</b>	Brigadier
9.	<b>b/w</b>	Between
10.	<b>CS</b>	Career Success
11.	<b>CD</b>	Career Development
12.	<b>Coy</b>	Company
13.	<b>CAFs</b>	Civil Armed Forces
14.	<b>CG &amp; D</b>	Career Guidance & Dialogues
15.	<b>CCPO</b>	Chief City Police Officer
16.	<b>Comd</b>	Commander
17.	<b>CO</b>	Commanding Officer
18.	<b>Col</b>	Colonel
19.	<b>Capt</b>	Captain
20.	<b>Constbl</b>	Constable
21.	<b>CALEA</b>	Commission on Accreditation for Law Enforcement Agencies
22.	<b>COHRDP</b>	Career Oriented Human Resource Development Practices
23.	<b>DSP</b>	Deputy Superintendent of Police
24.	<b>DIG</b>	Deputy Inspector General
25.	<b>DV</b>	Dependent Variable
26.	<b>Exec</b>	Executive
27.	<b>FIA</b>	Federal Investigation Agency
28.	<b>FATA</b>	Federally Administrated Tribal Areas



<b>S/No.</b>	<b>Abbreviation</b>	<b>Meaning</b>
29.	<b>FC</b>	Frontier Corps
30.	<b>HR</b>	Human Resource
31.	<b>HRD</b>	Human Resource Development
32.	<b>HSC</b>	High School Certificate
33.	<b>HSSC</b>	Higher Secondary School Certificate
34.	<b>HDI</b>	Human Development Index
35.	<b>IB</b>	Intelligence Bureau
36.	<b>IV</b>	Independent Variable
37.	<b>Insp</b>	Inspector
38.	<b>Jnr</b>	Junior
39.	<b>KPK</b>	Khyber Pakhtunkhawa
40.	<b>KM</b>	Knowledge Management
41.	<b>LEAs</b>	Law Enforcement Agencies
42.	<b>Ldr</b>	Leader
43.	<b>L&amp;D</b>	Learning and Development
44.	<b>Lt Col</b>	Lieutenant Colonel
45.	<b>Mgmt</b>	Management
46.	<b>Maj</b>	Major
47.	<b>M&amp;S</b>	Middle and Senior
48.	<b>MMDP</b>	Mental Model Development Practices
49.	<b>MV</b>	Moderating Variable
50.	<b>NACTA</b>	National Counter-Terrorism Authority
51.	<b>NPO</b>	Non-Profit Organization
52.	<b>OCM</b>	Organizational Career Management
53.	<b>OECD</b>	Organization for Economic Cooperation and Development
54.	<b>PSP</b>	Police Service of Pakistan
55.	<b>Pl</b>	Platoon
56.	<b>ROI</b>	Return on Investment
57.	<b>SSP</b>	Senior Superintendent of Police
58.	<b>SCCT</b>	Social Cognition Career Theory

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<b>S/No.</b>	<b>Abbreviation</b>	<b>Meaning</b>
59.	<b>SP</b>	Superintendent of Police
60.	<b>SD</b>	Standard Deviation
61.	<b>SI</b>	Sub Inspector
62.	<b>Sec</b>	Section
63.	<b>TBL</b>	Team Based Learning
64.	<b>T&amp;D</b>	Training and Development
65.	<b>UNDP</b>	United Nations Development Program
66.	<b>WC</b>	Wing Commander
67.	<b>Wt.</b>	Weighted
68.	<b>YP</b>	Young Professionals

---

## **CHAPTER 1**

### **INTRODUCTION**

#### **1.1 Background**

Development of human resource remained popular for quite some time but now it has largely been replaced by development through learning and training or learning and development (L&D). Despite the fact that the two phrases are nearly identical but practitioners have never been drawn to human resource development (Harrison, 2009). Learning is characterized as a change in knowledge brought on by some kind of experience (Budhiraja, 2022). Whereas, development is an evolving process which is fueled by lifetime learning, and incorporates a variety of situations (Liu, 2017). Therefore, empirical evidences can be used to argue that development occurs as a result of learning (Mason & Brougham, 2020). The purpose of development strategies and methods is to ensure that professionals of an organization acquire and enhance their potential and capabilities to undertake duties with ease and advance in the career for both benefit of their own and that of the organization (Walton, 1999). Yashchenko et al. (2022) state that organizations sponsor different career oriented human resource development practices (COHRDPs). They further argue that in the quest for their own advancement, professionals engage in these development programs consistently and persistently because they feel satisfied once such activities are organized (Giraud et al., 2019).

Several studies on professionals' career success have been conducted in the past targeting on the individual and organizational variables that affect this construct (Mahmoodet et al., 2018). In this context, earlier studies had identified three theoretical perspectives on professionals' career success (CS). These studies also highlight subjective as well as objective factors that influence career success (Schmitt, 2020). Individual, structural and behavioral factors are categorized as part of such perspective. Human capital and inspirational concepts are the source of individual factors according to which individual attributes are described. Organizational arrangements expediting opportunities for career success are covered under structural method. The behavioral method covers the level of professionals' control, over career progression of their own through taking part in career advancement schemes (Cronley & Ravi, 2021). Review of the pertinent literatures reveals that researchers utilizing a small number of variables in piecemeal have mostly predicted career success. They failed to take into account the implications of various sets of theoretically based variables (Sodirjonov, 2020). Additionally, phenomena of success in career for professionals of law enforcement or government sector has been addressed only in limited literature, despite conduct of

large number of studies on this construct (Khan, 2022). This has raised concerns as to how professionals interpret career success and factors predicting it.

Young professionals' (YPs) learning and development is crucial since it directly affects the strategic goals of the organization (Naim & Lenka, 2018). Without carefully thought-out early grooming and development of young professionals, such goals cannot be realized. Raising professional standards from the start of new employees' professional career (Dogan & Kirkgoz, 2022) is therefore, crucial for their performance as well as that of the organization (Chima, 2022). The development of fresh employees in law enforcement agencies is strongly supported by many current leaders in the industry. As Şen and YildizDurak (2022) argue that regular career-oriented professional learning should continue with other mandatory training activities during initial developmental phase. In contemporary setting, it is vital for management to devise strategies for improvement and advancement of employees (Li, 2020). This will add to the motivation and commitment among professionals (Pahi et al., 2021), essential for career success. Keeping this in view, every institution has been spending lot of funds on learning and development of professional for their career advancement (Dose et al., 2019). Because guiding the young professionals towards right direction in their careers can cause a lifelong satisfaction, alternatively it can lead to demoralization, decreased learning motivation, absence of satisfaction, and even stress, as revealed by number of authors (e.g., Maurer, 2001; Blokker et al., 2019).

Current research focuses on learning and development of professionals employed in the law enforcement agencies (LEAs). The concept of learning and development initiatives in the law enforcement field was first introduced in 1979 with the establishment of CALEA (Commission on Accreditation for Law Enforcement Agencies). This committee was conceived to formulate standard guidelines for development of professionals in the LEAs so that they can provide superior services (Rohde, 2002). However, recent challenges of fifth generation hybrid warfare demand that LEAs must have highly motivated, talented, and devoted staff members who are eager to learn while considering a sustainable future career in the organization (Lo et al., 2020). Similarly, keeping in view the impact of fast paced operational environment requiring quick decisions, managers of LEAs have also realized the need to reform their human development strategies (Williams & Sondhi, 2022). Law enforcements operate under dynamic operating environment having versatile nature of issues as quantified by Khan (2014). A unique difference between the private organizations and law enforcement is the nature of law enforcement being a non-profit outfit (Ahakwa et al., 2021) rather

their professionals must work under a variety of demands and additional restrictions, which hinders their performance efficiency (Williams & Sondhi, 2022).

This research is therefore, oriented towards ascertaining the requirement for initial learning and development of young professionals in LEAs, and its inherent linkage with their career success. The study will look into such basic learning and development issues among young professionals in two different contexts, namely the Police organization and the Civil Armed Forces (CAFs). For this purpose the influence of three developments factors for young professionals i.e., career guidance and dialogues (Reid, 2022), team-based learning (Bonazzi & Rouiller, 2021) and mental model development practices (England, 2020) have been focused in the context of LEAs. Whereas, 'attitude to continuous learning' (Budhiraja, 2021) is looked upon as a critical component of the effective learning and development process. Because an individual's attitude to continuously take part in learning and development programs in his work environment is regarded as most crucial for his career success (Koskinen, 2022). Professionals are motivated to do things, take on possibilities, and demonstrate commitment to a successful career when they have a positive attitude for continuous learning (Liu et al., 2017). In other words, 'attitude to continuous learning' affects career success. According to Karakş (2022), organizations must educate and cultivate a core group of professionals with a desire for lifelong learning and the ability to handle changing job assignments. Thus, career success and learning process also demand long-lasting association between young professionals and the organization (Baldwin & Ford, 2018).

The success or failure of LEAs has significant effect on the development and economy of nations like Pakistan (Goldstein, 2019). Any such effect depends on young professionals' quality development being a strategic asset (Mason et al., 2020). However, due to absence of focused early development, many talents in law enforcement agencies are wasted (Abbas, 2011). Upon joining these organizations, several highly skilled professionals may not receive the proper opportunities to discover their true talent and improve upon (Groppi, 2021). Either responsibilities are assigned to them beyond their skill level or improper guidance is provided. As a result, they rarely achieve their full potential. Despite having the necessary abilities, individuals are unable to advance in their careers since the climate is not favorable (Johnston, 2016). Due to a high attrition rate and the application of the "survival of the fittest" principle, LEAs are required to prepare new professionals on a somewhat fast track basis, which makes the issue more complex (Kleygrewe et al., 2022). Moreover, LEAs lack career guidance programs; instead, authority and discipline are used as the primary learning and development instruments (Kayani, 2022). Young professionals are not guided

in the proper direction; grades and performance are preferred (Khan, 2022). The atmosphere and background education that professionals possess before joining the organization are the major contributors to their career success (Boiko-Buzyl et al., 2021). Therefore, the aim of this study is to find out the learning and development factors affecting career success of young professionals for the benefit of both the individuals and organizations.

## 1.2 Gap Analysis

The development of employees' abilities and learning orientations is vital due to the ageing professionals in many countries (De Jonget al., 2021). Employees, who feel their organization supports learning and development, are motivated to learn, take part in development activities and apply what they have learned in the workplace, which makes capability development beneficial in a variety of ways (Beier, 2022). This is crucial for both younger human resources who are learning how to work while also “learning to learn” at work and older workers who must acquire new skills and information to stay marketable. Nevertheless, a research by Organization for Economic Cooperation and Development (OECD) discovered that 75% of professionals have no interest in continuing their learning (OECD, 2013). Young professionals are said to have a desire for learning and an urge to advance their knowledge and abilities (Tikkanen et al., 2022), but this has not yet been methodically explored or empirically tested in the research. To address this issue, the current research study discusses how investments by institutions on learning and development of young professionals are likely to affect their career success. Similarly, Mason and Brougham (2020) contend that learning and development psychology of younger employees is distinctive than those of their experienced counterparts, and they may need various forms of support, resources, and knowledge to help them develop their skills and talents (Searle et al., 2022). Therefore, in order to ensure that the efforts to improve competence are optimal, any new research should focus mainly on the development of young professionals. Hence, in line with Stahl et al. (2022) argument that learning and development programs must meet the needs of fresh entrants, current research goes beyond and distinguishes that young professionals should be the focus of organizational gains instead of older ones.

In recent years, research on the elements that help and impede learning and development of professionals, has substantially increased but less is known about how to best train just beginner or younger professionals (Khan, 2022). This is fundamental because young group may learn differently than their more experienced, older coworkers. Furthermore, their learning experiences throughout “emerging adulthood” may have a significant impact on how they nurture as adults in

terms of attitudes, behaviors, and as a product (Tezcan, 2022). Thus, research is mandatory to investigate the elements that support young professionals' attitude towards lifelong learning as well as the degree to which learning and development results in career success (Naim & Lenka, 2018). Therefore, this research is an effort to suggest that experiencing which sorts of interpersonal interaction are most significant for young professional career oriented development would allow organizations to focus more specifically on these efforts. It would be interesting to investigate how additional career-related aspects influence the developmental goals and behaviors of young professionals (Burgess et al., 2020). Moreover, there are several development programs suitable for particular career success, but no experimental evidence exists to support this matching (Presti et al., 2022). Only a few researches have looked at the best forms of handling particular types of employee in this area. Hirschi & Koen (2021), for instance, looked at contemporary career development (CD) programs, matching each program with specific forms of career success, but there is currently a lack of strong empirical evidence for matching individual preferences with organizational interventions. Therefore, additional research is necessary in this context (Mason & Brougham, 2020). Such gap can be filled by the outcome of this research which is considered as a turning point to align the needs of all stakeholders since current and future success of an organization depend on quality development of young professionals (Lyer, 2021) being addressed in this investigation.

The literature mostly ignores the issue of why professionals should engage in learning and development processes (Schunk & DiBenedetto, 2020). Moreover, unlike efforts on research in learning theories, career-oriented learning and development of professionals have received limited attention among researchers (Pinnington et al., 2022), except for a few empirical studies in management and organizational psychology literature (Hasan & Ali, 2022). In this context, numbers of scholars have proposed the conduct of future study to explore other antecedents of career success and further potentially important characteristics that may also influence the association between human development and career advancement programs (Bagdadli et al., 2021). Like, while studying career-related continuous learning and career attitudes, Nassredine, and Easa (2020) advise that future research should test the premise that employees' participation in career-related continuous learning (CRCL) activities leads to subsequent career growth. Whereas Presti et al. (2021) have recommended that future research to investigate factors influencing employees' career success is essentially needed. Similarly, De Jong et al. (2021) also emphasize on the need for investigating as to what length education and learning factors reflect the association of employees'

career success and career-oriented development practices of the organization. Therefore, the idea of career-oriented learning and development proposed in current study offers one solution to this problem (Van der, 2020). It includes formal ways of learning and development like career dialogues as well as informal learning from colleagues (Abadi et al., 2022). Along studying factors, that influence both learning and development and career success, the present study will explore the variables that influence professionals' career oriented learning and development. Besides, Oubibi et al. (2022) also propose that their research on career advancement could not take account of learning and development factors; while Solangi et al. (2002) believe that future research should assess how learning and development concerns are handled in institutions and how they affect staff's career success (Carter, 2021). To fix such challenges, leaders interested in work force planning and development of professionals may use outcomes of this study to assess ways that may appropriately tackle the absence of learning and development of fresh intake of professionals in their institutions.

In addition, highlighting the need for further work on the subject, Ebner (2021) recommends that future researchers should observe the effect of learning and development of employees in services organizations. This is followed by Castillo (2022), who also indicates that the issue of development programs in LEAs having direct bearing on career success is a new and emerging discipline of study due to the constant changing of regulations hence; there is limited research on this subject that should be further investigated (Tahir & Afridi, 2019). To fill this gap, current study is to provide a right direction in this regard in order to make LEAs an efficient, well-functioning service to respond to fifth generation warfare effectively with development efforts through COHRDPs.

Aslam et al. (2022) argue that, for both current and future career success, professionalism is the cornerstone. Thus, individuals should professionalize themselves early in their service (Craps et al., 2021). This means that young professionals must constantly assess the circumstances as they build their professions (Aliya & Gulnur, 2022). In this context, prior research has discovered career tools like career competences (Eccles & Anders, 2018) and movement capital (Presti et al., 2022) as predictors of professional advancement (Kizilcec et al., 2022). However, the environment in which career success occurs has generally been overlooked (Presti et al., 2021). Recent quests from career scholars and this gap in empirical study (De Vos, 2020) suggest that the environment in which development occurs is directly linked to the success in professional career (Akkermans et al., 2021). Despite receiving considerable attention of researchers, the idea of career-oriented learning and development emerged rather independently from the research on career success



(Bagdadli et al., 2021). For a number of reasons, it is imperative to connect the two study lines (Yang & Horak, 2019). First, career-oriented learning and development transcends the simple acquisition of new knowledge or learning for its own purpose (Biekowska, 2022). In order to meet the requirements of future career advancement, professionals must also prepare themselves for new assignments that need up-skilling or re-skilling of their knowledge (Kullberg, 2022). Employees are thereby motivated to improve their understanding, abilities, skills, and other traits continuously (Kae et al., 2021). Such issues are addressed through relevant variables of this study, which are preferred over other learning and development factors because these are equally applicable to both, effective learning and development strategy and career success of professionals (Spurk et al., 2019).

Therefore, it may be said that there has not been much research on learning and development with regard to career-oriented HRD (Schmitt, 2020). Hence, it is essential for human resource development (HRD) researchers to research and create theories to support HRD policies (Page-Tickell, 2022). It may be noticed that none of the earlier researches, whether those were on general learning or learning in the context of HRD, took into account the elements that affect employees' career-oriented development (Wickramaratne, 2021). Learning and development research should therefore, address these two challenges (Bellare et al., 2021). Such studies should also focus on previously under studied elements, such as career guidance and dialogues (Reid, 2022), team-based learning (Keshf & Khanum, 2022), and mental model development practices (Lucrezia et al., 2021), among others (Bagdadli, 2021). The researcher also believes that additional research in this context would clarify how the learning and development factors and environment affect the growth of young professionals' competence, and eventually their career success. Hence, to tackle these issues, this research re-conceptualizes and integrates concepts such as career orientated learning and development and career success within organizational settings.

Likewise, studies also have identified several factors influencing career success, which may be the result of learning new skills, or enhancing existing skills (Bonneton et al., 2022). Literature has also revealed that 'career guidance and dialogue' is one such factor, which plays a central role in effectiveness of learning and development activities (MacPhail et al., 2021). In this perspective, emphasizing on the need for career guidance and dialogues for the first time, Super (1980) found that the essential feature of young people is a search of the career opportunity and meaningful life, which often need assistance and advice from the sidelines. According to a proposal made by Wonget et al. (2022), future study should characterize as well as assess such factors that encourage

the usage of career guidance and dialogues. In the same way, Malinda (2022) contends that the importance of career guidance and dialogue, which are intended to support in determining a person's competency-based professional path, should also be taken into account. This will eventually result in a rewarding professional career. Similarly, Nilsson and Hertzberg (2020) suggest that organizations should include career guidance as a required subject in order to guide learners in career positions so that they can focus on what skills they need for better performance. While Martha et al. (2021) have recommended that factors like career guidance may be focused in future research studies to help learners competencies for career advancement. In addition, while linking the need for future research on the role of career guidance and dialogues, Nilsson & Hertzberg (2022) have argued that the construct is believed to contribute in determining a competency-based career direction that will ultimately lead to a rewarding professional career.

In today's changing environment, team based learning (TBL) may also be significant for career success (Parmelee, 2022). Although team-based learning and career advancement are examined from various angles, they both take into account the social support and acknowledgment provided by coworkers and superiors (Ifechi et al., 2022). Keeping this perspective in view, Pylväs et al. (2021) further contend that in addition to the environment, social, situational, and individual elements modified by TBL also have an impact on learning and development. Thus, according to Al-Arafat & Doblaz (2022), more research to show the effectiveness of TBL is highly recommended. Besides, scholars have also suggested that future studies should examine the long-term impact of TBL on learners' achievements and improvements in peer evaluation (Lino-Neto et al., 2022). Pylväs et al. (2021) made the same recommendation in a different research study, saying that a thorough examination of professionals' experiences with TBL and its effects on career success would help better understand the linkages between these two concepts.

Similar to this, Andrews et al. (2022) claim that mental models (MM) have an important function in the course of learning. However, such models are not realized adequately and lacking in a systematic study scheme communicating professionals how to interact with them effectively. In order to increase an organization's efficiency through mental models, it is necessary to both acquire new abilities and put them to use on a regular basis (Müller & Antoni, 2022). Keeping in view the effectiveness of mental models in learning and development process, Toikka and Tarnanen (2021) have suggested that researchers should further explore professionals' mental models and how they might relate to development of leaders and communities. Moreover, literature has also revealed that the relationship between career success and mental models has

neither been evidently examined in research studies so far, nor short or long-term effects of mental models have been investigated in different phases of learning. Barring few studies that have compared the effectiveness of mental sketches on novices in carrying out tasks, there is a dearth of research on mental models. Despite the researchers' recommendation to utilize mental models in assisting young learners because they have less full mental models and may need greater assistance from outside sources, literature is mostly silent on the subject (Parmelee, 2022). Therefore, further research into the causes of mental models' long-lasting impact on learning and development is needed in future. Such research may help in finding accurate methods for development of mental models during learning and to further examine the connections between mental models and professionals' attitudes to learning and its outcome i.e., career success (Müller & Antoni, 2022). By fostering better communication, greater teamwork, and preparing experts to handle highly complicated and demanding work, this inquiry may contribute towards raising the performance of LEAs as a whole.

The purpose of this research is to evaluate and design a learning and development theoretical model for younger group of professionals in which "attitude to continuous learning" functions as a key mediating component at the domain level. It specifically looks at how much "attitude to continuous learning" mediates the correlation between important elements of the learning and development and career success. A positive attitude towards learning and performance improvement is a prerequisite for participation in development programs (Celik & Uzunboylu, 2022). Positivity and approving self-evaluation produce inspiring enthusiasm to take on new learning endeavors (Wu, 2022). As a result, when deciding whether to participate in programs that promote continual learning, one's attitude towards learning becomes crucial (Friesen & Brown 2022). A significant gap in the research is the lack of a scale that has been established to date to measure the attitude of learners with various work experiences towards continuous learning. Knowing specifically how organizations may improve young professionals' learning and development and career advancement would be very helpful for boosting learner engagement (Mason & Brougham, 2020). Despite claims in the literature about the importance of professionals' attitudes towards continuous learning in general (Tezcan, 2022) and young professionals in particular (Tikkanen et al., 2022), the current study found little support for this. Therefore, greater research into how young professionals' views on lifelong learning affect their personal growth and professional advancement would also be helpful.

Past studies have emphasized particularly on the human and organizational antecedents of

career-oriented learning and development to discover how it might be fostered in an organization (Schunk & DiBenedetto, 2020). Despite progress, our understanding of the antecedents of career-oriented learning and development remains limited. Additionally, despite the plenty of career success studies, only a small number have addressed the phenomena of career success in relation to learning and development in LEAs (Malik et al., 2021). This has caused some people to worry about how environmental and organizational changes, as well as the organic structure, would affect careers and how LEAs understand the subject and the elements that contribute to career success in law enforcement institutions (Kiyani 2020). According to the literature on learning and development, most research worker have focused mostly on the financial, telecom, and banking sectors as well as on NGOs (Southby & Pozo, 2022), with little attention has been paid to the public or services sector (Bhattiet al., 2021). Despite the fact that no organization or economy can be successful until there is stable law and order situation in a country (Rohde, 2002), there are very few researches linked to security or law enforcement organizations that are available in the body of knowledge (Khan, 2022). This is especially true for Pakistan, where hardly anyone would be interested to invest in the absence of a stable security environment (Makki & Iftikhar, 2022). Only efficient and well-equipped law enforcement organizations can make it happen. In this respect, Jenkins et al. (2022) suggest that comparative study should be carried out between various organizations to provide a larger theoretical account on law enforcement whereas Kayani (2022) recommends that factors such as learning and development environment and peer relationship also affect commitment, which needs to be investigated. Some literature addresses participation in learning activities directly (Dogan & Kirkgoz, 2022), but most research focuses on relevant variables or behavior without explicitly addressing a developmental orientation (Baker et al., 2022).

It is therefore, required to be realized that though security and law enforcement sector around the world is being transformed replacing concept of 'Hard power' with 'Soft Power' such as hybrid warfare, due to technological developments (Jahangir & Bashir, 2022) but, in case of Pakistan the situation is different. Being almost a security state and having weak economy there is a long way to go (Kayani, 2022). Thus, the success or failure of LEAs has significant implications for the peace, prosperity, and development of countries such as Pakistan (Hafiz, 2022), which is dependent on the quality development of young professionals as a strategic asset (Groppi, 2021). The confidence, expertise, and capabilities of the leaders would increase with more career-oriented learning and development opportunities. Therefore, to remain more effective and relevant, existing

bureaucratic and militarized learning and development models need to be re-aligned by LEAs (Ghezzi et al., 2021). Hence, for a paradigm change, traditional learning and development practices have to be replaced with innovative solutions for grooming of professionals (Madavi et al., 2022). Current challenges to law enforcement will require professionals who are skilled at pursuing career directed learning activities to their advantage and have capacity for more thinking about law enforcement work (Hassan & Jiang, 2021). Therefore, findings of this investigation are assumed to assist LEA in formulating a plan that meets the needs of young professionals and agencies both in development of current and future potential leaders.

### 1.3 Problem Statement

Since long HRD in LEAs has been dependent on general training for career progression of professionals (Lyer, 2021). However, many contemporary leaders in this field have now started to recognize the importance of a holistic approach for learning and development of employees for their career success (Cronley & Ravi, 2021). Many of the conventional LEAs in Pakistan are also lagging behind in this field (Kayani, 2022). In these agencies as well in other such bureaucratic larger organizations, plenty of potential is being wasted owing to absence of focused early development (Ahmed, 2022). Due to a lack of direction and an unfriendly atmosphere for career progression, individuals are unable to advance their careers despite having the required talents (Hussain, 2020). Moreover, there does not exist uniform policy for development of officers and junior leaders rather separate programs are run for this purpose (Kleygrewe et al., 2022). These organizations also lack a framework of career guidance and dialogues (Daly, 2022), instead rely on authority and discipline as primary methods for training and development. Grades and results are valued over guiding young professionals in the right direction (Munir, 2022). Career success is heavily reliant on a young professional's background education and atmosphere prior to joining the organization (Khan, 2022). This position is especially difficult for LEAs because they must prepare young professionals on a relatively fast pace due to substantial attrition, while keeping the 'survival of the fittest' principle in mind (Yevstafiev & Manoilo, 2021). Therefore, lack of holistic learning and development system for young professionals is also one such challenge and a problem in LEAs of Pakistan which is not well understood (Ahmed, 2022). Even if this problem is identified, the solution to this issue is not known. Continuation of the same could seriously affect initial development of professionals, which is not only linked to their career success, but effectiveness of the organization as a whole (Ghani, 2018). Thus, the researcher intends to examine to what extent learning and development factors such as career guidance and dialogue (Soika, 2020), team based learning (Bonazzi & Rouiller,

2021), and mental model development practices (Dharani & April, 2022) influence the career success of young professionals in larger organizations such as LEAs in Pakistan, using 'attitude to continuous learning' (Budhiraja, 2021) as a mediator.

#### 1.4 **Questions for Research**

This study will address following research questions:

- a) What types of learning and development aspects are required for professionals' career success, and what value do these activities add to the careers of law enforcement professionals?
- b) What is the impact of career guidance and dialogue, team based learning process, and mental model development practices on the careers of law enforcement professionals?
- c) Whether mediation in the relationship through 'attitude to continuous learning' exists between learning and development factors (career guidance and dialogue, team based learning, and mental model development practices) and career success of young professionals in LEAs ?
- d) Can Artificial Intelligence predict career success of young professionals based upon learning and development factors (career guidance and dialogue, team based learning and mental model development practices) in the context of LEAs?

#### 1.5 **Significance of the Study**

The current research will make two major additions in the body of knowledge. To begin with, it discusses how investments by institutions on development and learning of young professionals are likely to affect their career success, the subject that has received little attention in the literature (e.g., Bagdadli & Gianecchini, 2019). It would be interesting to investigate how additional career-related aspects (Burgess et al., 2020) influence the developmental goals and behaviors of young professionals. Therefore, current research goes beyond assessing the only human career development factor on career success (Khan, 2022). Along studying factors, that influence both learning and development and career success, the present study will explore the variables that influence employees' career oriented learning and development. These variables are preferred over other learning and development factors because these are equally applicable to both, effective learning and development strategy and career success of professionals (Spurk et al., 2019). No such research have yet been carried out which integrates both the constructs in this way. The study can also be used as a benchmark for other future researches on hierarchical public sector organizations or LEAs, and can be applied to similar private sectors institutions with minimal modifications.

In addition, these learning and development factors hold good for all training institutions, HRD departments of profit and non-profit organizations as well as for LEAs. Moreover, these factors are part of a wholesome HRD system, which is an alternate to general training and development system. Knowing how organizations may plan and implement career-oriented development for young professionals, in particular, will provide useful insights for enhancing learner engagement (Northup, 2019). Experiencing which sorts of interpersonal interaction are most significant for young professional career oriented development would allow organizations to focus more specifically on these efforts (Naim & Lenka, 2018). The human resource practitioners need to frequently review HRD practices to improve learning and development of the workforce (Mulvie, 2021) in order to realign with the organization objectives (Rotatori et al., 2021). Therefore, findings of this research will benefit the stakeholders, especially HRD practitioners. Since current and future success of an organization depends on quality development of young professionals (Lyer, 2021) thus, outcome of this research can be the turning point to align the needs of all stakeholders. Institutions like other Civil Armed Forces and the Armed Forces, having almost the same issues, are expected to gain a lot from this research effort and would focus more on the development of fresh entrants affecting their career success. Moreover, capacity of Pakistan's LEAs is directly connected to the ability of the state to deal with security issues for economic stability. Development efforts through COHRDPs would make LEAs an efficient, well-functioning service to respond to fifth generation warfare effectively (Tahir & Afridi, 2019). With unanimous public agreement on the necessity for substantial law enforcement changes in Pakistan (Hussain, 2020), this research thesis will provide a right direction in this regard. Current study has therefore, have significance for administrators of LEAs in setting policies for their agencies. Leaders interested in work force planning and development of professionals would use outcomes of this study to assess ways that may appropriately tackle the absence of learning and development of fresh intake of professionals in their institutions (Carter, 2021).

The study intends to support and cultivate current and future professionals, junior leaders, and officers. By examining the career-oriented learning and development requirements of LEAs professionals, this investigation will aid in management and implementation of the young professionals' development program (Mulvie, 2021). Not only would it aid in outlining the learning processes, but it will also raise recognition among upper management for the value of a strategy for the development of young professionals. Providing a systematized career-focused learning and development scheme to professionals is expected to facilitate LEAs to draw competent individuals,

since prospective professional might seek employment in an organization with a culture of learning and development. In order to get an employee of choice, HRD must foster a culture of learning and development and offer opportunities for professional advancement (Boiko-Buzyl et al., 2021). By fostering better communication, greater teamwork, and preparing experts to handle highly complicated and demanding work, this inquiry may contribute towards raising the performance of LEAs as a whole. Overall, the research is anticipated to be a worthwhile investment for the institutions. The price of not training professionals is high. Potential costs to the institution include operational inefficiency, poor performance, a lack of succession planning, and a failure to draw in and keep top people. The findings of this investigation are assumed to assist LEA in formulating a plan that meets the needs of young professionals and agencies both in development of current and future potential leaders as also envisaged by Carter (2021).

### 1.6 Objectives of the Study

The following objectives have been specified for this research study: -

- a) To determine career-oriented learning and development factors affecting career success of law enforcement personnel in order to establish sound HRD system based upon empirical evidence that shows how different policies affect development of young professionals.
- b) To determine whether ‘career guidance and dialogues’ contribute towards career success of young professionals in LEAs.
- c) To determine whether team based learning contributes towards career success of young professionals.
- d) To determine whether ‘mental model development practices’ contribute towards career success of young professionals in LEAs.
- e) To determine whether ‘attitude to continuous learning’ mediates the relationship between development factors (career guidance & dialogues, team based learning, and mental model development practices) and career success of young professionals in LEAs.
- f) To determine as to what extent does the does Artificial Intelligence (AI) contributes in predicting the career success based upon learning and development factors in LEAs context.

### 1.7 Supporting Theory

Learning and development importance can be examined using the Human Capital Theory (for example, Becker, 1964; 1975; Woodhall, 1987). When people invest in themselves or others through learning, training, or other developmental activities (Budhiraja, 2022), it increases their future output. This is known as human capital (Govender & Adegbite, 2022). According to the



Human Capital Theory (HCT), learning and development are the most significant investments on human capital (Isa & Muafi, 2022). A number of elements, which can be human capital, demography, influence career success of professionals interpersonal and organizational processes (Modestino, 2019). Most studies examining how these factors affect career success employ Human Capital Theory as their primary theoretical framework (Spurk et al., 2019). Therefore, theoretical perspective of current study is supported by this concept since the mechanism linking career oriented human resource development practices (COHRDPs) to career success is broadly explained by Human Capital Theory. Hence, it can be claimed that exposure to various disciplines rather than continuously engaging in the same exercise will be better for a person's human capital (Kankaew & Vadhanasindhu, 2022). Since the purpose of this study is to analyze the literature and determine whether scholars and practitioners of human capital development should plan for a comprehensive approach, like career oriented HRD (Wang et al., 2022) therefore, such an approach will enhance development and career progression of professionals and, at the same time will boost organizational productivity (Horak & Yang, 2019). Thus, current research work contributes to Human Capital Theory (HCT) and research on career success by boosting the expounding power of Human Capital Theory through investigating the collective impact of numerous development strategies with mediating influence of 'attitude to continuous learning'. Since it is established that human resource development (HRD) is being replaced by learning and development (L&D) in the field of management since long. Therefore, based on learning and development theories and HRD concerns, the three-fold goal of this study is to establish methods for improving the theoretical linkage between HRD and Human Capital Theory, promoting theory building in learning and development, and contributing to meaningful convergence on current human capital theory. Because all of the learning and development elements described in this study affect the development of human capital, it will also be the sole addition to the literature concerning Human Capital Theory.

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.1.1 General**

This chapter covers review of literature on current research study, which is comprised of twelve sections. Initial two sections provide an overview of HRD, including its evaluation in the context of Pakistan, and career-oriented HRD. In Section III to VII, historical, contextual and theoretical aspects of learning and development, quality development, career-oriented learning and development alongwith few learning and development models, and learning and development of young professionals have been debated in detail. Section-VIII establishes the linkage between career-oriented learning and development and Artificial Intelligence. Sections IX to XI provide an overview of Pakistani LEAs, including their career-oriented learning and development efforts, as well as a review of the entire system. In Section XII of this chapter, theoretical framework has been discussed alongwith literature review on all the variables of the study in a chronological order, starting from dependent variable, which is career success. Review of literature on each variable covers its definition, historical perspective, references from previous research studies and relevance to current research study, in order to work out research model for development of hypotheses for empirical testing.

### **SECTION – I**

#### **HUMAN RESOURCE DEVELOPMENT**

#### **2.1.2 Human Capital - Origin and Concept**

Human Capital idea first emerged when Adam Smith's "The Wealth of Nations" was released in 1776. His book's two guiding principles have proven to be the cornerstones of all subsequent researches on the idea of human capital (Amberg & McGaughey, 2019). These two ideas have the following components: (1) employee inputs are not only quantitative, they quantitatively take into account the acquired and valuable qualities of all public employees as well as the current level of knowledge, skills, and opinion held by the workforce. They also take into account the fact that (2) skill gained through education, employment, and other means always has a true cost, which is a capital permanent and effectively realized as it were in person. During the 1950s and 1960s, the concept of human capital and accounting for value through information acquired via acknowledged learning, practical training, and other informal methods continued to grow. Leading scholars including Becker, Denison, Fabricant, Mincer, and Schultz's work

popularized the concept of investing in human capital and its analysis (Mohamed, 2016). In contrast to the previously identified four essential components of the cumulative production model—physical capital, labour, land, and management—these scientists concentrated on a residual aspect called human capital. The Nobel Prize winner Theodore Schultz defined human capital as the residual component (Sono & Schultz, 2008). According to Schultz's definition of human capital, expertise and knowledge acquired during the course of training and learning are the type of capital that occurs due to investments which provides returns (Suseno & Pinnington, 2018).

### 2.1.2 Human Capital Theory

This theory asserts that learning and other knowledge have a valuable impact on productivity and efficiency. The idea also distinguishes between broad and firm-specific learning when it comes to on-the-job learning. These ideas have long-term effects on HRD. According to the human capital idea, society and individuals can benefit financially from investments on people (Uddin et al., 2016). This theory has generated a standardized and generally applicable logical structure for researching and estimating a Return on Investment (ROI) for on-the-job learning, teaching, and other knowledge (Atkinson, 2016). It is the responsibility of HRD researchers and professionals to resolve ROI. Kirchner and Akdere (2019) assert that organizational leadership is capable of realizing that providing learning and development to human capital is a necessary investment if it is to succeed above higher returns on strategic direction. The notion of human capital also asserts that spending money on education, professional development opportunities, and other knowledge has a positive bearing on effectiveness (Yahya & Tan, 2015). The wide-ranging consequences of this theory have also highly affected strategic planning necessitating requirement for the development and placement of human capital to maintain a competitive edge by earning better ROI through investment in hidden capital (Amberg & McGaughey, 2019).

### 2.1.3 Defining Development of Human Resource

HRD is highly essential area of concern for administrators of present era. The subject comprises competencies, commitment and culture as defined by Donald et al. (2019), one of the pioneers of HRD. In order to make an organization function effectively, all three aspects are vital. The scholars further state that without focusing on these three areas, organizations cannot achieve efficiency. HRD, as stated by Sodikjonov (2020), is a practice of training fresh intake of professionals for their development, adjustment, career advancement and skilling, in order to improve personal development as well as teamwork, thereby achieving the promising results for the organization. Knowledge has no value unless there is prospect of applying it, which is accomplished

through experience (Obeidat et al., 2019). To achieve this all, learning and development is a one of the effective instrument and a part of employee welfare package for their promotions. These practices produce highly motivated and pragmatic professionals who enable the organization to achieve its goals (Manuti, 2020).

#### **2.1.4 Human Development in Historical Context**

HRD in view of Nadler (1984) is chain of activities on learning intended to transform behavior of learner. For the first time the subject was introduced in George Washington University in 1968, followed by at Miami during the conference of ASTD (American Society for Training and Development) in 1969. This subject gained further acknowledgement during the decade from 1970-80. However, initially it was considered as a substitute to T&D (Nadler et al., 1984). Japan is the pioneer nation for initiation of HRD activities as opined by some of the management practitioners. Most accepted conviction in Japan is that ‘Better People’, not merely better technology, is the most certain means to a ‘Better Society’ (Bandura, 1989). This is the reason that many HR professionals and researchers have focused on how to develop human resource through HR department to achieve effectiveness in the organization.

#### **2.1.5 Human Resource Development in Pakistan**

Both the governmental and private sectors in Pakistan are concerned with HRD. Following the 18th Constitutional Amendment, the planning department, the labour workforce and Pakistanis overseas ministry as well as the labour and HRD ministries, are responsible for managing HRD in the public sector. Other departments involved in HRD include NCHD (National Commission for Human Development), NAVTEC (the National Vocational & Technical Education Commission the Provincial Technical Education), TEVTA (Vocational Training Authority), and HEC (the Higher Education Commission). Although the Government of Pakistan acknowledges the significance of HRD, it does not approach the issue holistically for human capital development instead places additional focus on training and development (HEC website, 2008).

#### **2.1.6 Human Resource Development in Government Sector**

In order to promote HRD in Pakistan, students, instructors and scientists are awarded scholarships by P&D (planning and development) Division via Higher Education Commission (HEC) of Pakistan. The HEC website (2008) states that a variety of scholarships are awarded to seek PhD degrees from foreign colleges, for which people are sent abroad to conduct research, and accordingly Pakistanis living abroad are given employment at a variety of universities in Pakistan. The development of people and organizations in the social sciences, humanities, engineering,

agriculture, and technology is the main goal of HEC. To develop policies for employment administration, human resource management, and employment promotion is the responsibility of the labour, workforce and Pakistanis overseas ministry. The vision of the ministry is described on the website as focusing on the socioeconomic advancement of labour class, improving workforce-management affairs, encouraging a culture of competitiveness and protecting the self-respect of labour by fostering a respectable workplace. National Commission for Human Development (NCHD) was created as an organization in 2001 at federal level. The improvement of public sector delivery mechanisms was its main goal as it focused on fulfilling the millennium development goals through the social sector. It tried to tackle issues including adult education, female empowerment, and strengthening local competence. It also addressed universal primary education. NCHD served as an incubator for enhancing the capabilities of the public sector and non-governmental organizations (Nahyoon, 2008). The Pakistani government launched NAVTEC in 2006. Its main objectives were to create national occupational skill standards, build HRD strategy, and advance technical education and vocational training (NAVTEC, 2008).

#### **2.1.7 Human Resource Development in Pakistan's Non-profit Sector**

The non-profit sector, commonly known as the non-governmental organization (NGO) sector, appears to be significantly more structured, knowledgeable, and dedicated to advancing HRD than any other sector in Pakistan. The promotion of HRD in Pakistan has been significantly helped by both national and international NGOs (Gould-Williams, 2007). Through public-private partnerships, the NGO sector has been able to advance human development through variety of methods, which involve adult education, creation and delivery of training programs, the provision of funding for socioeconomic uplift, the establishment of health facilities and elimination of teenager level labour. Currently, umbrella entities in Pakistan that have established forums for several NGOs are the NGO Resource Center (NGORC) at Karachi and Social Enterprise Development Centre (SEDC) at Lahore.

#### **2.1.8 Analysis of Human Resource Development in Pakistan**

If people's abilities are developed and their inspiration level is increased, HRD can help community fulfill their aspirations and drive the economy forward. However, aptitude development has been the most neglected sector in Pakistan, where professional and vocational talents are developed at a modest speed but inventive, psychological, individual, and social abilities are overlooked (Jamil et al., 2018). The Human Development Index (HDI) for Pakistan, a developing nation, shows a depressing picture. According to the UN, Pakistan's HDI is 0.5, placing it 152th out

of 189 nations (UNDP, 2019). The 2008 Academy of HRD meeting in Asia acknowledged the relationship between HRD and sustainable development. Pakistan's low performance in Human Development has an impact on the condition of HRD, which is regarded as the most important discipline to focus on in recent times since organizational development is inextricably linked to HRD. It translates into improved societies, workplace changes paradigm due to global competitiveness and the value of evolutionary knowledge and abilities of individuals and societies. Even though the majority of Pakistan's population is illiterate and employed in the informal economy (Shahid, 2014), there is no system in place to increase the skills of these people. Focus should be placed on developing the existing and transferable abilities of the workforce in the informal sector on a more systematic and logical basis (Jamil et al., 2018). Unfortunately, the HRD for daily wages workers in the manufacturing and industrial sectors as well as the agricultural sectors is also overlooked in modern societies.

The learning and development system also fails to connect learners with the world of work and does not invest in human capital creation. It is observed that the area of HRD is facing challenges due to absence of resources and competent HRD professionals (Jamil et al., 2018). Similarly, in Pakistan, only 2 % of the national budget is dedicated to education and vocational training sectors, and even this small amount is not enough to fund HRD initiatives (Aftab, 2007). In contrast, the non-profit sector and the public-private partnership sector are involved in HRD in more organized manner. Furthermore, it has been noted that the human development sector in particular has significantly increased the application of HRD at the local and regional levels (McLean, 2006). According to the OECD 2016 official development assistance report, Pakistan ranks fourth among the top five ODA recipient countries, with a large portion of official development assistance and foreign funding invested in education and economics is 24% and 51%, respectively (OECD, 2016), which directly and indirectly contribute to HRD and organizational growth.

## **SECTION - II**

### **CAREER-ORIENTED HUMAN RESOURCE DEVELOPMENT SYSTEM**

#### **2.2.1 Existing Career Management Practices in Organizations**

Career management at organizational level (OCM) means actions initiated to support career growth of professionals (Baruch & Peiperl, 2000), which involves assisting in their transition into leadership roles and supporting them in receiving promotions and salary raises (Vinkenburg &

Weber, 2012). The professional literature has recognized that career success has extended beyond money and prestige alone in the last 25 years, conceptualizing "new" career models based on people's initiative (Tomlinson, et al., 2018) and accepting that occupational achievement have developed into a term that encompasses more than just income and position (Ng et al., 2005). Despite this, organizational career management has maintained its position in research and practice because it strives to address the most significant difficulties being faced by human resource practitioners in the organizations (Koch et al., 2017). Since 1970s (Bowen & Hall, 1977), theoretical research on organizational career management has primarily concentrated on rendering suggestions and guidelines to the organizations for the development of quality succession programs. Besides recent research has focused on the concept of organizational career management strategies that can assist professionals in achieving their career aspirations, either independently (Baruch, 1999) or as a whole (Lepak & Snell, 1999). However, except for Rosenbaum's (1984) classic work, which subsequent research on career has largely overlooked, no scholars have provided a theoretical justification for the connection between organizational investment on career development and career success. In addition, no all-inclusive empirical study has evaluated the efficacy of organizational career management methods, either individually or collectively (De Vos, Dewettinck, & Buyens, 2008). Therefore, it is necessary to suggest a framework that highlights the association between career managing practices of the organizational and employees success in career (Cappelli & Keller, 2014). Such an attempt will provide a valid and empirically tested definition of the impact of career focused development methods on successful career trajectories for professionals (Gill, 2018).

### **2.2.2 Organizations' Role in Career Management**

Career management efforts by organizations refer to "practices deliberately established by organizations, to improve the career effectiveness of their employee, establishing what employees want from their careers, providing appropriate career opportunities for employees, identifying which employees deserve these opportunities and then providing them" (Orpen 1994, p. 28). As per Doyle (2000, p. 229), organizations design a variety of interventions and initiatives under this category "to promote and contribute to their goals [while giving individuals] the opportunity to satisfy their personal needs and aspirations". Clarke (2013) demonstrated that in several organizations, professionals are responsible for their own career growth, but the organization continues to assist their professional development through career progression programs. This analysis looked at the evolution of organizational career models. The theoretical justification for the connection between

organizational investment and personal career growth was outlined in Rosenbaum's landmark work from 1984. Instead, according to Rosenbaum (1984), organizations spend far more on “selected” persons with the capacity to move into leadership positions than they do on normal individuals. Organizational investments transform over time into individual accomplishments through a dynamic process, which serves as both the foundation for continued career growth and the criteria for choosing people who will move up the corporate hierarchy. Rosenbaum's (1984) process is one of the few attempts to analytically characterize the organizational factors that support individual career advancement. Since 1980s, majority of research produced (Baruch, 1999) focused on adoption as well as spread of organizational career management techniques in organizations. The mechanisms identified by Rosenbaum (1984) has largely been overlooked in the majority of the studies on the subject of career thereafter (Baruch et al., 2015).

### **2.2.3 Career Oriented Human Resource Development System**

The model for human development activities in agencies is highly influenced by career-oriented HRD. For instance, Schein (1978) discussed the call for “whole systems” adequate for locating, fostering, and supervision of professionals right through course of their careers. Such all-inclusive HRD schemes would incorporate techniques meant for tying together various organizational and personnel tasks like strategic HRD, performance reviews, personnel evaluations, and career-oriented HRD in a way that makes it easier for requirements of professionals and organizations to be matched over a period of time. Similar to this, model of career notion by Driver (1978) calls for taking into account the entire system of organizational and human functions since it provides a framework for identifying and establishing strategies for management of career at organizational level. The said model involves an investigation of vertical or lateral movement as well as factors that steer individuals in their professional requirements. Therefore, long-term, constant merger of recruitment approaches, task allocation and placing techniques, learning and development activities, performance evaluation processes, incentives, and structure of organizations is required to establish and sustain compatibility between personal career conceptions and procedures of the organizations (Driver, 1979). As an organization develops, fresh human resources experts are employed, and new guidelines and processes are established, staff and HR activities often evolve as well.

Therefore, distinct functions that were created and put in place during different periods, by distinct individuals, responding to various requirements, cannot work together as a unit to accomplish similar goals. As was already stated, a variety of HR practices are involved in career



development and channelization. Consequently, the career advancement tactics advocated by models on career-oriented development by career theorists are at odds with situations where HR activities collectively do not make any sense (Schein, 1978). Recent models on human development and management of career promote a view of HRM as a system. When approached methodically, career management is not merely another HR activity that runs separately from other HR responsibilities. Development of career and its management is instead viewed as a practice that combines HR and activities in the organizations, which together form a scheme of interdependent units (Driver, 1979). Unfortunately, there are not many conceptual tools available to build career-oriented HRD system or to diagnose system as a whole. In practice, most HR systems are separate collections of parts that are rarely created from a “whole systems” perspective. According to Walker and Gutteridge (1979), a HRD system is required that has a certain set of parameters which may be used for both design and diagnostic purposes. Therefore, the researcher makes suggestions about how to create a career-focused HRD system using this framework as a guide.

#### **2.2.4 Need for Career-Oriented HRD System**

Training institutions and organizations are becoming more aware of their important role in assisting young professionals with both their educational and professional advancement (Gysbers, 2005). Careers no longer grow within predefined parameters and are hence, to a significant degree, unexpected (Pryor & Bright, 2011). Young professionals are also expected to have an inner motivation to perform while joining the organization (Bimrose & Hearne 2012). In today's competitive world, it is essentially the duty of the individual to realize a sustainable career (Maree, 2016). Organizations consequently support the concept of fostering the development of various skills necessary for fulfilling market needs, like the ability to adapt to changing circumstances grounded on a dedication to both the job and the organization (Hillage et al. 2002). Such acceptance occurs without recognition that these abilities need a diverse learning atmosphere compared to the situation when conventional technical skills were emphasized (Smith & Comyn 2004). The current study outlines the way institutions view their organization's initial situation as it transitions to informal learning circumstance that are centered on helping learners in up-skilling they need in training facilities and external factors that have an influence on intrinsic organizational culture. Therefore, emphasis of the present research is on inner organizational elements against societal influences of outside.

## **SECTION - III**

### **LEARNING AND DEVELOPMENT IN PERSPECTIVE**

#### **2.3.1 Definition and Explanation of Learning and Development**

Development of professionals, management improvement, development of leadership, development of aptitude, development of staff, development of career, workplace development are just a few of the names that are used in the literature to define the subject of learning and development. All of the aforementioned terms are resorted to interchangeably throughout this study to represent the language found in the literature, with the idea that learning and development serves as the study's overall subject. All progress requires learning, which is the process of acquiring knowledge and abilities (Saks & Haccoun, 2013). Development involves a person gaining new skills for both their current and future careers (Bryson et al., 2006; Saks & Haccoun, 2013). Learning and development is ongoing practice and can be achieved in a variety of ways, both formally and informally. Gaining information and abilities necessary for the task at hand by means of both recognized development initiatives and unstructured community exchanges between coworkers is known as workplace learning (Saks & Haccoun, 2013).

Jacobs and Park (2009) argue that learning at place of work is the process that professionals use when engaging in skills training, professional development programs, or other types of experience-based learning course in order to acquire the competence to satisfy their present and prospective occupational requirements. The definition presupposes the need to strike a balance between necessitates of professionals to pursue knowledge acquisition to further their own work-related interests and goals of organizations, which provide the context for the learning, even though this balance is not always achieved uniformly. Since “organizations learn only via individuals who learn,” learning must begin at the individual level (Senge, 2006, p. 129). The three levels of learning and development programs for learning at personal, group, and at the level of organization are widely acknowledged (Saks & Haccoun, 2013). Each level functions independently to affect learning in this multiple systems perspective, but they also interact with one another. According to Schein (2010), “organizations, their leaders, and everyone else would need to become learners as the world grew more complicated and diverse” (p. 365). Learning and development at work is a process that a person goes through to work in their current position and to prepare for the future.

#### **2.3.2 Learning and Development - Contextual Aspects**

Development through transfer of training is accepted as nucleus of any organization. These procedures significantly assist in the personal development of those involved (Northup, 2019).

Additionally, the professionals must comprehend that they have the skills and capacity to alter both their current setting and the contexts in which they choose to operate. Learning and development, as a discipline of management study and practice, is concerned with how humans, either individually or in teams, obtain a sensation of gaining anything which is available previously or generates in the sense of producing something entirely novel (Harrison, 2009). Such procedures give professionals the chance to increase their own awareness and abilities, liable to help them perform better and advance in their current or future occupations (Khan, 2022). Learning is conceived as a continuous process that occurs throughout the lifetime of every professional. People need to learn new things and broaden their knowledge of various topics throughout their life. They can contribute to development in this way. Learning allows to develop an effective grasp of the ideas, know-how, attitudes, and behaviors that may help people function and carry out tasks and activities in the right way (Walton, 1999). Individuals can promote professional growth and development when they are able to apply the skills and attitudes successfully in their daily life. It is well recognized that employees must develop their skills and competencies while carrying out their job responsibilities (Kurbanova, et al., 2022). When they are effectively engaged in the learning processes, they will be able to upgrade their knowledge and competencies. Learning has the ability to help people and organizations achieve their individual and collective targets.

### **2.3.3 Significance of Learning and Development**

In most cases, the HR division incorporates concepts of learning and development. Development though learning is seen as an essential to the HR sector in more than two-fifths of the organizations. While in a fifth of cases, it is a component of generalist HR duties (Atkinson, 2016). It is critical to develop a thorough awareness of the organization's goals and objectives in order to comprehend the relevance and meaning of these notions (Clanchy et al., 2019). In 25% of the organizations, the learning and development strategy is in line with organization needs. Both are generally aligned with some discrepancies in some instances. Lack of clarity is supposed to be the main obstacle to alignment (Stuart, 2015). In other words, people are unable to comprehend the significance and meaning of learning and development in situations where they lack a clear understanding of the organization's aims and objectives or their own work responsibilities. Therefore, it is fundamental to establish in-depth grasp of organizational goals in order to recognize the significance and meaning of learning and development.

It is essential to broaden one's understanding of learning technologies in learning and development (Stuart, 2015). Larger organizations tend to use learning technology more frequently.

Compared to smaller organizations, they are more likely to include integrated learning and e-learning as among the most popular learning and development strategies (Puteh et al., 2015). Learning and development initiatives are reckoned being fundamental to the organizations. The people who participate in learning and development programs receive information on several organizational issues. These comprise things like history, departments, people, goals and objectives, job responsibilities, and so on. The individuals should also receive counseling and guidance services in addition to learning and development (Tahir et al., 2018). Expert counselors are hired to provide guidance and support to the staff in finding answers to a variety of issues and challenges in counseling and guidance services as well. The people can improve their knowledge and comprehension of many ideas and domains through counseling and other services (Hackett, 2018).

Most of the time, organizations support the training of learning and development specialists. Awareness of organizational goals, market factors, external environmental conditions, and proper understanding of one's professional duties and responsibilities are regarded as the important aspects in order to become an HR professional, especially given the current emphasis on alignment with the organizational strategy (Winda et al, 2017). There is a need to allocate time and financial resources for training events, courses, conferences, and seminars to be able to assist in professional development and capability enhancement. In this way, professionals are given the chance to enhance their expertise and competency (Stuart, 2015). All individuals must develop their professional competence and abilities to be able to successfully perform their employment obligations. It is believed that education is crucial for ensuring that people have access to knowledge about a variety of concepts and topics as well as for fostering professionalism among them (Du Plessis & Sukumaran, 2015). Additionally, it is essential to make sure that organizations employ knowledge in the proper way when carrying out work obligations. As a result, it can be said that performance appraisal systems have significantly contributed to fostering learning and development (Hsieh et al., 2019). Regular appraisals, encouragement of self-reflection, personal development plans, and targets that are connected to the organization objectives are all realized as useful aspects of performance appraisal systems (Stuart, 2015).

#### **2.3.4 Learning and Development Types**

Understanding various models of development through learning will help professionals choose the one that would work the best for his/her situation. Making sure that learning happens in a manner that meets the requirements of both the professional and the organization may be more significant than the type of learning and development. All sorts of management and leadership

development programs, Belling et al. (2004) hypothesized, “have the potential to enable participants to learn and transfer their learning back to their organizations if they are structured and delivered effectively”(p. 252). There is no consensus in the literature regarding the best ways for individuals to learn or the efficacy of various learning methods. According to Yukl (2013), formal education, self-improvement activities, and developmental activities can all be used to develop leadership. Coaching, mentoring, and special assignments are examples of developmental activities that can be included in operational job assignments. In literature review by Jacobs and Park (2009) on workplace, learning and development, it has been found that there are two main types of learning: informal acquisition of knowledge and formal learning. Official or formal learning comprises of organized education programs, nearly all of which are sponsored by organizations (Jacobs & Park, 2009). Informal learning takes place at work and involves developing knowledge and skills through practice. Informal education may take the form of work shadowing, coaching, mentoring, and group problem-solving (Jacobs & Park, 2009).

According to Billett (2004), the definition of workplace learning as informal, non-formal, or unstructured implies that it is weak, adhoc, and less credible than learning in a classroom. He disagrees with these terms. Additionally, Billett said that it is crucial to recognize that not all learning takes place in classrooms and there are other learning environments such as the workplace. According to Conger (2010), traditional leadership development programs still have their place and, when done well, may be quite effective in development of leaders. According to Conger, individuals frequently fail to remember the subject of their growth quickly once an activity finishes; individuals must create further enduring approaches for post-training improvement. People frequently forget about their development soon after a program concludes. Since we are aware that progress is a continuous process, this is a big tragedy. When a program finishes, it never ends (Conger, 2010).

One can think of learning and development as both formal and informal (Saks & Haccoun, 2013). Off-the-job activity of learning and development is formal, whereas on-the-job learning and development is primarily informal. Management knowledge acquisition or learning may take place fully at workplace (Frost & Wallingford, 2013). Taking supervisors away from their positions is too costly and futuristic learning through seminars, courses, and discussions may not take place. As an alternative, Frost and Wallingford (2013) have suggested a strategy, which involves appraising professionals’ abilities, instructing, or mentoring, informal training, developing a personalized learning plan, and giving ongoing, frequent feedback. To establish and oversee the manager's individualized learning plan, HR, the supervisor, and the manager would participate in this process

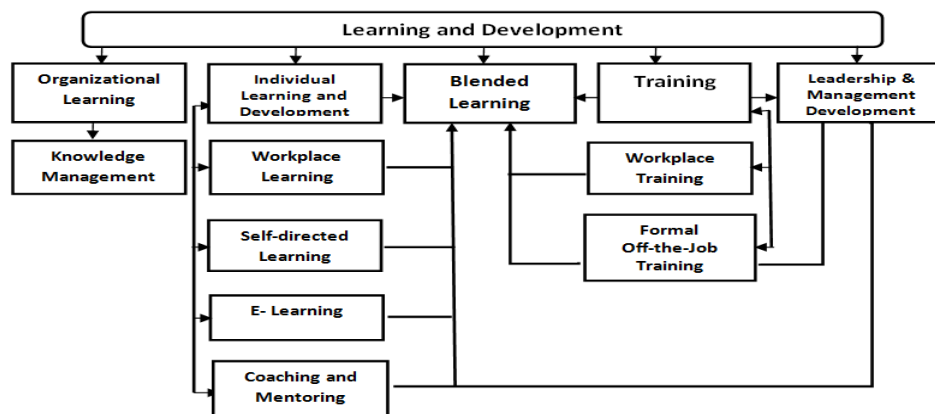
(Frost & Wallingford, 2013). According to Saks and Haccoun (2013), job rotation, coaching and mentoring are the most typical forms of informal growth. Several disruptions that can obstruct knowledge acquisition at work are one of the drawbacks of on-the-job learning and development. According to Saks and Haccoun (2013), researchers have also stated that, a mixed technique, using array of modalities appears to be the most successful.

Career development includes bounded programs like coaching, workshops for career planning but many organizations lack the time or resources to provide a structured training program due to the fast workplace changes, including downsizing, re-organizations, and changing career needs (McDonald & Hite, 2005). These authors recognized unofficial acquisition of knowledge, groups, participation of society, and alternate kinds of mentoring as four boundary-spanning learning activities that can be used to advance employees' careers (McDonald & Hite, 2005). The resources needed by these boundary-spanning operations are often less than those needed by more established bounded-development programs. Researchers agreed in the literature that informal learning and development might take numerous forms, including organized group of people, mentoring, workplace shifts, career training, and learning projects (Yukl, 2013).

### 2.3.5 Components of Learning and Development

The main goal of acquisition of knowledge or development learning as a strategy of organization is to promote combined improvement through encouraging, knowledgeable, and morally stimulating learning that supports professional goals, enhances individual knowledge, and recognizes and constructs on diversity (Jovanovi et al., 2016). Figure 1.1 depicts the learning and development add-ons as stated by Jovanović et al (2016):-

**Figure 2.1: Components of Learning and Development**



Source: Jovanović, Z., Damjanović, A., & Dimitrijević, V. (2016). *Learning and development in modern organizations*.

### 2.3.6 Learning and Development Trends

According to research, workplace learning and development is shifting away from traditional classroom instruction to more adaptable on-the-job learning strategies. Organizations may look for more informal learning opportunities as the pace of work accelerates but lack of resources and time to organize such official learning is the main issue (Saks & Haccoun, 2013). The need for knowledge sharing has grown, leadership is supporting it more, and there are more informal activities started by employees, all of which might be linked to the growth in informal learning (Lavis, 2011). Although there is a transition from prepackaged to personalized and customized knowledge acquisition, organizational management to personal-management, and classroom presentation to ongoing, just-in-time, and mixed delivery methods, there is still a major emphasis on the classroom learning (Garavan et al., 2012). According to research, only 30% of occupational essentials learnt and known by professionals are acquired through formal training and development programs whereas, what they learn and know acquired informally is about 70% (Saks and Haccoun, 2013). According to Chambers (2013), experts in the industry believe that 80% of employee learning and development comes from experience, from mentoring and coaching 10%, and remaining 10% through formal education. According to Chambers' summary, "Overall, the prevailing method involves developing supervisors and employees in the context of their ongoing work experience rather than taking supervisors and employees away from their work environment so that they can develop" (p. 140). Learning is conceptualized as a process more collaboratively and fluidly in learning and development instead of being final product (Lavis, 2011). Despite the fact that organizations are employing informal approaches frequently, there is still much to learn about their efficacy (Garavan et al., 2012). Although there are numerous development strategies in use, there has not been enough research to determine how beneficial they are (Yukl, 2013). Appraisal of efficacy will be more decisive as HR faces increased pressure to deliver customized, business-focused learning programs that are in line with institutional plan (Lavis, 2011). Hayward (2011) probed if appraisal methods stand outdated and pointed out that as organizations adopt creative learning and development strategies, they also need to develop methods for measuring the effects of these initiatives. Learning and development systems will vary depending on the organization, and their success will depend on how well they fit with the culture (Simonsen, 1997; Stahl et al., 2012).

### 2.3.7 Formal and Informal Learning

The administration of an organization typically oversees and institutionalizes formal training. Formal learning and development often uses a range of learning techniques to share

knowledge, has clearly stated learning objectives or abilities that trainers expect learners will learn on culmination of training, and includes an appraisal at the conclusion to determine how much participants have learned (Landry, 2015). The managers of the organization will then typically evaluate the workers to see what they learnt and whether they accomplished their goals (Winters, 2012). Professionals, however, can learn through both informal and formal learning and development approaches, with the majority of workers and workplaces often applying both. The bulk of the time, informal learning does not call for any kind of curriculum or framework, and is not institutionalized or assessed (Jacobs, & Park, 2009). For more seasoned workers who wish to hone their abilities, gain firsthand knowledge, or pick up knowledge from their coworkers by working alongside them, this type of learning may be best (Pandey, et al., 2019).

### **2.3.8 Impediments in Learning and Development**

It may be simple to draw the conclusion regarding importance of learning at the level of managers. Longenecker (2010) observed that what is essential to realize is that the barriers barring managers obtaining knowledge and acquiring abilities needed to perform well as organizational change are taking place everywhere. According to the literature, organizational culture and structure as well as lack of time and employees' interests are the main causes of learning and development hurdles. Seven aspects that are having an impact on learning and development have been recognized by Belling et al. (2004) including group resistance to training, absence of help from teammates, lack of peer support, paucity of support during job performance, stresses due to work time shortage, non-existence of control and worthlessness of the training package. The traits of restrictive learning and development environments listed by Fuller and Unwin (2004) include partial participation in groups, lack of a shared tradition of improvement, absence of learning chances, lack of support for professionals looking for prescribed qualifications, majority of learning and development occurring on the job with limited opportunity for reflection, and lack of a formal workplace program. Several researchers have undertaken studies on the barriers to learning and development. Two such independent qualitative studies were carried out to determine the challenges in learning and development of managers (Longenecker, 2010). The daily time constraints at work, a lack of organizational means, absence of managerial support, and paucity of time for preparation followed by scrutiny, were some of the similar barriers discovered in both the researches. Time constraints was listed as the main obstacle to managerial learning and development as identified by Longenecker (2010) at 82%; likewise, Belling et al. (2004) placed time constraints and the emphasis on short-term performance as the top barrier at 72%. Professionals must be responsible for their own



learning, and both studies established that barriers included being ignorant of gaps in knowledge, lacking motivation, or being unwilling to learn. These investigations lead to the inference that the hurdles will differ for each organization and employee. Learning is challenging in organizations where long-term planning is highly valued while short-term results are prioritized and lack of leadership support in learning and development by allocating adequate funds or staff time.

### **2.3.9 Learning and Development Linkage to Organizational Culture**

The learning and development environment is influenced by culture, which is universal (Schein, 2010). The culture is like an organization's personality (Bower, 1966). Implementing the conclusions of Bower's study will require an understanding of the relationship between organizational culture and learning and development. More leadership development is expected if individual learning and development is valued greatly for organizational success (Yukl, 2013). In such an organization, training will get greater resources, and explicit learning measurement and rewards will receive more attention. A development culture requires dedication, communication, and trust (Simonsen, 1997). Although learning is professionals' own concern, senior leaders must help supervisors and employees if they desire improved performance (Longenecker, 2010).

### **2.3.10 Enablers of a Supportive Learning and Development Culture**

Organizational culture, according to many authors is important to learning and development (Schein, 2010; Simonsen, 1997). Robust learning and development environment should be fully backed by the executive team to achieve improved levels of workforce commitment and an encouraging organizational culture (Lavis, 2011). Two essential elements in organizations that foster productive learning environment for employees are access and opportunity to learning and development (Bryson et al., 2006). Learning and development environment is characterized by Fuller and Unwin (2004) as expensive and limited. Facilitating workers to obtain professional training, professionals' involvement in multiple work teams, time off for introspection or learning, learning and improvement as a way of career progression, and instituting a readily available place of work syllabus all are the characteristics of expansive environment (Fuller & Unwin, 2004). According to Yukl (2013), organizations have a variety of options for fostering learning and development, including designing work schedules that give employees time to try out new approaches, offering financial support, and setting up skill-building seminars and guest speakers. Belling et al. (2004) discovered a supportive culture falls under three broad categories: features of learners as individuals, workplace constituents for them, and kinds of experience of learning and development. They concluded that there is no single factor that generates a friendly culture.

The top three factors for better transfer of learning, according to Belling et al. (2004) are learner's willpower, being cognizant of his strong and weak areas, and appreciating advantages of learning and development. According to Conger (2002), a person must be responsible for his own career planning, but top management, managers, and professionals themselves must all actively support and participate for a career development culture to succeed. In order to create a supportive learning and development culture productively, top leadership, learners, and a strategic resource investment are all required (Al-Hussami et al., 2018). Strong executive backing, supervisors who encourage learning and development, self-driven professionals, continuing long-term investment, and techniques are some of the main essentials that researchers have identified as supporting the creation of learning and development culture (Amberg & McGaughey, 2019). In conclusion, a program reinforced by senior executives as per organizational goals, and designed with employee involvement would be the critical components of a successful learning and development culture.

### 2.3.11 Areas of Learning and Development within Organizations

The following are the main organizational areas where learning and development occurs:-

- a) **Communications.** The individuals within the organizations vary from one another in a several ways. Caste, race, ethnicity, religion, culture, learning background, personality qualities, and socioeconomic status are some of these aspects (McNamara, 2008). Consequently, they might speak various languages but mostly, people speak in the same language with one another in a workplace setting. It is essential for people to use polite and respectable language in order to foster efficient verbal and written communication (Obeidat et al., 2019). Effective communication mechanism is the key component of training and development program. Therefore, it can be said that encouraging efficient communication procedures is crucial for fostering effective learning and development inside an organization.
- b) **Technical Skills.** Technical proficiency is seen as one of the most significant aspect for human resources. The people at all levels must be prepared to use mobile devices, computers, printers, photocopiers, scanners, and other equipment (Camp et al., 2022). People who use these technologies must be educated about both how to use them and their features. According to research, people participate in training programs to learn about how to use computers (Alerasoul, 2022). Through training and development programs, individuals occasionally improve their technological knowledge and skills within organization as well. Technical proficiency is viewed as an essential feature for carrying out office and administrative activities (Kapoor, 2023).

c) **Customer Service.** Employees must know consumer needs in order to meet better competitiveness in the global marketplace of today (Stewart, 2014). It is vital for all of the organizations to increase their knowledge of current and innovative techniques, engage in regular research, cultivate the virtues of assiduity, resourcefulness, and conscientiousness, and demonstrate efficiency in order to perform the task of providing customer service in the proper manner (Juraev, 2022). These characteristics will allow them to meaningfully add to the efficient promotion of customer service.

d) **Diversity.** Normally, diversity training includes explanations of the various perspectives and viewpoints that people have. There are many ways of people differing from one another (Mann & Webb, 2022). Despite these disparities, people must cooperate and integrate when working together. Research has revealed that diversity is prevalent and obvious inside organizations. Employees must provide equal rights and opportunities for all, respect one another's honour, and treat one another with dignity in order for the organization to fulfill its aims and objectives (Juraev, 2022).

e) **Ethics and Morality.** The society's demands for corporate social responsibility are rising in the modern world. A wide range of beliefs and ethics are brought into the workplace through diversity in the workforce (Naim, 2021). Despite individual variances, it is imperative for people to practice morality and ethics. Morality and ethics grant persons with knowledge regarding the ethics of sincerity, righteousness, and honesty (Loughlin & Barling, 2001). People undertaking supervisory, managerial or role of service provider, and other work activities must always act morally and ethically when carrying out their jobs (Holderby & Van Domelen, 2015). Hence, it can be contended that morality and ethics should be practiced throughout one's career.

f) **Good Relations with Others.** The organization's members must keep a positive affiliation with one another. When a person's responsibilities are multifaceted and they are unsure of the best practices to use, they must look for support from others (Koeslag-Kreunen et al., 2018). As office employees are completing their jobs, they must constantly interact and discuss various issues with one another (De Haes et al., 2020). Therefore, it can be said that members of the organization will be able to do their job obligations in a well-organized method and achieve organizational goals when they develop positive relationships with each other while working in groups and teams (Yoon & Kayes, 2016). Working in this way not only inspires people but also assists in their learning.

g) **Quality Initiatives.** Initiatives like comprehensive quality management, quality circles,

benchmarking, and others call for fundamental training in quality concepts, rules, metrics, and further related topics (Obeidat, 2019). It is obvious that when people work for companies in a range of positions, they need to be well-trained in a variety of areas, including concepts, rules, measurements, and standards. It is possible to learn about these elements in a diverse methods (Khan, 2022). These include carrying out research, taking part in discussions, interacting with people, visiting the field, and so forth. Hence, it can be said that quality projects will help people carry out their duties properly to accomplish organizational goals (Ilies, 2018).

h) **Quality Decision Making.** Even though judgments are made at a higher level, there must be a method for preparing experts to make decisions quickly and efficiently (Iordanoglou et al., 2014). For the learning and development of young professionals who may become future leaders, this component is extremely important. It is impossible to make decisions without engaging in mental exercises. Exercises to develop mental models are the best way to learn how to make decisions (Senge, 2010). Thus, the future leaders' learning and development process places a premium on sound decision-making. Without mental model development techniques used during initial employee training and development, the same is not possible (Ackoff, 2015). Since mental model development is a crucial component of learning and development therefore, it can be one of the potential variables for current study.

i) **Well-being and Safety.** The organization's members must have the highest level of safety and security. Safety and well-being of the professionals is related with two main aspects, i.e. physical safety and psychological safety (Masdonati et al., 2022). Physical safety is taken into consideration, when the employees are engaged in risky occupations such as, coalmines, law enforcement, silk weaving, gem polishing and so forth. People must use machines, tools, and equipment to perform their jobs in these organizations. They must therefore, make efforts to avoid any types of mishaps (Holderby & Van Domelen, 2015).

j) **Policies and Laws.** The creation of regulations and policies empowers people to perform their work responsibilities in an orderly way. These factors offer individuals a sense of direction so that they can complete the proper jobs and activities (Satterfield, 2019). The members of the organization must adhere to the rules and policies in addition to amplifying their knowledge to accomplish their job obligations ((Ilies, 2018). Compliance with rules and policies makes a big distinction in keeping people around. Contrarily, breaking laws and regulations would result in disciplinary action (Landry, 2015). Thus, it can be argued that rules and policies must be obeyed in order to carry out various tasks and operations of the organizations effectively.

k) **Job Duties.** Individuals' learning and development focuses mostly on their employment responsibilities. There are many jobs and activities, which people must carry out in order to complete the assigned task (Blokker et al., 2019). They must therefore, enhance their knowledge of a variety of tasks and activities. It is essential that those working for the organization have adequate computer abilities when they are required to do presentations (Ashurovich, 2023). Additionally, it is vital for professionals to improve their decision-making abilities. Making decisions is viewed as an essential aspect of the organization (Musaeva, 2022). Therefore, it can be said that ongoing learning and development would result in making sensible decisions, giving effective presentations, and carrying out job obligations in line with organizational goals.

### 2.3.12 **Process of Learning and Development**

The activity of learning and growing must be founded through comprehension of the mechanisms involved (Easterby-Smith, 1997). These strategies are complex and varied. They include the means by which learners and organizations review, as described by learning theory, the notion of organizational learning, the questionable proposal of the educational institution, and the input that individuals contribute to their own learning and growth (Garvin, 1993). Individuals engage in voluntary learning when they actively seek to acquire the skills and capacity they need to do their jobs competently (Pedler et al. 1997). It must be encouraged and supported. Learning theory defines and relies on how well individuals are inspired to acquire, their styles of learning, their capacity for 'acquiring to learn', and the learning curve manifestations (Wenger, 1998).

### 2.3.13 **Harrison's Six-Step Model for Learning and Development Process**

Applying Harrison Cheryl's Model (1989) on employees' workplace development, Jan (2010) contends that the stated model significantly enhances the learning and development process of professionals. Therefore, this model is likely to support development of theoretical framework for current study, salient are:-

- a) **Step 1 - Hire or Promote.** In order to find the person who is the best fit for the position that has to be filled, the organizations either hire professionals or promotes from within during this process. The said process is a step forward in terms of professional development and learning. The first step in creating a career strategy is to evaluate professionals' skills, motivations, and talents in the context of culture, values, and work requirements. The success level will always be high if the work-related objectives are defined in accordance with how the individual would like to advance his career path.
- b) **Step 2 - Orient or Communicate.** The professionals are familiar with the organization's

culture and value system as well as how they must accept their position they are trying to match their value system with the organizational culture. If both value systems are compatible, they decide to keep working. Now that they have made the decision to stay, if the organization can establish a link between its values and each employee's success in his career, the newly enrolled or upgraded professionals won't have to struggle to adapt to their new roles and will be able to relate to the new environment with ease.

c) **Step 3 - Observe Performance.** At this point, certain expectations are established and expressed to the employees. These expectations are often duties that the newly enrolled individuals must do. Each person makes an effort during the process to use his or her capabilities to achieve the stated goals. Both the management and the experts are able to identify that person's weaknesses and strengths. It helps in the process of self-evaluation for both the individual and the organization. Professionals receive feedback based on their performance.

d) **Step 4 - Manage Performance.** Professionals are accountable for their work, but their performance has a direct impact on the organization. Professional development and learning could be used as an alternative method under the given the situation. According to Simonsen (1997), both administrators and professionals may benefit from a stronger working relationship if career advancement is a part of the performance management system and the necessary resources are in place to make it happen on a regular basis.

e) **Step 5 - Develop Employee.** For the advancement of professionals, a variety of tools are available, including on-the-job training, career planning classes, and counseling and evaluation services. Whatever methods the organization applies for development in accordance with settings, they truly help professionals progress in their careers. According to Simonson (1997), the total development process should include additional realization activities in addition to financial rewards. Armstrong-Stassen and Schlosser (2008) have presented learning and development initiatives from workers' perspectives and argue that organizations are motivated to launch their career development initiatives because these are seen as an effective solution to a number of problems (Harrison, 1989).

f) **Step 6 – Make Personnel Selection Decision.** Ocampo (2005) in his report for the United Nations (UN) has focused on four prospective areas to enhance learning for effectiveness of the public institutions. These are as follows: 1) Enhance knowledge management and sharing; 2) Support staff mentorship programs; 3) Strengthen the learning and development system; and 4) Enhance the analytical capacity of the Government.

## SECTION - IV

### ROLE OF LEARNING AND DEVELOPMENT

#### 2.4.1 Role of Learning and Development

Improvements and innovation in the workplace frequently depend on professional development and formal or informal learning. A culture that prioritizes learning and development can benefit both the organizations and the employees, and there are diverse benefits that make devoted learning a need for any organizations (Darling-Hammond, 2020). One can better appreciate why it is important to constantly pursue better knowledge, more skills, and a better grasp of one's organization by understanding the role individuals play through workplace learning and developing in an organization's success (Beier, 2022).

#### 2.4.2 Factors Influencing Role of Learning and Development

The management of individual development is one of the main duties of authorities dealing with learning and development. The management of people must be done in accordance with their job responsibilities and institutional goals and objectives. According to Dam (2022), five primary aspects affect the role of learning and development, which are: -

- a) **Talent Attraction and Retention.** Most crucial and the only goal of learning that takes place within the organization is to increase productivity and profitability. In the modern world, learning also makes a fundamental contribution to finding job chances (Piech, 2016). It is clear that obtaining learning credentials, skills, and abilities is necessary for people to be able to find career prospects (Hsieh, 2019). The workforce is increasingly accountable for his or her own professional and personal development (Selvan & Furse, 2022). This is evident since the choice is with employees whether they apply competencies and information to improve life on acquisition of knowledge and get a thorough with the grasp of diverse subjects or otherwise (Meijers et al 2013). When employees commit to developing their professional skills, they are more likely to remain employed, keep cordial relations with other team members, and experience job satisfaction (Naway & Haris, 2017).
- b) **Competences Development of Individual.** Human capital needs continuous investments in development through learning in order to keep its importance. Once knowledge is outdated and disremembered, it is obvious that people would have hurdles while carrying out their professional

obligations (Beier, 2022). Therefore, regardless of the types of job responsibilities that each individual is carrying out inside the organization, they must make a substantial contribution to the advancement of knowledge and skills. Employees also need to improve their communication, time management, decision-making, and leadership skills (Du Plessis & Sukumaran, 2015). Their ability to engage with others will improve with enhanced communication skills. The ability to make judgments will enable the promotion of the organizations and communities' well-being (Jain & Duggal, 2018). People with leadership abilities will be able to organize the direction and management of their teams, offer solving their issues, and establish a friendly and pleasing work atmosphere (Naim, 2021). Thus, it can be argued that personal capability development will help people succeed in carrying out their job obligations.

c) **Create a Value-based Culture.** Creating a culture of learning and development may add substantial values to the organization. Value-based cultures, as the term suggests, are those in which people are expected to examine morality, values, and ethics (Damayanti et al., 2019). People must adhere to a value-based culture and instill moral and ethical values when engaging in diverse roles related to knowledge or career responsibilities (Lucas et al., 2018). Value-based cultures help people develop an understanding of peaceful dispute resolution techniques. The importance of the organization's members developing positive relationships with one another cannot be overstated (Lacerenza et al., 2018). Therefore, by using efficient communication techniques, they are able to settle disputes and problems amicably. Hence, it can be argued that fostering a culture of values will affect learning and growth (Simonsen, 1997).

d) **Branding the Organization.** Trademark of any organization is considered as the highest capital and significantly reflects the performance of that organization in the market, its financial standing, its position in the industry, and its range of goods and services (Drury, 2016). The organization's investments in learning and development can significantly improve the brand and boost its reputation in the market. The workforce needs to become more involved in learning in order to develop the employer's brand and be able to perform their duties and activities in an appropriate manner (Ilies, 2018). Individuals cannot complete duties and activities in isolation, which is one of the characteristics that is of highest value in developing the employer brand (Andreevna, 2021). Because of this, it is essential that they cooperate and integrate with one another while making choices, working on projects, improving production processes, drafting laws and policies, and so forth.



e) **Motivate and Engage Employees.** Employee engagement and inspiration are closely related concepts. Employees would become efficiently involved when they become motivated to perform their job obligations (Du Plessis & Sukumaran, 2015). It is the organizations' responsibility to execute programs for motivation of professionals within the organization (Thomas, 2019). Making promotional opportunities available, providing rewards and incentives, launching training and development programs, and creating a friendly and social work environment are all crucial factors that must be considered in order to motivate employees (Camp et al., 2022). When employees are knowledgeable about and prepared for their job responsibilities, they will become motivated and actively contribute to the accomplishment of organizational goals (Lattuch & Young, 2011). It is widely acknowledged that workers get motivated and actively engage in their work since they are seen as one of the key sources for maintaining contented living standards and advancing one's career chances (Baluku et al., 2018).

#### 2.4.3 Learning and Development viz-a-viz Workplace Improvement

A continuous improvement culture fostered by continued professional learning and development can enhance the workplace in addition to providing personal rewards. Here are a few gains that apply to most of the workplaces:

a) **High- Performance Employees.** Focusing on prioritized development and growth of high performance professionals is the most valuable aspect in the organization (Boye & Grönlund, 2018). Employees who accomplish their work more excellently not only up-skill themselves but also educate their colleagues in this aspect (Modestino et al., 2019). Employee efficacy can also rise, which can save expenses for the organization, increase output, and reinforce the organization's standing in the market.

b) **Structured Learning and Development Environment.** Continuous professional learning and development is conducted in a structured setting. In such environment, all employees are aware of the core competencies that are necessary to succeed, and they can perceive that their owners are concerned with their success as a whole (Selvan & Furse, 2022). Additionally, structured learning promotes consistency in the workplace, which may lead to fewer accidents or safety problems and much reliable outcomes.

c) **Increased Employee Job Satisfaction.** When professionals are happy with their jobs, it can boost morale and produce better outcomes overall (Awan & Farhan, 2016). Job fulfillment has an impact on employee retention as well, and it reduces the cost of additional boarding and training

for fresh professionals for the organization (Naim & Lenka, 2018). In a workplace where people are happy and fulfilled with their jobs, the organization may be able to attract competent personnel for recruitment.

d) **Workplace Learning and Development.** Continuous learning and development is a type of formal and informal learning that supports workers in developing new skills and adapting to a dynamic environment. This can include activities like on-the-job training, professional development programs, and continual learning (Beier, 2022). One can utilize many of the abilities acquired throughout these procedures throughout his or her professional career, whether they are more tangible skills like learning how to use some software, a particular approach or more abstract skills, like leadership, communication or teamwork (Northup, 2019).

#### 2.4.4 Supporting Professionals' Learning and Development at Work

There are many diverse approaches one can adapt to engage in continuous formal or informal learning and development, a few of these are explained below:-

a) **Internships and Apprenticeships.** Organizations can provide prospective professionals with internships and apprenticeships to promote their ongoing professional growth. This is an exceptional chance to acquaint new employees with the values of the workplace and the distinctive culture of the organization by placing them under the guidance of an accomplished expert (Juraev, 2022). Such expert can assist them in developing important abilities, enhancing their institutional knowledge through hands-on experience, and guiding them in the delicacies of the job that they might not otherwise discover (Stewart, 2014).

b) **Career Guidance and Dialogues.** Career counselors or leaders can assist professionals in determining their areas of improvement and directing them towards the tools they need to develop specific competencies (Yuferev & Mironov, 2022). A counselor or supervisor can also assist professionals in finding out whether their career goals are timely or achievable and what future prospects may be open to them after they develop particular abilities (Tahir et al., 2018).

c) **Courses and Workshops.** Continuing learning programs are needed to keep up a profile in several professions, such that of attorney, physician, or law enforcement. Professionals can either enroll in a training program or take classes as required to acquire specialized, career-relevant skills (Saks & Haccoun, 2013).

d) **Membership in a Professional Organization.** Human resources can broaden their professional networks and access possibilities for professional growth by joining a professional

organization or club (Stewart, 2014). Several professional associations even provide discounts for such opportunities. Employees may also avail chance by attending social events sponsored by a professional organization (Khan, 2022). Such network can expose professionals to new techniques, abilities, and organizational norms as well. Team-based learning is one such activity that has been acknowledged as one of the key components of an efficient learning and development process.

#### **2.4.5 Learning and Development Advantages for the Organization**

The literature frequently connects learning and development to the success and competitive edge of the organization (Govaerts et al., 2011). Individuals' understanding, expertise, and talent for learning are well-recognized assets for success of the organization (Senge 2010). Organizations capable of harnessing aptitude and dedication for learning at organizational level will be the ones that truly flourish in the future (Senge 2006). Like Conger (2002) argues that career development culture assists professionals in redefining their talents in order to capitalize on the possibilities of their employment. Learning and development has the potential to boost employee output and enhance recruitment and retention, which is another advantage for the organization. Training results in more productive human resources who make fewer mistakes, are more upbeat, and need less supervision (Saks & Haccoun, 2013). Additionally, learning has been connected to employees' retention, as it is likely that they will stay with the organization depending upon their level of dedication (Simonsen, 1997). Organizational success can result from linking learning and development to adopted strategy for the reason that leaders can have abilities as well as information necessary for supporting achievement of objectives by the organization (Saks & Haccoun, 2013). Employees must be aware of the demands of the organization, and there must be a clear connection between strategic directions and employee activities (Simonsen, 1997).

According to Yukl (2013), most organizations do not align leadership development with their competitive strategy, despite the fact that this is imperative for success. HR professionals should watchfully analyze incorporation of futuristic targets of the organization in its package for improvements because integrating strategy to learning is a complex process. The literature suggested that funding learning and development is vital (Jacobs and Park, 2009). While research has shown that learning and development, and organizational effectiveness are positively correlated, but not all organizations invest equally in training. Learning and development is not a high priority

with Canadian firms, revealed by study on learning and development in Canadian business (Lavis, 2011). One of the causes, according to Lavis (2011), is that many organizational leaders tend to see learning and development as more of a cost than an investment. Lavis (2011) also identified that the lack of investment made by Canadian businesses on workers being most crucial to the success of the industry, was a factor in the country's declining productivity and innovation at that time.

#### 2.4.6 **Benefits of Learning and Development for the Individuals**

Organizations should take into account what inspires staff to participate in learning (Simonsen, 1997). Although there are many advantages for people but learning and change can not be enforced onto the individuals (Schein 2010). Successful organizational learning efforts, according to the literature, “begin by encouraging and motivating individuals to learn and to take the initiative in determining their own learning needs” (Teare, 1997, p. 304). Increased stress on professionals by way of “the learner, development, and career builder” is a trend in the literature (Bryson et al., 2006, p. 284). According to Saks and Haccoun (2013), having the chance to learn has a variety of advantages, such as boosting one's self-assurance and outlook as well as their sense of usefulness and belonging in the workplace. Since the information economy has taken over, employees are more accountable on the aspect of their own learning (Silzer & Dowell, 2010). Employee roles are growing more complex as well as the workplace being more collaborative and less hierarchical (Day, 2007; Lavis, 2011). Employees are starting more informal activities due to the growing demand for information transmission, and management are encouraging this change (Lavis, 2011). According to Garavan et al. (2012), learners must be self-aware, self-confident, and tenacious to succeed in the transition towards individuals organizing and implementing own development activities (Garavan et al., 2012). The more involvement of leaders in the process the more the organization will invests on knowing their learning requirements.

#### 2.4.7 **Impact of Learning and Development on Career**

There are numerous ways in which professionals might benefit from ongoing training, among these are:

- a) **Improved Work Performance.** Professionals can improve their competence and effectiveness through continuous training and education. Confidence in their abilities to do their jobs well and fulfill their obligations can be elevated through training (Piech, 2016). Someone's performance can improve with training and experience, which could lead to higher pay or improved prospects for advancement (Kawiana et al., 2018).

b) **High Morale.** Those in skilled professions often report higher levels of job satisfaction after committing to a learning strategy of continuous improvement. They might feel more confident in their abilities if they have a solid grasp on the specifics of their job (Akkermans et al., 2015). Having access to training can also lift morale by providing a sense of challenge. A more positive outlook on work and life usually translates into higher output and greater fulfillment in one's job (Wright & Wright, 1987).

c) **Skills Improvement.** Professionals can gain from learning and development since it can help them locate areas in which they can strengthen their abilities and so move up the ranks. Furthermore, if team members depend on each other to carry out primary tasks that call for unique expertise, the team as a whole can become more productive (Akkermans et al., 2015) When professionals work together to address their common vulnerabilities, they have the freedom to get their work done without continual oversight. The ability to demonstrate proficiency in a certain area can also make an individual a more attractive job candidate (Boye & Grönlund, 2018).

#### 2.4.9 Learning and Development Viz-a-Viz Career Success

HRD is the process of recruiting, training, and inspiring an organization's workers to perform at their best. In order to achieve this aim, learning and development programs can improve employee qualifications for the future (Maurer et al., 2003). Employees in today's competitive era need both intrinsic and extrinsic incentives and career success opportunities to feel appreciated. Organizations educate and stimulate their employees about their training and advancement prospects are more likely to retain talented professionals than those that do not (Triandani & Anggriani, 2015). McGrath (2016) argues that practitioners in the field of human HRD would do well to familiarize themselves with how researchers have developed techniques for quantifying returns on investment in learning and development. In order to calculate the return on investment in training, HRD professionals will need to apply a proper and forward-looking strategy, based on the results of quantitative studies of HR planning. This strategy will ensure the legitimacy of HRD initiatives for career success of professionals (Obeidat et al., 2019). This study thus identifies career success as one of the variables of interest based on quality elements of learning and development and the method involved.

## **SECTION - V**

### **QUALITY LEARNING AND DEVELOPMENT**

#### **2.5.1 Quality Learning and Development**

Improvement through learning is the practice of enhancing abilities and developing expertise in order to successfully execute tasks (Mason & Brougham, 2020). Such development initiatives are vital to boost performance of employees (Budhiraja, 2022). It is one of the most essential methods of assisting individual employees in improving present skill set and knowledge by enabling them in acquiring fresh knowledge through quality learning (Long et al., 2017). Shah and Steinberg (2021) established that humans are precious assets of the organization thus, it is imperative for organizations to invest in their learning and development to reinforce their qualities and competencies. In addition, Ziyakashany (2009) discovered learning as an organized process, affects individual, team and organizational effectiveness. It also improves the standard of the interaction process with supervisors and coworkers, as well as teamwork abilities (Wang et al., 2022). Mason and Brougham (2020) endorsed that learning and development is a meaningful move planned by the organizations to enhance the proficiencies of their employees. Learning and development aspects are critical for any organization wishing to remain competitive while also maintaining loyalty and motivation inside their setup (Tharenou, 2001). Such strategies have the potential to improve organizational performance (such as efficiency and career success) as well as customer loyalty (Amberg & McGaughey, 2019). Besides, it might raise spending in learning programs in order to prepare them for future requirements (Mohamad et al., 2020).

#### **2.5.2 Why Quality Learning and Development?**

HRD practitioners are facing number of challenge in managing effective HRD, particularly in the era of technological progress. Development of human capital in HRD through education, training, human resources' learning and motivation are considered vital for quality grooming. However, absence of quality HRD poses a great challenge to the maturity and execution of efficient HRD. Efficient HR strategies and investments in HR development is the central factor in HRD practices. They are reckoned as the driving force for the effectiveness of any organizations (Fyfe et al., 2018). Moreover, in order to compete productively, it is vital for the organizations to adequately educate and provide durable learning to their employees (Uddin et al., 2016). In the context of precise perspective of HRD professionals, there is a dearth of HRD professionals having the capacity to handle particular role of HRD in organizations (Otoo & Mishra, 2018). This lack of HRD masters can be a main hurdle in organizations' HRD endeavors. In fact, just a few scholars

have argued that HRD professionals are capable of learning and nurturing others to become professionals (Fyfe et al., 2018). It has also been observed that an inadequate level of support, dedication, interest, and cooperation in human resource development has been identified as interfering with the effectiveness of the HRD system (Mankin, 2001), as well as influencing the quality of employees' learning and development (Mahfud et al., 2022).

### **2.5.3 Quality Learning and Development System**

Effective organizations have instituted a discrete quality HRD system. It includes development oriented performance appraisal, quality learning through sufficient learning activities, mentoring, and other methods such as coaching. It also contains ways for instilling a sense of pride, commitment, personal growth mechanisms, courses, quality social groups, and kaizen team building drills (Tharenou, 2001). Additionally, test of their HRD culture, work values, delegation, quality focus, reward and recognition scheme, and employees' empowerment sufficiently cover that effective organizations implement revolutionary changes to alter their HRD system (Obeidat et al., 2019). According to quality HRD, employees cannot be dealt as commodities to be acquired and declared redundant as per desires of the employer. They are to be patronized and groomed. However, most of the organizations have yet to grasp the strategic significance of HRD (Otoo & Mishra, 2018). With the increasing significance of comprehensive quality management approaches in developing a competitive edge, employers must understand how to attract, retain, and motivate experienced human resources (Vasanthi & Basariya, 2019). Beside, organization should be able to execute total quality development practices for competitive edge over time (Obeidat et al., 2019).

### **2.5.4 Effect of Quality Learning and Development Practices**

Many recent research efforts demonstrate the impact of HRD practices on TQM. According to Mahfud et al. (2022), the service system and HR policies can improve quality. A strategic HRD framework can design HRD procedures and programs and integrate them with HR strategy and policies (Reddy & Ambatipudi, 2021). However, these short-term tactics are limited in some organizations since they are undetectable and may be altogether lacking in minor setups (Vasanthi & Basariya, 2019). This results in a lack of foresight in human resource planning, which has an impact on professional learning and development (Masud & Daud, 2019). According to the literature, HR is becoming highly competitive and demanding for HRD practitioners (Yahya & Tan, 2015). On the other hand, it has been discovered that selection, quality development, and workforce management are all major concerns for HRD experts (Obeidat et al., 2019). Keeping these

difficulties in HRD in mind, organizations must analyze their recruiting and advancement criteria to ensure that the appropriate human resources are deployed on suitable role (Otoo & Mishra, 2018). Amberg and McGaughey (2019) conducted an empirical study to determine the association between quality learning activities and outcome and discovered that skill-developing HR practices contribute to increased knowledge and fulfillment. Similarly, cross-training regimens result in higher quality. Obeidat et al. (2019) demonstrated how excellent development supports high-quality leadership, a strong team, and employee dedication.

### **2.5.5 Quality Learning and Development Relation with Career Aspects**

The success of an organization and its professionals is determined by the quality of its practices and the combined hard work of both parties. Supporting professionals for making precise career passages and enabling them to sail through their life-long career is not only beneficial for success of the organization, but also for the individuals as well. If young professionals are rendered with high quality career guidance in their early career, they are likely to know the importance of continuous learning and will strive with full potential to make progress for living more satisfying lives (Yahya & Tan, 2015). Evidence also highlights that social status associated with professional accomplishment is more valued than individual's happiness, level of spending, self-esteem and status due to income (Kirchner & Akdere, 2019). Every employee is always optimistic for career advancement in his life. This career progression is one of the factors that affect employee performance improvement. According to Presti et al. (2021), individual who is competent in managing his career, and has good goals and plans to achieve it will have an enormous motivation to do better and have a clear goal in the course of his career than any other individual. Each opportunity for advancement will motivate employees to do more to achieve best in their career.

## **SECTION - VI**

### **LEARNING AND DEVELOPMENT OF YOUNG PROFESSIONALS**

#### **2.6.1 Development of Professionals in Perspective**

Development of professionals is not a new concept in the world. One of the first corporate universities named as General Motors Institute (Gerbman, 2000) was set up in 1927 in order to train professionals in their domain of work. In 1950s, number of bodies and associations embraced the idea (Gerbman, 2000). Establishment of institute for the purpose by General Electric in 1950s was followed by McDonald with the launching of Hamburger University for training of staff in the 1960s (Garger, 1999). Despite all this, development of professionals was still facing many hiccups.



To address the issue, career planning and development efforts with focus on young professionals were started in the 1970s with great prospects for the organizations to plan and groom young professionals for higher management positions (Mason et al., 2011). This was a robust approach to achieve long-term commitment of employees for the organization. This commitment is cited as a contract for lasting loyalty and commitment in return for opportunities offered for training and development essential for career success (McCauley & Kuhnert, 1992).

Employee development took a turn and went through a course of reconstructing in the 90s. Investment in professionals was on the rise though it was a bold forecasting (Combs & Gillis, 2009). According to the ASTD's 1998 Industry Report, since 1993, American companies having above 100 workers had invested more than \$60 billion on development, a 26 percent growth (Garger, 1999). There are numerous forms of staff development, each having pros and limitations. However, because of the shift in mindset, professionals may not commit whole career, rather may stay with the organization for some period that cares for their progress (Agba et al., 2010).

### **2.6.2 Philosophy of Professionals' Development Initiatives**

Different organizations have instituted various types of development programs for several reasons. The basic principles of an appropriate professional development program, according to Mohamed et al. (2016), are orientation course, soft and technical skill learning. These ideas are broadly accepted core elements for any professional training program. Atkinson (2016) thinks that workers development initiatives must include core competencies such as attitude to acquire knowledge, problem solving, creativity, and self-management of career (Suseno, 2018). The most important concept of many professional activities is to share the vision, facilitate employees to recognize the culture and values, and build their confidence as to how they can support their career success (Pinnington et al., 2022). Two aspects are vital for the success of such development initiatives i.e., they should be updated and style of learning must be in control of professionals. Hence, professional improvement practices are valuable to both the institutions and employees.

### **2.6.3 Key Components of Development Initiatives for Professionals**

T&D (training and development), CD (Career Development) and OD (Organizational Development) are stated as three major components of HRD (Kirchner & Akdere, 2019). However, this point of view has not always been taken as such because HRD has been considered as a substitute for training and development. Learning has recently been prioritized over training and development (O'Neil, 2016), with organizations recognizing the pervasiveness of informal learning in the workplace (Turner, 2017). Learning is thought to occur at several levels, from the individual

to the organization as a whole, with knowledge as an outcome or product of this learning (Darling-Hammond et al., 2020). This evolutionary trait progressively offers HRD its own identity and unique contribution to organizational development. Quality development initiatives involve setting of targets, design of career, learning and appraisal. Learning helps employees enhance their overall performance (Gerbman, 2000). Organizations can also satisfy workers by making career planning an essential component of development process (Obeidat et al., 2019). Career planning should focus on assisting professionals in discovering a career path that they recognize and value (Ouerdian & Mansour, 2019). Any development programs for professionals will rapidly vanish if it does not appraise itself regularly. Hence, it is essential that HRD initiatives be continuously evaluated to identify training needs so that suitable objectives can be set for next phase of learning. This should be emphasized even more for development of novice professionals to put them on right track just from the initial stage of their career.

#### **2.6.4 Benefits of Development Initiatives for Professionals**

Professional development programs assist both professional employees and organizations. Institutions that do not broaden their learning will be unable to compete with those who do (Obeidat et al., 2019). They may benefit financially in the short run, but likely to miss the long-term battle for talented human capital. An organization should develop professionals on fast track basis for recoument of deficiencies at the right time (Koch et al., 2017). Several businesses regard development and learning as a waste of time since it diverts their attention away from the completion of their tasks (Fyfe, 2018). However, successful organizations know that the investment on training cannot be compared with the benefits in return. Fyfe et al. (2018) argues that development programs for professionals can be realized in two different ways. Its objective is either to enrich the organization or to provide a benefit to employees. It is a win-win situation in both cases. The optimal way is to emphasize equally on both value for the organization and benefit to the employees because they are ultimately mutually beneficial (Dopson et al., 2019).

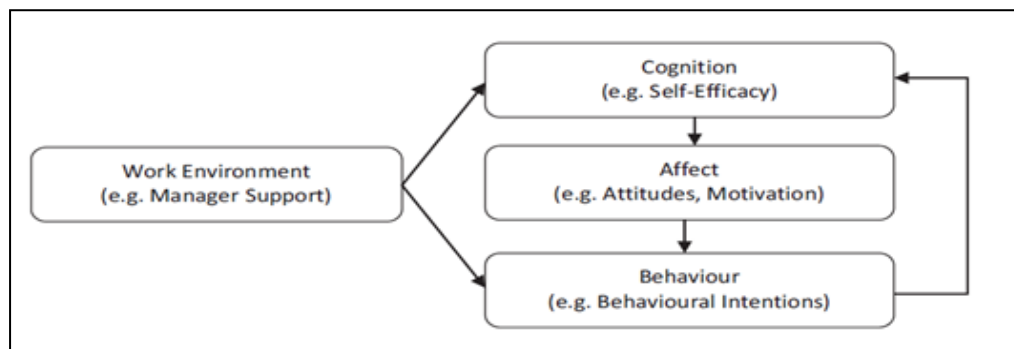
#### **2.6.5 Maurer's Learning and Development Orientation Model for Professionals**

In the study on the training and development model for professionals, Maurer (2002) suggested a structure for studying the improvement, development and training practice for young professionals. Self-cognition, attitude and affect are the three main parts of Maurer's concept. These factors show an employee's appetite for continual learning, sometimes known as a 'learning and development orientation' for professionals. Figure 2.1 depicts the model's diagram presented by Maurer (2002). This highlights the participatory nature of an employee's views, approaches, and

inspiration for development initiatives, as well as their wants and participation in developmental behaviours (Maurer, 2002). The model recognizes the workplace setting as the basis of impact on the practices of development.

The model combines various professional growth models and suggests several new relationships (Maurer, 2002). While it is impossible to go over every aspect of the model, it does provide a structure for investigating the association between young professionals' development and acquisition of knowledge related viewpoint, cognitions, and inspiration as critical constituents of the growth procedure. The current study is focused particularly on two aspects of the model. The first is the importance of self-efficacy in the training and development process, and the second is the role of the workplace setting as a precursor to self-efficacy.

**Figure 2.2: Learning and Development Orientation Model**



Source: Maurer, T. J. (2002). *Employee learning and development orientation: Toward an integrative model of involvement in continuous learning. Human resource development review, 1(1), 9-44.*

In line with social cognitive theory (Bandura, 1986), Maurer's model identifies that the cognitive form of the self plays a critical role in initiating motivation and behavior in terms of professional learning and growth. Maurer (2002) argues that a professionals' training and development orientation begins with a state of mind. Self-efficacy beliefs are one facet of the cognitive self that activates individuals' learning orientation. In many learning and training situations, self-efficacy is anticipated to forecast worker stimulus and outcomes (Colquitt et al., 2000). Essentially self-efficacy for growth is self-assurance in the ability of professional to improve his/her personal traits in light of one's existing and predicted scenario (Maurer, 2002).

The second important aspect in Maurer's model for the current study is that of the workplace setting as a basis of developing self-efficacy thoughts. Maurer and Lippstreu (2008), on the other hand, evaluated the work environment as a driver of self-efficacy, including organizational, management, and coworker support for development. As previously acknowledged, coworkers are vital to provide support for training and development of young professionals and may influence

their growth self-efficacy views. The concept originated by Maurer (2002) has garnered widespread acceptance in subsequent studies (Hackett, 2018), demonstrating its soundness as a model for professional development and its suitability in the context of current study. The current study employs Maurer's model to help in the building of a theoretical framework but considers more relevant factors essential for the process of learning and development in order to better understand the development of young professionals.

- a) **The Work Environment.** Scholars are mostly in broad consensus that the environment in which knowledge acquisition is activated is critical to individual training and development (Gill, 2018). The workplace is a mainly fertile source of learning opportunities and the major setting in which individuals improve their professional abilities and skills (Masud & Daud, 2019). Recognizing which aspect of this setting have the greatest influence on the motivational and behavioral elements of the development cycle is an important feature of competence development (Quratulain et al., 2018). Organizational, including manager backing for professional learning, and peer (co-worker) assistance for learning are the two characteristics of the workplace settings of greatest relevance to the current study. It has also been claimed that these forms of help in professional development influence a particular perception, namely self-efficacy (Maurer, 2002).
- b) **Organizational Support for Development of Professionals.** Organizations provide individuals with vital information about the degree to which learning and development is valued (Kawiana et al., 2018). A critical component of an organization's learning support is that professionals have equal chance of learning and they all may grow their abilities, skills, and competencies (Obiekwe & Ezeugbor, 2019). Research shows that professionals, who believe that their organization support their career progression are better inspired to acquire knowledge (Kawiana et al., 2018). Some evidence also exist which indicates that organizational support and commitment for individuals' development are positively related (Bouraoui et al., 2019). An organizational devotion to development and training empowers professionals to take part in series of developmental programs and to learn through indirect interactions and experiences with their colleagues (Puteh et al., 2015). As a result, organizational support or dedication may have a favourable impact on an employee's attitude in acquiring new knowledge.
- c) **Co-Workers Support for Development of Professionals.** Teammates also contribute significantly during training and development practices of young professionals, usually achieved through team-based learning (Atkinson, 2016). Research highlights that through their attitudes and behaviors, teammates act as informal role models of developmental behaviors (Slagter &

Wilderom, 2017). Especially interpersonal relationships are quite meaningful for the learning and development of young professionals (Puteh et al., 2015). According to different researches, peers provide critical development assistance by encouraging professionals to participate in workplace development initiatives (Yoon & Kayes, 2016). Coworkers' guidance and dialogue have also been linked to improved levels of professional performance and organizational motivation (Yoon & Kayes, 2016). Thus, teammates are important sources of direct learning, as Marinova and Chiaburu's (2005) study found that coworkers' support was a better predictor of motivation than supervisor support. Given the relevance of coworkers for professional learning and development identified in numerous researches, especially for young professionals, investigating their influence on learning and development is more significant.

#### **2.6.6 Younger Professionals -An Overview**

Young professionals are the face of the future. Although they are in a modest ratio of the whole manpower of any organization, as they grow, they will progressively assume control of all important positions in an organization (Mason et al., 2011). According to the research, while an individual's characteristics vary throughout time, they are more likely to be misled during the early phases of their profession. Adolescent and early twenties are critical periods in which young individuals are familiarized with number of new events, which might affect the development of their behaviour, beliefs, and character (Webb & Karlis, 2019). Young professionals' conviction is fundamental to their involvement in acquisition of knowledge during their professional career. The call for adjustable, learning-centered professionals has specific significance for the development of young professionals. As existing lots moves out of the organizations fresh professionals are the next generation to take on crucial responsibilities in human resources, groups, and communities (Takeuchi et al., 2021). Thus, organizations have both a vested stake and a crucial role in supporting young professionals to grow their potentialities require for career progression.

To encourage the growth of a core group of promising young professionals, both organizations and investigators require a deep comprehension of how young professionals learn and develop in their job environment (Mason & Brougham, 2020). Nonetheless, HRD professionals have a tendency to collectively concentrate on professional growth. Though some focus has been given to the requirements on improvement of elderly professionals (Salminen & Miettinen, 2019), the development of young professionals has been overlooked. While reviewing research literature on young professionals, this part of the current study answers two queries: how to define young professionals and how do they feel regarding learning and development experiences while being on

the job? The first question about young professionals has been responded in following paragraphs by differentiating young professionals from other group of professionals. The subject of young professionals' experiences with learning and development is addressed by concentrating on available research that has studied full-time professionals and their experiences during initial stages of careers (Masud & Daud, 2019). These researches highlight the importance of young professionals' experiences about learning and themselves.

#### **2.6.6.1 Life Stage Changes Theory**

One aspect that differentiates young professionals from other workforce in the organization is their life phase. Professionals face diverse experiences and undergo varying degrees of transformation in their personal traits such as views, attitude, values, and conduct at various times of their lives (Walton et al., 2006). Need for differentiation of this crucial lifetime from other stages of the life, has been urged by many researchers and scholars. Levinson (1986) denoted 'early adult transformation' as ages from 17 to 22 years. Arnett (2000) recently defined 'emerging adulthood' as distinct from both early adulthood and adolescence to encompass the age range of 18 to 25 years. Emerging adulthood is regarded as one of the most prestigious stages of life, during which a person's qualities are still being groomed, and it is regarded as a transitional bridge between adolescence and early adulthood (Tanner & Arnett, 2016). Thus, young professionals can be considered as 'emerging adults' during their late teens and early twenties. 'Emerging adulthood' is highly acknowledged in body of knowledge as a significant stage during which personal growth and development occurs (Hamilton & Hamilton, 2006). This idea conveys that traits are more receptive to change at both older and younger ages, with reduced receptivity throughout middle (Krosnick & Alwin, 1989). The differentiation between young professionals and other older group of professionals has meanings for both scholars and organizations in realizing how they learn and developed most efficaciously in the job situations (Armstrong-Stassen & Schlosser, 2008).

#### **2.6.6.2 Defining Young Professionals**

Young professionals are very vital part of work force as work is a central activity for them. They are between the ages of 15 to 30 years and are paid professionals. Their performance has acquired much focus from organizations but limited from researchers or policy framers, both in Pakistan and internationally. Scholars also express a peculiar stage of life while referring to young professionals and applying terms that are usually attached to particular age parameters (Tanner & Arnett, 2016). Some frequently practiced terms are emerging adults, young adults, adolescents, teenagers and youth (Almohaimeed, 2015). Nevertheless, these words do not distinguish between

several groups of young professionals who overlap with one another. Public sector organizations use age characteristics to differentiate between different groups of professionals (Lamb & Rumberger, 1999). When selecting young professionals, organizations typically fix 15 and 30 years as lowest highest age limit criteria respectively (Kirchner & Akdere, 2019). These age limits do separate groups of young professionals, but they neither differentiate between people who work and those who do not, nor between part-time and full-time employees (Mason et al., 2011). Yet, the usage of such characteristics might be a valuable approach for defining and differentiating professional groups. Instead of concentrating merely on age, it may be more useful to examine features that differentiate young professionals from other professions (Armstrong-Stassen & Schlosser, 2008). Therefore, for this study young professionals were selected on the basis of years of experience, which was limited to 10 years.

#### **2.6.6.3 Part Time versus Permanent Young Professionals**

Young professionals have at least two same basic attributes i.e., their age and involvement in job. They have no other similarity as a group (Marks, 2006). For instance, some work part-time while others work full-time, some come directly from school while others have completed more education or training, some work simply for additional income while others work for personal satisfaction or career growth (Mason et al., 2011). Furthermore, research indicates that permanently employed young professionals whose abilities and interests are in harmony give high level of importance to learning and development opportunities. Such professionals anticipate continuing learning during their career, seeking out broader learning and acquire more from learning activities (Vaughan, 2003). Hence, while learning activities are crucial for part-time employees (Stern et al., 1997), these may be especially vital for permanent professionals as they improve their professional abilities and pursue their career objectives and goals. Overall, full-time employed young professionals have a longer time at job, are more inclined to work in jobs and organizational settings appropriate to their abilities, expertise, and career goals, and are more energized by positions that present chances to acquire knowledge, improvement, and career advancement than part-time staffs. Permanently employed professionals' experiences are thus predictable as particularly pertinent for the improvement not just in work-related information and abilities but also for their values and orientations towards learning and growth (Mason & Brougham, 2020).

### **2.6.7 Learning and Development Experiences of Young Professionals**

#### **2.6.7.1 Work Setting and Environment**

The workplace is a crucial setting for the establishment of a learner's identity (Coetzer,

2007). Although substantial identity development occurs during infancy and schooling, Uddin et al. (2016) believes that as young professionals integrate into the workforce, they turn into not just professionals but also learning-professionals. Individuals who become learning professionals evaluate true meanings of a professional who is constantly acquire knowledge to improve his abilities. Organizations have a vital function in assisting younger professionals in adjusting to their job and role by providing opportunities for on-the-job learning and relationships with supportive senior peers (Vasanthi & Basariya, 2019). Coworkers and supervisors help young professionals adjust to their new jobs and build their professional perspectives and identities (Akey et al., 2017). According to the literature on older professionals, organizations that focus on learning and development can strengthen beliefs and attitudes about work and learning through supportive peer interactions in the workplace (Rotatori, et al., 2021). During early career, novice professionals are likely to be enticed by workplace setting more than the elder ones (Mason & Brougham, 2020) may.

#### **2.6.7.2 Work Environment for Part-Time and Permanent Professionals**

These studies provide several insights into the early job experiences of part-time young professionals. They emphasize on the significance of the workplace setting and in particular associated social ties. However, a few academics have hypothesized that because part-time professionals' social networks are mostly located outside of the work environment and employment connections may be less crucial to all these individuals than initially believed (Scales et al., 2016). Many studies on full-time professionals support the idea that a person's career experience and workplace culture are significant sources of individual and job-related development and growth, while also highlighting the necessity of further study on this topic. Literature also demonstrates that work values vary over a person's first years of full-time employment (Dopson et al., 2019) and in responses to particular events, such as the ability to acquire new skills at work (Webb & Karlis, 2019). All of these findings point to the workplace as a key arena in which young professionals build their identities as both professionals and learners (Takeuchi et al., 2021). Seniors and peers, in particular, appear to have vital part in assisting novice colleagues in adapting to work and demonstrating their professionalism (Uddin et al., 2016). The research provides additional evidence for the importance of interpersonal ties in the learning of young professionals (Akey et al., 2017). As a person's primary activity becomes their job, seniors and peers may become critical sources of learning and development for young professionals (Schunk & Meece, 2006). Colleagues may also influence a young professional's belief in acquiring professional knowledge, much as they affect their assurance in accomplishing educational goals (Scales et al., 2016).



### **2.6.7.3 Drivers for Career Foundation of Young Professionals**

The expectations for a job and its possibilities have recently shifted from traditional conceptions that have been prevalent in the business world for decades to current concepts. It is believed that the first few months of career are crucial for developing a favourable social contract between a professional and an organization (Blokker et al., 2019). These contracts are described as professional opinions of experts about the term and circumstances of their organizations' exchange agreements. Psychological contracts in the relatively stable environment appear to differ in many ways from those in the existing dynamic situation (Presti et al., 2019). Several job motivators that were a component of the psychological contract have evolved through throughout time. These motivators are an individual's short-immediate or long-term goals or choices that influence his or her job decisions (Modestino et al., 2019). Aspirations and priorities may be linked to precise aspects of an organization or work therefore; career drives can be either job-related or organization-specific. Such career drivers whether traditional or progressive can be characterized broadly (Davis, 2015). According to the data, progressive career drivers outnumber traditional ones (Schindler & Virdia, 2019). In both circumstances, new age employees are more oriented towards progressive career drivers, notably the ability to acquire new abilities and skills in order to better their existing standing.

## **SECTION - VII**

### **CAREER-ORIENTED LEARNING AND DEVELOPMENT**

#### **2.7.1 Early Career Values for Professionals**

Career has been defined by Greenhaus et al. (2010, p. 9) as “the pattern of work-related experience that spans a person's life”. Early career is a distinct stage and is transitory in nature. When choosing a career path or an organization is not necessarily normal or ideal (Singh & Greenhaus, 2004), it might be difficult for some professionals due to their social standing and career choice decision (Marcy & Mumford, 2010). It has been demonstrated that value of first year activities has a significant impact on prospective career progression, status, and incomes “through promoting or limiting access to coveted career options” (Jeong & Leblebici, 2019, p. 5). Values have an impact on professional development and decision (Johnson & Monserud, 2010). Such values may be extrinsic or inherent, depending upon the accompanying work compensation itself (Sorthaix et al., 2013). Importance of initial career have a considerable influence on professional trajectory and results (Wegemer & Eccles, 2019), even though career success is still ambiguous and may be perceived otherwise at that particular phase. Initial career values require special treatment as

a career management and decision component since the relationships between career decision-making and career success are the most promising variables to describe career aspects (Akkermans & Kubasch, 2017; Akkermans & Tims, 2017). Furthermore, Jian et al. (2019) have recommended more exploration on early career, particularly for fresh entrants however, no earlier research work has examined the law enforcement sector in terms of individuals' early careers values or associated determinants.

### 2.7.3 Career -Oriented Learning and Development in Early Career

Career-oriented learning usually occurs organically once someone is exposed to job and practical circumstances. Professionals now (Bridgstock, 2009) engage in most of this learning after graduating from educational institutions and beginning their first employment roles. Early access to job-oriented learning programs broadens professionals' understanding of potential career paths and helps in the formation of realistic identities. Young professionals gain a better understanding of learning and development programs in more specific and clearer terms when interaction with learning and development activities increases (Nyström et al., 2008). The traditional strategy is no longer viable in today's very crowded and competitive environment (Karmel & Carroll, 2016). Professionals must have a good idea of fundamental skills necessary to give worth to their effort and steer their careers. Recognizing such requirements, organizations have begun to implement deliberate measures to encourage career-oriented learning among their professionals. These approaches vary depending on the type of organization, organizational structure, professional needs and program profile, employability conceptions, the level of management guidance for career-oriented learning and development, and the vision, objectives and strategy according to which their organization functions (O'Leary, 2017).

During first year of their professional careers, professionals begin an iterative process of developing their career identities by recognizing their central career aspirations, skills, and beliefs and utilizing this emerging career identity in the framework of organizational information and expertise, ideally in genuine workplace context supported by professionals (Bridgstock & Hearn, 2012). This iterative and introspective procedure fosters the 'self-management' aspects of successful career management (Bridgstock, 2009). Professionals are assisted in developing adaptable career identities, which are identities anchored in accurate knowledge about the world of work and self-awareness, but are also adjustable enough to change over time as necessary. As part of their learning, they are motivated to acquire high-level abilities connected with professional development

and to continue the process on a regular basis. Once this procedure begins, employees are voluntarily inclined to involve in productive learning experiences in order to lead their own skills through learning in accordance with their personalized career objectives. Professionals will be more likely to value upward career development and other parts of career-oriented learning after ascertaining adaptive career identities (Bridgstock, 2009).

Professionals must gain organization-relevant learning and expertise in the next phase of career-oriented learning, including how to form organizational networks and discover, secure, or generate jobs. Renewing a skills-oriented program for integration into career-oriented learning can be a difficult task. If whole-program techniques are not used, some topics may contain career-oriented learning aspects while others will not. Professionals may oversight critical knowledge acquisition opportunities or replicate those several times instead of development of knowledge base across the curriculum (Bridgstock & Hearn, 2012). Organizational programs have long placed a premium on disciplinary knowledge and skills, as well as essential competencies and other transferable skills (Yorke, 2010). Furthermore, professionals may enter programs expecting to learn primarily discipline content. Career-oriented learning, according to researchers, actually improves the growth of administrative and essential skills, as well as meta-cognitive and self-regulating abilities. Career-oriented learning as a basis and integrator for discipline learning is a critical notion for professionals, academic personnel, and executives of organizations alike (Bridgstock et al., 2019). Once staff and leadership recognize the value of career-oriented learning in curriculum, the challenge remains as to how it can be actually utilized in programs. Organizations specialize employees in subject specific to their respective disciplines however, the majority lacks professional career-oriented learning and development experience. One effective strategy for incorporating career-oriented learning into programs might be to encourage deliberate teamwork among educators, career professionals, and learning architects. Transitioning to a mutual and all-inclusive course of action to career oriented learning will necessitate skill development for both career employees and trainers.

#### **2.7.4 Career Oriented Environment for Learning**

The non-traditional continuous improvement framework necessary to create learners' interest must emphasize the promotion of certain professional skills and a career profile (Meijers & Lengelle, 2012). A discussion regarding real job experiences is extremely important (Meijers et al., 2013). Kuijpers et al. (2011) and Meijers et al. (2013) demonstrated that a learning and growth

environment aimed at developing career competences and a career identification is practice-based and dialogical, and provides professionals with increasing authority over the decisions they take. This robust career-oriented HRD culture is notably different from a typical training and development atmosphere in that it is not primarily concerned with information transfer and is not directed towards a defined learning track (Kuijpers et al., 2011). Enterprises typically lack a good career-oriented learning atmosphere, including on-the-job training (Hughes et al., 2015). According to research, during discussion about job placements, supervisors speak to professionals 65% of the total time. They discuss professionals around 21%, and themselves about 9% of this time respectively (Winters et al. 2009). Fundamental explanation in this regard appears to be absence of dialogical abilities among supervisors, combined with job distinctiveness centered on information exchange and offering feedback in a mono-logical style (Assen et al., 2016a, 2016b). This career uniqueness is the product of intrinsic and extrinsic interactions in which an active interchange and a continuing construction process happens, culminating at an occupational distinctiveness (Lengelle & Meijers 2014). Additionally, the bulk of career guidance professionals had little or no particular career guiding training (Oomen et al. 2012). This necessitates a transformation from a monolithic to a dialogic learning culture, as well as new routines for supervisors' career conversations with their professionals.

### **2.7.5 Re-culturing of Organizations**

Establishing a dialogical career-oriented learning and development culture necessitates organizational “re-culturing” (Fullan 2007). Culture of any organization is characterized as “the deeply established patterns of organizational behaviour and the shared values, assumptions, beliefs, or ideologies that members have about their organization and its work” (Peterson & Spencer, 1990, P. 142). Changing organizational culture entails altering these deeply established habits and shared ideals (Blood & Thorsborne 2005). Co-cultivating novel and shared connotations necessitates professional growth and collaboration (Fullan, 2007). According to Lodders' (2013) study, collective learning pertains to work-oriented learning activity that occurs when participants of a group engage and consciously pursue shared learning learning objective. Socialization, a crucial aspect of group learning, adds to the clear and specific interpretation of tacit knowledge (Fullan, 2007), and thus necessitates far beyond merely learning from everyone else, such as the development of a shared acknowledgement and description of the learning experience and the fresh knowledge outcome (Gubbins & MacCurtain, 2008). Finally, in order to facilitate career

discussions with professionals, a sound career-oriented learning and growth atmosphere must be established. Combined education of supervisors is required at the organizational level to develop such a learning environment. Transformational leadership is required at the management level to initiate the collective learning process of supervisors. In this debate, career guidance and dialogues, as well as team-based learning, were demonstrated to be key learning and development aspects as part of a career-oriented learning and development process.

### **2.7.6 The Concept of Career-Oriented Continuous Learning**

Career growth is a life-long learning experience according to Triandani and Anggriani (2015) whereas, in Rineer's (2020) opinion, the value of information and abilities earned through a career route is undeniable in one's advancement, and education plays a critical role in this process. By acknowledging the relevance of learning and development programs, the concept of life-long learning attempts to meet the practical and intellectual needs of professions. According to Triandani and Anggriani, the capacities of career-oriented continuous learning depend heavily on the individuals' personal talents and mindset. Furthermore, Carter (2021) argued that the theoretical concept found in the concept of career-oriented continuous learning is relevant because it is made up of knowledge-based concepts that form the foundation of a set of useful scenarios to assess the effectiveness of the career development policy for professionals. As a result, one of the concepts crucial to analyzing and understanding the effectiveness of career development strategy for professionals is the theoretical concept incorporated in the concept of career-oriented continuous (Thomas, 2019). Based on the findings of numerous academics, it can be stated that an individual's approach and attitude towards continuous learning plays a vital part in the success of any learning and development activity. Thus, attitude towards continuous learning can be a possible mediator in the learning and development process and professional career outcomes.

### **2.7.7 Career Oriented Learning and Career Management**

Career Management Skills (CMS) are the talents, traits, behaviors, and knowledge required by professionals to steer their careers. Despite challenges in defining a common concept of career management skills, throughout western nations there seems to have common understanding regarding the description of skills for career management program (Sultana, 2012). The chosen language in the local context is 'career-focused learning and growth', which emphasizes on the developmental part of career, which is maneuvered by learning orientation since its commencement.

The majority of institutional-taught career-oriented learning and growth themes contain learning competencies that enable decision-making practices, prospects awareness, transitional learning, and identity (Law & Watts, 1977; Law, 1996). The primary goal of career-oriented learning and growth is to assist learners recognize themselves and their environment, while also giving opportunities to learners to better decide on their knowledge and development and/or employment paths.

The objective of career management skills or career-oriented learning and development is not to prepare learners and young professionals for certain occupations or careers (Sultana, 2012). It is better to think of it as a continuous learning process as opposed to a single moment. According to the concept of career-oriented learning, individual learners can affect their careers, skills, knowledge and values; and work-related attitudes can be created via learning and personal experience (Neary & Dodd, 2016). Such mechanisms can be actualized in an institutional environment through job-oriented learning and/or career advice programs and services that target a wide range of individual learners. According to Sultana (2012), organizations should also recognize that learners might previously possess a variety of abilities, behaviors, and beliefs regarding the workplace and learning because of their everyday experiences outside of the classroom. These might have been acquired through work experiences, assisting colleagues with work, volunteering, and other informal means. The goal is to assist learners to recognize their prior knowledge and construct upon it in self-evaluation ways (Law, 1996).

### **2.7.8 Career Oriented Learning and Guidance**

According to OECD (2004, p. 19) guidance during career is described as “services and activities designed to assist persons of any age and at any stage of their lives in making learning, development, and employment decisions to manage their careers”. Developing and implementing career guidance program is part of career guidance. This allows professionals to better understand their own strengths, interests, and goals. The increasing complexity of the workplace and expanding chances during post secondary learning and development process necessitate better reach to meaningful career-oriented learning and professional assistance. Professionals must now find out ways to look for and assess various reservoirs of knowledge in order to plan learning and development paths that match their interests, abilities, competencies, qualifications, and changing market possibilities. Council of European Union passed resolutions during 2004 and 2008 emphasizing the importance of good support for guidance during one's career. The goal is to provide people with the knowledge and abilities they need to deal with their knowledge acquisition, careers,

changing over of training intuitions, training and work. The resolutions mentioned above regard acquisition of career management skills to be a significant objective for advisory services (Sultana, 2018). Career-focused learning and career guidance activities complement each other. According to Law (1996), “a single program of work can integrate them into a whole, each providing mutually supporting contributions” (p. 210). However, the lines between the two are blurred since several actions may overlap. The association is fluid and constantly renegotiated.

### **2.7.9 Role of Dialogues in Career Oriented Learning**

A career dialogue allows learners to use career skills and capabilities, and as a result, establish a career identity in stages (Savickas, 2019). A career identity manifests itself as a story (Lengelle & Meijers., 2014), and in a variety of circumstances, this “career story” assists individuals in defining who they are and how they should behave in a career context. It is accomplished through generating and supplying purpose and right direction (Wijers & Meijers, 1996), as well as by creating a feeling of causality and consistency about one's professional path (Longenecker, 2010). Trainees and their counselors collaborate to provide significance to their career experience in order to create a career narrative. It emerges from the literature survey that career guidance and dialogues play a significant role in steering young working professionals in the right direction early in their careers. Hence, career guidance and dialogues might be a potential variable in the study.

### **2.7.10 Strategy for Career-Oriented Learning**

Career-oriented learning approach of an organization is the means through which it ensures that learning and development factors contribute to the achievement of its stated targets and objectives (Whitely et al., 1992). In other words, when individuals are able to expand their knowledge and abilities, they will be able to use them to attain desired goals and objectives. Strategic HRD also encompasses initiating, eliminating, modifying, steering, and guiding practices so that all employees and teams are armed with the required skills, education, and competencies (Nguyen, 2020). As a result, professionals may be enabled to carry out current and potential organizational tasks. The characteristics of the learning and development strategy are explained in the following paragraph.

### **2.7.11 Features of Career-Oriented Learning and Development Strategy**

A career-focused learning and development strategy should be business-driven in the notion that it is intended to promote organizational goal through fostering an advantage in human capital (Tang & Martins, 2021). Moreover, it should be people-centered, which entails considering the desires and necessities of participants and implementing aspects that may facilitate their active growth and development. The philosophy supports a career-oriented learning and development strategy (Khan, 2022). It focuses largely on the creation of a learning environment that fosters learning and provides the basis for the planning and implementation of learning programs and practices. A career-focused learning and development plan represents the organization's perspective on learning and development's function. Investment in training and development initiatives has been shown to contribute significantly to the attainment of corporate objectives, and investment in them has proven to be advantageous to all members of the organization (Ok & Vandenberghe, 2016). Plans and programs for career-oriented learning and development has to be linked with and support the attainment of organizational and HR priorities. Organizations must promote and provide opening to all of their members to grow and improve their professional competence and abilities (Ellemers et al., 1998). The need for organizations to invest in learning and development has been widely acknowledged. Individual employees bear the primary responsibility for development. Supervisors and representatives of the HR department will provide support and guidance to these personnel (Wickramaratne, 2021).

#### **2.7.12 Best Practices in Designing Career Oriented Learning and Development Strategy**

This section examines some studies on the practices for developing a career-oriented learning and development strategy (Killian, 2010). In a study on post secondary institution, Cembrowki and Da Costa (2001) explained how managers can advance to other internal positions and assist with succession planning. According to Simonsen (1997), the crucial elements of an embedded career advancement scheme are a career advancement perception and philosophy, support from upper management, education and interaction with employees, middle engagement, employee ownership and obligation for their own growth, and career advancement resources. During a study on best HR practices in 51 European organizations, Buus and Saslow (2005) deduced that, while there was no single approach to oversee leadership development, the best practices were: linking growth to plan, utilizing real-time feedback for adjustments, applying customized learning methods, assisting buddy programs, internal and external audit effect, and sharing results, “creating and maintaining a strong learning culture, ensuring that learning is a top



priority for the organization, providing diverse learning delivery methods, rendering learning support, and aligning learning with organizational strategy” (p. 1).

In a benchmarking study of best practices in leadership development, Fulmer and Wagner (1999) outlined the following eight principles: Aligning leadership development with growth strategy; establishing an HR and business collaboration; utilizing competency frameworks; talent development from within; establishing strong links to succession planning; promoting action learning; ensuring high level assistance for development work; and thorough assessment of the results.. Stahl et al. (2012, p. 32) found “best practices are only 'best' when they are used in a certain context; what works for one organization may not work in another”. Day (2007) in a report on the Society for Human Resource Management Foundation discovered that the most successful leadership development approaches must be formalized through rigorous, individualized, and experience based process (pp. 4–5). While there is no one-size-fits-all approach to designing a learning and development program (Garavan et al., 2012; Stahl et al., 2012), several best practices have evolved from the research (Buus & Saslow, 2005; Day, 2007; Garavan et al., 2012; Stahl et al., 2012). Based on a thorough and exhaustive examination of the literature, following is a set of best practices: a) Align learning and development with organizational strategies and business objectives; b) Get top-level support; c) Share vision; d) Assign financial support; e) Integrate learning and development into organizational cultural; f) Put learning first at organizational level; g) Diversify transfer of knowledge; h) Tailor programs to get learners’ participation; j) Appraisal to assess return on investment; and k) Offer continuous communication, involvement and change.

## SECTION-VIII

### **CAREER- ORIENTED DEVELOPMENT AND ARTIFICIAL INTELLIGENCE**

#### **2.8.1 Artificial Intelligence Techniques**

The Artificial Intelligence techniques are known as machine learning (ML) techniques. The ML techniques learn from past and previous data and make prediction for future. The ML techniques are explained below:-

- a) **K-Nearest Neighbor.** “The k-nearest neighbors (KNN) algorithm is a simple, supervised machine learning algorithm that can be used to solve both classification and regression problems. It is easy to implement and understand, but has a major drawback of becoming significantly slow as the size of that data in use grows” (Chima, 2022).

b) **Naïve Bayes.** Naïve Bayes Classifier is one of the simple and most effective classification algorithms, which helps in building the fast machine learning models that can make quick predictions. It is a probabilistic classifier, which means it predicts on the basis of the probability of an object (Premnath & Arun, 2020).

c) **Support Vector Machines.** Support Vector Machine (SVM) is a supervised machine learning algorithm, capable of performing classification, regression and even outlier detection (ww.google.com).

d) **Decision Trees (DTs).** “These are a non-parametric supervised learning method used for classification and regression. The goal is to create a model that predicts the value of a target variable by learning simple decision rules inferred from the data features. A tree can be seen as a piecewise constant approximation” (ww.google.com).

e) **Random Forest.** A Supervised Machine Learning Algorithm which is used widely in classification and regression problems. It builds decision trees on different samples and takes their majority vote for classification and average in case of regression (Google.com).

f) **Artificial Neural Network (ANN).** An artificial neural network is an adaptive system that learns by using interconnected nodes or neurons in a layered structure resembling a human brain. A neural network can learn from data—so it can be trained to recognize patterns, classify data, and forecast future events (Sakka et al., 2022).

### 2.8.2 Artificial Intelligence Evolution in HR

The application of artificial intelligence (AI) in human resources (HR) is no longer limited to specific usage. Either through software or with customized solutions, AI today provides HR professionals with novel answers to their most pressing problems (Premnath & Arun, 2020). AI technologies are essential for making educated decisions so critical in enhancing the success of an organization. Career development involves assisting people throughout their professional advancement, from enrollment inside the organization to continuous learning and development (Chima, 2022). With AI forecasts, HR department can then predict the organization's future staffing and educational needs in order to prepare accordingly. The application of these solutions not only secures the long-term profitability of the organization, but also sustains and strengthens the availability of workers, by assuring them a growth in competencies in accordance with the requirements of future work environment (Sakka et al., 2022).

### 2.8.3 Artificial Intelligence in Learning and Development

Recent advancements in Artificial Intelligence are anticipated to have substantial effects on future labour force and competency needs, in addition to allowing novel learning methods (Premnath & Arun, 2022). As per literature and research study results (e.g. Russell et al., 1995; Berk, 2021; Chima, 2022), Artificial Intelligence may be employed in learning to facilitate a variety of functions, including learners' self-inspiration and well-being, individualized learning assistance and responses, learning processes and applications, program evaluation, segmentation and forecasting, ease of use and accessibility, staffing, and professional management. Several researches have examined the benefits of AI in career guidance. Like Russell et al. (1995) evaluated the effect of artificial intelligence on the learners' development, including academic support. They found that Artificial Intelligence might have a favourable effect on learners as well as on the organizations, institutions, procedures, and individuals that comprise learning system. While Premnath and Arun (2020) do not expressly contextualize their research within career guidance, the real examples along the professional' lifecycle promote the introspection on abilities and learning chances, as well as the transformation to the working world, which are important functions of career guidance. Learning and Artificial Intelligence have a complex interaction (Sakka, 2022; Coeckelbergh, 2019). First, Artificial Intelligence related competencies should be developed in training academies, since they will be necessary in future job situations that employ AI. Second, innovation based on Artificial Intelligence may be used in the process of education and learning, either by integrating it into current learning settings or by exploiting better learning environments for learning goals. Thirdly, Artificial Intelligence should be advanced further for educational reasons.

### 2.8.4 Skill Gaps Identification and Filling

AI can also rapidly discover professionals' skill gaps, i.e., the difference between their current skill level and the one needed to assume a certain job or satisfy specific organizational goal. Several diagnostic methods are employed to determine this skills mismatch (Chima, 2022). In the perspective of career development, this is often accomplished through yearly interviews and self-evaluations by correlating the abilities that workers have with those necessary to hold their present job or the one they are aspiring to occupy. Several technologies can be applied to swiftly quantify this difference with the help of Artificial Intelligence. Keeping in view organization's strategic objectives and using skills repository, skills gap are identified (Russell et al., 1995). After these deficiencies are recognized, it is feasible to incorporate technology to align the job descriptions to

the learning material in order to acquire one of most suitable learning solutions to fill these voids (Sakka, et al., 2022).

### 2.8.5 **Fostering Internal Mobility and Career Path**

Artificial intelligence is also demonstrating to be important in extending career pathways that are tailored to individuals' requirements and ambitions (Arthanat et al., 2019). Thus, regardless of the domain of advancement (promotion) or lateral mobility (corresponding post), Artificial Intelligence enables the identification of connections across divisions to build meaningful career options for individuals (Chapman, 2021). By assessing the closeness between the task specifics (title and explanation) and the abilities needed for doing the various responsibilities inside the organization, Artificial Intelligence may identify customized career progression prospects for individuals. In fact, technology may find career advancement opportunities that HR staff might not have initially considered (Hmoud & Laszlo, 2019). This skills-based strategy may be utilized to keep talent by providing professionals with a variety of opportunities inside the organization.

### 2.8.6 **Optimizing Career Management through Artificial Intelligence-Based HR Tools**

Career development and management entails assisting professionals during their entire career progression, from recruiting inside the organization to ongoing development and learning (Bothma, 2018). Artificial Intelligence has been gaining traction in the HR field for some years. Some of the important career development functions that can be mechanized using Artificial Intelligence involve sorting applicants, proposing learning and building tailored career opportunities for staff (Malathi Sriram, 2017). The succeeding AI-based solutions accomplish these goals:

a) **Professional - Job Offer Matching.** This tool makes it easy to find the most relevant candidate profiles for a given position by matching the skills associated with job offers with the skills identified in the candidates' bio-data. This matching allows for an objective pre-selection of profiles for the positions to be filled. The support of technology allows recruiters to save precious time, and candidates and the organization to begin the first stage of career management in good conditions (Hmoud & Laszlo, 2019).

b) **Learner - Training Matching.** This tool makes it possible to offer the most relevant training content to employees according to their needs. It is based on a common reading key, the skills, to match the contents of a training catalog with learner profiles, based on the job they hold and the skills they have. This matching allows us to offer them training adapted to the changes affecting their job or their professional development (Mathur, 2019).

c) **Skills - Job Matching.** This tool allows HR to associate a job title with a set of skills, and conversely, to match a list of skills with a job. In this way, it allows the jobs and skills of employees to be matched with all the positions in the organization. In this way, the technology can quickly identify the bridges that exist between employee profiles and vacant positions or job openings in order to determine whether they can be filled internally or otherwise (Tambe et al., 2019).

### 2.8.7 Machine Intelligence to Predict Career Success

There is no universal strategy for professionals' work engagement. To optimize the effectiveness of their skills training, organizations must first customize the information offered to each worker. Adapting learning to a user's requirements, learning preferences, and chosen transmission medium enables the individuals to more effectively achieve their own progression and determine how their competency matches with their entire career aspirations. Organizations must also evaluate how learning and development is measured (Kettunen & Sampson, 2019). Self-initiated learning paths need a component of unorganized inquiry for professional development. Presently, however, degree accomplishment and time spent in a program are used as metrics. While it is essential, but we must shift our emphasis and investigate other aspects, such as program participation and the contents individuals desire most frequently (Fusco et al., 2020).

### 2.8.8 Artificial Intelligence Linkage to Success of Organization

The ideal method to enable professionals reach their full latent is to create possibilities for professional advancement. A stage powered by Artificial Intelligence may render professionals a consolidated perspective of their talents. It provides a gauge of the closeness between various talents (Sampson et al., 2020). Moreover, it can offer constant monitoring of the fresh abilities necessary for career advancement. Organizations that employ extensive skill metrics will have a greater awareness of the current skill sets of their expertise. In addition, they will comprehend the adaptation requirements of the future. Anybody with the inherent drive to progress can profit from artificial intelligence and the strategic placement of skills-oriented knowledge (Kumari & Hemalatha, 2019).

## SECTION - IX

### OVERVIEW OF LAW ENFORCEMENT AGENCIES IN PAKISTAN

#### 2.9.1 Types of Law Enforcement Agencies in Pakistan

Two major categories of law enforcement agencies exist in Pakistan. The first group consists of federal government entities, while the second is police force in the provinces. Numbers of primary agencies functioning under the jurisdiction of government in the center are nineteen, which are handling a wide range of law administration duties such as collection of information, patrolling along frontiers, execution of law and responding to numerous offices (Abbas, 2011). The overall manpower strength of the entire segments of all law enforcement services available to government in the center having authority in all provinces is estimated to be approximately 700,000 people. The eighteen Federal LEAs fall into four basic categories (Abbas, 2011) as represented in Figure 2.3.

a) **Forces under the Control of Ministry of Interior.** These forces include the Pakistan Rangers (Punjab and Sindh), the Pakistan Maritime Security Agency, the Frontier Corps (KPK and Balochistan), the Frontier Constabulary, and the Northern Areas Scouts (Gilgit-Baltistan). This force also includes the Islamabad Police and the Federal Investigation Agency (FIA).

b) **Police Planning and Management Organizations under the Ministry of Interior.** The National Police Bureau, National Police Management Board, National Police Foundation, and National Public Safety Commission are among them. The National Counter-Terrorism Authority (NACTA) is the most recent entity to be added to this list.

c) **Other Federal Agencies.** Organizations that are not directly controlled by the Ministry of the Interior fall into this category. They include the Ministry of Communications' National Highways and Motorway Police, the Ministry of Railways' Pakistan Railways Police, the Ministry of Defense's Airport Security Force, and the Ministry of Narcotics Control's Anti-Narcotics Force.

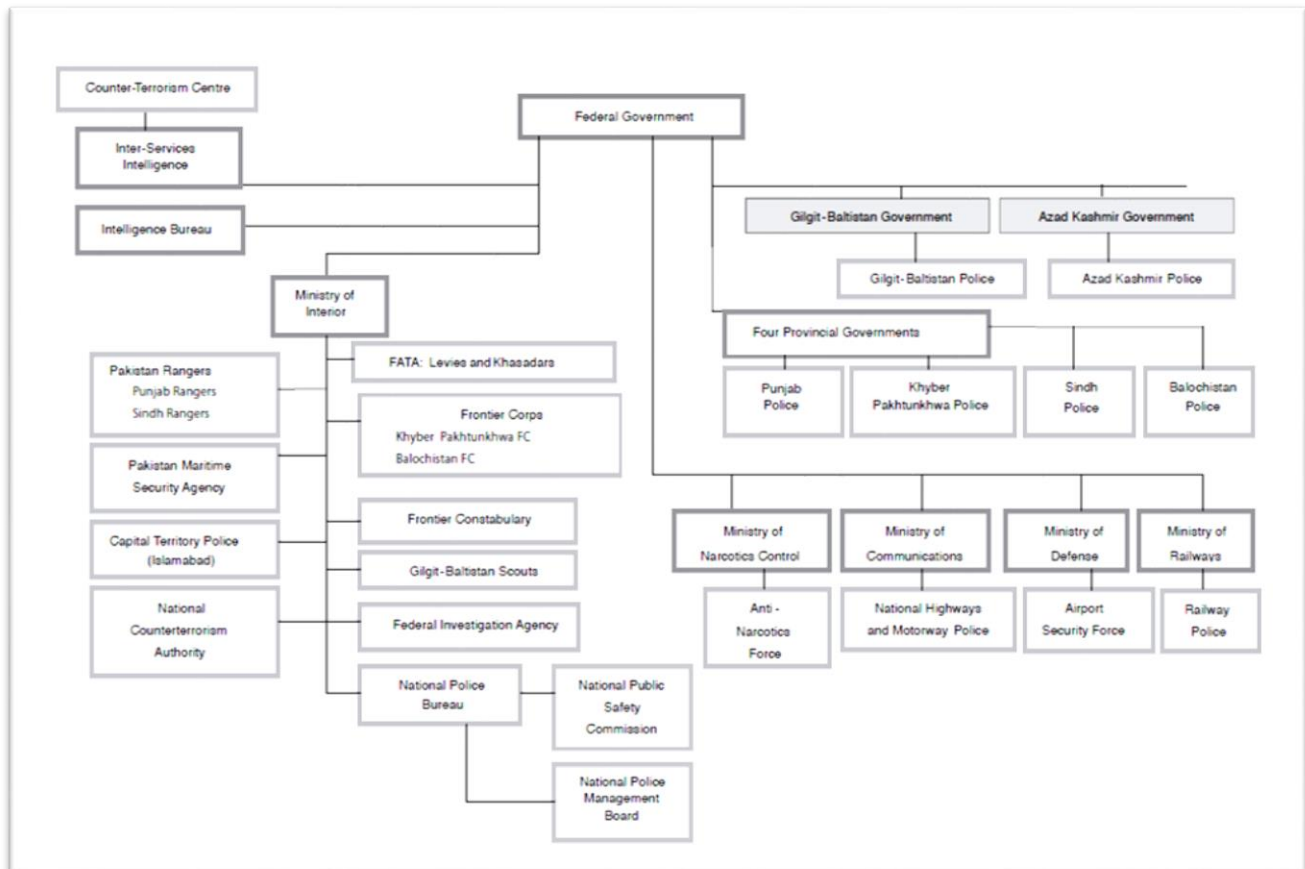
d) **Intelligence Agencies.** The two principal intelligence outfits are the Intelligence Bureau (IB), a civilian agency, and Inter-Services Intelligence (ISI), overseen by a senior serving Army officer. In Pakistan, they have regional and provincial offices. The following paragraphs provide a quick overview of these organizations' responsibilities, jurisdiction, and line of command.

e) **Provincial Police.** The four provincial police organizations, as well as those in Gilgit-

Baltistan (GB) and Azad Jammu and Kashmir (AJK), make up the second category of law enforcement substructure. These provincial and regional police agencies are all organized similarly and follow the same set of laws and norms. The Pakistan Penal Code, the Code of Criminal Procedure, and the Qanun-e-Shahadat Order, for example, are uniformly applicable to all parts of the country excluding Federally Administered Tribal Areas (FATA).

f) **The Police Service of Pakistan (PSP).** It is a Federal service enrolled through the Federal Public Service Commission that supplies more than 80% of senior supervisory officers with the rank of assistant superintendent of police and above who serve as sub-divisional police chiefs to provincial police departments. The Establishment Division of the Federal Government manages its enrollment, training, and career management, including transfers to provinces and federal districts. Lower-ranking police officers are permanent employees of provincial police organizations and cannot be transferred outside of their home provinces. Since the British era, Pakistan has had these complex service structures of LEAs.

**Figure 2.3: Organizational Structure of Law Enforcement Agencies in Pakistan**



Source: Abbas, H. (2011). *Reforming Pakistan's Police and Law Enforcement Infrastructure*: Washington, DC: US Institute of Peace.

## 2.9.2 **Pakistan Police**

### 2.9.2.1 **Origin of the Force**

After taking complete control of combined India on August 17, 1860, a Police Commission was established by British administrators in order to manage a police force. Within 22 days, the commission completed its recommendations, followed by enactment of 1861 Police Act, resulting in raising of police force officially (Rohde, 2002). This act was created following Irish Constabulary guidelines and was mainly intended to raise a law enforcement agency capable of consolidating and maintaining the British rule without concern for individuals' civil rights in India (Royal Irish Constabulary, *The Oxford Companion to Irish History*). Ironically, the British rulers' mandate for this police force was significantly dissimilar to the mindset, tasks, and goals of the police in the England itself. The force was visualized as a dictatorial and oppressive institution with no intention of serving the country's populace in India.

The India régime formed a seven-member panel in July 1902 to assess the effectiveness of the newly raised police organization in order to make realistic reforms for efficacy of this force (Khan, 2008). Only minor structural and ceremonial changes were proposed by the commission, hence, the police force kept on operating for the following few decades. The regulations for Indian police were initially drafted in 1934. Specific directions and extensive guidelines were provided covering variety of operational activities of police (*The Punjab Police Rules, 1934*). The Police Act of 1861 was not significantly revised on Pakistan's independence in 1947. Throughout the next four decades, several administrations in Pakistan formed approximately two dozen committees and commissions to suggest reforms to the Police Force (Khan, 2008). Due to a general lack of determination and paucity of means, most efforts for improvement were futile. However, the Police Ordinance 2002 implemented during General Musharraf's rule outlined a comprehensive strategy to reform this law enforcement force on modern lines (Suddle, 2003). Despite being a well-planned and comprehensive legislation, the Police Ordinance 2002 resulted in minimal and gradual development due to a mess of implementation issues, political imperatives, and dearth of financial capital. More importantly, the Federal Government's reluctance to pursue an implacable application of this law has hindered further developments on police reforms.

### 2.9.2.2 **Major Responsibilities of Police Services**

According to Khan (2008), main duties of Police Services of Pakistan are represented below (Table 2.1).



**Table 2.1: Responsibilities of Pakistan Police**

<i>S/No.</i>	<i>Type of Police</i>	<i>Responsibility</i>
a)	<i>Capital Police at Federal Level</i>	<i>Maintain law and order within the boundaries of Islamabad-The Capital.</i>
b)	<i>Each Provincial Police</i>	<i>Preservation of order within relevant borders of the concerning province.</i>
c)	<i>Railways Police</i>	<i>Guarding railway trains and security of tracks including other relevant arrangements.</i>
d)	<i>Prisons Police</i>	<i>Security of all prisons across the country.</i>
e)	<i>Federal Investigation Agency</i>	<i>Collection of Intelligence at state level.</i>
f)	<i>Levies Force</i>	<i>Security of 'B' type zones in Baluchistan.</i>
g)	<i>Frontier Constabulary</i>	<i>Maintenance of order and security in the tribal regions.</i>

Source: Khan, D. (2008). *Pakistan's Law Enforcement Agencies--Harnessing their Potential to Combat Terrorism*. Naval Postgraduate School Monterey CA.

### 2.9.2.3 Organization of the Police Force

All police services have their own organizational structures at the federal and provincial levels, and they operate in parallel with modest coordination (Suddle, 2003). Though each one has a distinct purpose, the central and agencies of relevant regions have broader responsibilities and are the primary counterterrorism forces. Table 2.2 below shows their approximate strength of police forces (Khan, 2008; Abbas, 2011).

**Table 2.2: Police Manpower**

<i>S/No.</i>	<i>Province/Area</i>	<i>Manpower</i>
a)	<i>Punjab Police</i>	<i>179921</i>
b)	<i>Sind Police</i>	<i>128500</i>
c)	<i>KPK Police</i>	<i>70000</i>
d)	<i>Baluchistan Police</i>	<i>38000</i>
e)	<i>Islamabad Police</i>	<i>12500</i>
f)	<i>Total Police Strength</i>	<b><i>429000</i></b>

Source: Khan, D. (2008). *Pakistan's Law Enforcement Agencies--Harnessing their Potential to Combat Terrorism*. Naval Postgraduate School Monterey CA.

#### **2.9.2.4 Training and Development**

Police Training Academy at Islamabad is the only facility for grooming and development of officers in police. Police training institutions and schools of concerned provinces train officials of all other ranks (Khan, 2008). Regardless of considerable progress in recent past, these institutions and academies are inadequately equipped for all-inclusive police force training. Neither the colleges nor the academies have any research and analysis wing. The department has few opportunities to train on modern lines. They mostly rely on on-the-job training (International Crisis Group, 2008). The primary training school is the Razzaq Abad Anti-Terrorist Training School in Lahore. However, only limited training programs can be conducted in this school that too for few individuals.

### **2.9.3 The Constabulary Force of Frontier**

#### **2.9.3.1 Foundation and Responsibilities**

This force was formed as Frontier Constabulary in 1913 to guard the governed frontiers of the North Western Frontier Province (now KPK). However, its tasks have evolved, and authority of the Frontier Constabulary now covers the area ranging from Karachi to Pakistan's Northern regions. The force is governed by 'The Frontier Constabulary Act 1915'. The original mission of the force was to stop tribal penetrations and illegal groups operating in the border regions, as well as to curb criminal actions and outlaws in border zones (Khan, 2008). However, ever since its origin, it has been supporting other LEAs in dangerous state of affairs, such as providing security to critical sites and foreign missions, watching drugs smuggling along the periphery of established and tribal areas, and performing any additional task demanded by the government.

#### **2.9.3.2 Organization and Strength**

The structure of Frontier Constabulary is platoons based. Along with the headquarters, there are general duty platoons. The manpower of the force is drawn from the KPK's frontier tribes. Pashtuns are the only people who can join the Frontier Constabulary. It is mostly a preventative force that may be deployed anywhere in Pakistan. This force lacks a specific intelligence agency, and its reaction to any crisis is predominantly reactive as opposed to proactive. Administrative control is entrusted to the Interior Ministry, while province where constabulary forces are positioned are delegated to exercise operational control (Khan, 2008).

#### **2.9.3.3 Training and Development**

Personnel of the constabulary are imparted training in their centers at Shabqadar and Swat, KPK. Both institutions are under equipped, inadequately staffed, and poorly structured to provide

high-quality learning. The FC's deployment model varies according to law and order state of the country. Because of their poor degree of operational preparedness, most Frontier Constabulary platoons are positioned in partnership with other LEAs. This force is rarely tasked any significant mission on its own. The Frontier Constabulary lacks specialist equipment as well as heavy guns. The force is technologically backward and rarely employs any breakthroughs in this field in its operations. Lately, some technical equipment including computers has been supplied for improved documentation however; these arrangements are inadequate for meeting even their modest needs of learning and development (Khan, 2008).

## **2.9.4 Levies**

### **2.9.4.1 Foundation and Organization**

The public police in Baluchistan, called Levies was created amid native clans of the province to manage peace and maintenance law and order in "B" type regions, considered as a replacement of police existing in rest of the state (Akbar, 2011). Setting up of Levies force dates back to the British rule, when Sher Shah Soori instituted administrative changes that resulted in the formation of a Federal Levies Force. Under this agreement, local tribes and elders were entrusted with responsibilities of maintaining peace and order inside their respective geographical and tribal borders. Following the collapse of the tribal system of states, the Levies became a provincial police in 1958 and started enforcing peace and order in the leftover "B" districts at par with the police under regular legislation (Samad, 2014). Merger of the Levies into the mainstream police force is underway. Levies have a total strength of around 10,000 soldiers (Khan, 2008)

### **2.9.4.2 Tasks**

Despite having a separate uniform, traditions and method of functioning, the Levies' tasks are nearly identical to the responsibilities of police. In 2003, Federal Government of Pakistan began integrating the Levies into police force, with the goal of eliminating Levies from provinces and organizing the police force in all regional sections. This practice is in progress and ongoing. Levies are currently in charge of upholding peace and ensuring security in "B" sections of the province, as well as monitoring, detecting, and apprehending criminals, highway security, protecting vital installations, and escorting dignitaries (Akbar, 2007).

### **2.9.4.3 Training and Development**

There is no established training centre in the country for Levies troops. After on-the-job minimum initial training, the mere option to conduct training for Levies troops depends upon availability of few odd vacancies at training facilities of the Army and Police.

### 2.9.5 CAF (Civil Armed Forces)

In conjunction to the different law enforcement forces solely controlled by provinces, Pakistan owns a well-structured CAF forces. These forces are also referred to as paramilitaries. They are managed at the centre level under the administration of the Interior Ministry, but are operationally positioned and administered in their particular province (Khan, 2008). These forces monitor the frontiers within their different domain, preserve national law and order, and respond to all disasters and crises. The CAF currently comprises of Punjab and Sind Rangers, Frontier Corps KPK and Baluchistan. Pakistan Coast Guards are also currently part of the CAF.

#### 2.9.5.1 Pakistan Rangers

Force that guards the borders of Pakistan in the east throughout the peacetime is named Pakistan Rangers. This is a federally sponsored force, which assists provinces of Punjab and Sind in maintaining writ of the government. Following its formation since 1948, the Rangers patrolled the whole of Pakistan's eastern frontier as a single unit. This outfit was split into Punjab and the Sind Rangers in March 1993. They function inside the borders of their areas of jurisdiction until the federal government requires their services outside (Khan, 2008).

#### 2.9.5.2 Punjab Rangers

##### 2.9.5.2.1 Tasks

Their mission is to defend the country's eastern borders in peacetime and start operating under the Pak Army during war, undertake domestic security tasks, facilitate assistance to the police force by taking part in combine operations against lawbreakers, including large-scale civil unrest, seizing control of some areas where the scenario is most dire, and conduct self reliant operations if necessary.

##### 2.9.5.2.2 Strength and Deployment

This group consists of around 100,000 individuals structured into the Rangers Corps. The bulk of the officers in this corps are on two to three years assignment from the Army. Punjab Rangers have created more domestic defense wings to react to the national security crisis that are committed to maintaining order within the state. This force, which is exclusively organized, armed, better skilled to confront domestic security threats, is anticipated to be far more successful than typical Rangers patrol at the border while combating terrorists attacks (Blood, 1994).

##### 2.9.5.2.3 Deployment and Manpower

Rangers Academy provides basic training for all ranks of the service. A number of them are further skilled while being trained during various courses offered by institutes of Pak Army. Besides

standard classes, anti-terrorist and commando training is also offered to Pakistan Rangers at the force's headquarters in Lahore.

### **2.9.5.3 Sind Rangers**

International boundary (around 912 kilometers) between Pakistan and India in the province of Sind is protected by Sind Rangers. These forces are engaged in fighting terrorism and holding order through extending intimate assistance to the Sind Police in Karachi, the interior of Sind, Gilgit, and Balochistan, as well as with United Nations missions worldwide (Khan, 2008).

#### **2.9.5.3.1 Role of Sind Rangers**

Normally, Sind Rangers perform duties equivalent to the Punjab Rangers. Nevertheless, with regard to domestic responsibilities, this force is currently performing variety of tasks in Sind, such as policing the National and Indus highways in emergency situations, supplying backup assistance to police, manning defensive bunds on the Indus River, remain available as a reserve in the event of civil unrest in Karachi, and undertaking independent operations as necessary.

#### **2.9.5.3.2 Strength and Deployment**

The Sind Rangers are comprised of an estimated 25000 officers (from Pak Army) and troops who are often deputed to Rangers. Because of ongoing operations against sub nationalists in Baluchistan, the exiting force deployed on the interprovincial boundary augments the Sind Ranger to observe the actions and moves of criminals. Since 2001, these Rangers forces have significantly enhanced their anti-terrorism capabilities. The elite commandos that comprise its anti-terrorist unit have been trained by the SSG (Special Services Group) of Pakistan Army. The Sind Rangers are now in charge of vital internal security operations in the province, including the protection of high-value installations, foreign consulates, different public and non-public agencies, and foreign dignitaries in transit (Suddle, 2003).

#### **2.9.5.3.3 Training and Development**

The Sind Rangers have an exposure to the same armaments and small arms as the Punjab Rangers has. Likewise, their standard of training, focus on combating terrorism competency for personnel, and operational effectiveness on the whole, in both conflict and peacetime situations are virtually identical to that of the Punjab Rangers (Khan, 2008).

### **2.9.5.4 Frontier Corps (FC)**

In 1907, seven pre-existing scout units and militias of territories along tribal belt of the combined India came together to establish the Frontier Corps, an independent and structured LEA (Abbas, 2007). The initial purpose of this group was to watch move across the Pak-Afghan border.

Although additional wings were added to the force following Pakistan's independence, it remained its basic goal. Nonetheless, the force's ongoing development and responsibility across 2500 miles of hard landscape led to its separation into two provincial organizations in 1973 that is to say FCs of NWFP and Balochistan provinces (Abbas, 2007). The Ministry of the Interior presently governs both detached troops.

#### **2.9.5.5 FC KPK**

##### **2.9.5.5.1 Tasks of FC KPK**

This force is accountable for security along Pakistan's northern and western frontiers. They have an efficient militia made up of people from tribes in KPK and Balochistan provinces. The FC KPK's mission includes both peacetime and wartime responsibilities (Dogar, 2014). The force's role is to safeguard and render vigilance of Pakistan-Afghan boundary line of KPK province, to preserve writ of the government in KPK (along tribal regions), to facilitate the civil government with domestic protection duties, and to come under Army control in times of war or crisis.

##### **2.9.5.5.2 Organization of FC KPK**

The FC KPK, with its headquarters in Peshawar, consists of corps and wings situated in strategic regions along the Pakistani and Afghan frontiers. Each corps is commanded by a Colonel who directly reports to the Inspector General of Frontier Corps (Rosenau, 2012). The IG, a major general (Pak Army) submits to the Interior Ministry in Islamabad. Scouts like South Waziristan, Chitral, Mahsud, Dir, Bajaur, Thal; Rifles like Shawal, Khyber, Tochi, Tochi and Mohmand and Kurram Militia, are examples of corps whose names typically reflect their regions of duty within KPK province (Abbas, 2007).

##### **2.9.5.5.3 Training and Development**

The KPK is provided with equipment and acts as an independent entity (Khan, 2008). This FC operates its own academy meant for training, but has inadequate foundation and associated resources. Prior to September 11, 2001, personnel training was mostly focused on peacetime security tasks along boundary lines. However, during past few years, the focus has shifted dramatically to learning to play the role to curb terrorist actions. Now, majority of the units are assisting the Pakistani military in anti-terrorist operations along the Pak-Afghan borderline. Originally, the force's output was dismal; however, it has been steadily improving (Abbas, 2007).

##### **2.9.5.5.4 FC Balochistan**

The FC Balochistan with its headquarter in Quetta, has manpower around 50,000 employees. This force is administered by the government at the centre, and its wings are stationed

all across the province of Baluchistan. They monitor the Pakistan-Iran and Pakistan-Afghanistan frontiers in search of anti-state and illegal practices as well as smuggling and people smuggling. Many times, this militia participated in government efforts to get rid of clannish and separatists, and other criminal groups present in the province (Khan, 2008).

#### **2.9.5.6 FC Baluchistan Tasks**

Major FC Balochistan duties involve guarding the Pakistan-Afghanistan and Pakistan-Iran frontiers to prevent smuggling and assisting the government in maintaining peace and order, protecting gas plants and mega projects, securing highways and railway connection, controlling human traffic, and executing anti-smuggling and anti-drug operations (Saleem, 2019).

#### **2.9.5.5.6 Training and Development**

This force possesses about the same amount and caliber of weaponry, operating equipment, and connectivity resources as the FC KPK. The FC Baluchistan has lately acquired a substantial amount of modern equipment and automobiles, which improves its overall operating effectiveness. Likewise, training on the job training in combating gangsters, terrorists, and sub separatists has led to the enhancement of both individual and group competencies of the force during the past several decades (Abbas, 2007).

#### **2.9.6 The Coast Guards of Pakistan**

Coast Guards of Pakistan patrols the state's coastline. The provinces of Sind and Baluchistan contain the majority of the state's 650 miles of coastline. The shoreline touches the Arabian Sea in the northeast (Zafar, 2021). The territorial seas have an extent of 24000, while the Exclusive Economic Zone is 196600 square kilometers. The enormous coastline of Pakistan remained open to many dangers before to 1971 since there was no structured force to oversee any kind of safety to combat criminals, infiltrators, and unlawful refugees. As a result, the Pakistani Coastguard was established in Karachi in June 1971. Since then, this force is being commanded by the Director General (brigadier from the Army) and has advanced at performing the tasks under the direction of its commander (Khan, 2008). In a bid to avert the smuggling and drugs, cease unlawful migration into and out of Pakistan, and prevent foreign spies or infiltrators penetrating along the coastline, the Coast Guard, works in conjunction with the FC Baluchistan, the Naval forces, , and the police force of the area. With Pakistan's rising terrorism, the relevance of Coast Guard has significantly improved. In order to combat with the traffickers, the police are chronically understaffed and lacks the most modern tools and equipment. This specifically affects their capacity for night operations.

## **SECTION -X**

### **LEARNING AND DEVELOPMENT OF YOUNG PROFESSIONALS IN LAW ENFORCEMENT AGENCIES**

#### **2.10.1 Learning and Development in the Public Sector and LEAs**

Effective learning and development support is crucial not only for individuals but also for the organizations. The government sector has lagged behind the business sector in implementing these programs in spite of better recognition of learning and development scheme (Hackett, 2018). It is because private sector organizations are highly competitive, and their bottom line is directly related to commercial profits. They compete globally rather than at local level. Furthermore, in the non-government sector, technical innovations have occurred more swiftly necessitating the need for highly skilled professionals. In simple terms, for their success taken as a whole for business earnings, private-sector organizations must retain a competitive edge (Obeidat et al., 2019). Service-oriented public sector organizations on the other hand are and run on resources mostly funded by government taxes. In LEAs, career development programs have progressed even more slowly. In actuality, career development has always been viewed as little more than promoting officers through the ranks until they become eligible to retire (Thomas, 2019). Hardly any guidance is extended to the professionals and far less help (if any) in personal improvement domain is provided. Economic factors have also been cited as contributing to the slow expansion of learning and development programs in law enforcement (Tahir et al., 2018).

Many police departments were compelled to restructure in the mid 1980s in order to minimize expenditures (Huey, 2018). This practice resulted in further reduction of opportunities for advancement. Hence, organizations must emphasize the need of learning and growing in one's existing position, as well as exploring new areas within the organization. Several LEAs have sought certification through the Commission for the Accreditation of Law Enforcement Agencies (CALEA) in past few years. This independent accrediting procedure verifies that LEAs have satisfied specialized requirements and specified criteria. Accreditation necessitates a substantial investment of time and money by participating organizations. Participating agencies are required by CALEA to have a documented learning and development program (Commission on the Accreditation for Law Enforcement, Inc., 1991). Thus, a growing percentage of law enforcement leaders perceive the significance of career development programs and view them equally to the private sector (Pyle & Cangemi, 2019).



### **2.10.2 Traditional Law Enforcement Learning and Development Activities**

The career of law enforcement is exceptional in that it entails a multitude of responsibilities at the personal, organizational, and community levels. These obligations are the glasses that reveal a law enforcement professional's responsibilities and tasks, leading to a unique differentiation from all other professions (Satterfield, 2019). Preserving the law and order, responding to citizens' queries, guiding individuals about civil rights, perilously chasing individuals engaged in illegal practices, assisting the elderly and young kids, exercising judgment while addressing grievances, educating the community on crime control, adhering to the hierarchy of power, and completing a load of paperwork comprise a standard working day for a law enforcement official. To guarantee that professionals are equipped with the requisite knowledge, abilities, and competencies to assume such a variety of jobs and responsibilities, it is essential that they receive the appropriate training. According to Walker (1999), law enforcement officers did not get official training fifty years ago. From the inception of institutionalized training, conventional police learning has frequently emphasized the mechanical and technological components of gaining abilities, topics like firing, driving, and team tactics (Alpert & Dunham, 1997), whereas disciplines such as interaction and problem-solving abilities, which are crucial for law enforcement professionals effective execution of tasks and obligations, were often disregarded (Birzer, 1999). Notwithstanding the diversity of law enforcement, the training activities are often executed in a uniformly aggressive way (Birzer & Tannehill, 2001).

### **2.10.3 Addressing Behaviorism in Law Enforcement through Learning and Development**

In the beginning of 1920, Watson (1913) created the notion of behaviorism. In the context of law enforcement, it is a rigorous procedure of integrating a person who has been socialized in and by society into the distinctive law enforcement culture. Several researchers in the realm of law enforcement have studied the viewpoint, personality, and identity shifts that occur throughout professional learning (McNamara 1967; Burgin, 1975; Maghan 1988; Andersen, 2006). All the way through the duration of training and development, the learner has little or no influence over his or her surroundings and is continually groomed in line with behaviorism theory, as reflected in instructional strategies, incentives, penalties, negative and positive feedback, etc. In the majority of instances, behaviorism theory acts as a basis for law enforcement training to fight crime and unrest, however, law enforcement strategies have evolved to emphasize evaluation and analysis (Andersen, 2006). Since the introduction of these new techniques, the training environment has evolved away from certain behaviorists strategies towards methods and training that are more in line

with contemporary trends. As a result of this shift in law enforcement policy, various training schools have revised their curriculum to match the latest perspective (Glenn et al. 2003). Hence, this new methodology of law enforcement requires professionals to be informed about existing legal decisions, scientific progress in the field learning and development, efficient interaction, learning process of judgments at group level, and teamwork, compared to traditional approaches (Birzer & Tannehill, 2001).

#### **2.10.4 Reasons for Learning and Development Initiatives in LEAs**

Leaders of law enforcement have utilized learning and development initiatives to enhance organizational performance (Carter, 2021). Although there are no regulations for delivering learning and development programs in non-accredited organizations, a number of law enforcement officers have recommended their usage as a method to improve organizational performance through leadership development, human skill development, and greater work satisfaction (Hackett, 2018). Private sector strategists and human resource professionals advocate for structured career enhancement schemes for similar reasons. They highlight the influence on overall organizational effectiveness through enhanced staff skills, work satisfaction, and leadership development (Khan, 2014). Individuals should thus be encouraged by organizational expenditure to determine the courses and impacts of their own career ambitions within the context of the organization's eventual objectives (Blokker et al., 2019).

#### **2.10.5 Learning and Development Strategies in LEAs**

Those in the field of law enforcement adopt a stated occupational ladder, also known as a career path. It is an established structure of methodical advancement to the top of an organization (Tajik, 2014). This professional ladder starts at the bottom with an official role and depicts the several ranks or stages required to advance to the next level until an individual achieves the highest position within an organization. Each next stage has greater responsibilities than preceding one (Malik, 2018). This form of organizational career prospect structure provides the most clear pathways to the organization's leadership. Prior to graduating to the next level, it is also expected that one gains specific skills and puts in time or tenure at each level (Groppi, 2021). Due to competitive challenges, the concept of hierarchical career advancement in several vocations and many organizations has evolved over the past few decades. The necessity to minimize expenditures and manpower has impacted organizations' career models (Ballard, 2015).

In LEAs, career progression integrates the phrases like career planning and management, a method of enabling and equipping agency personnel to advance within their services (Satterfield,

2019). Schindler and Viridia (2019) observed that career development is a significant variable in the HR equation of every organization, and that training, competence, expertise, and mentorship serve as the foundation for the development of individuals in any career sector. Similarly, Clanchy et al. (2019) warned that learning and development prospects and initiatives will be affected by technical, institutional, and human changes, and that organizations will face pressure to reduce their size owing to rising competitiveness. The majority of firms will require an adaptive staff (Cain, 2020). Professionals will need to be adaptable, able to tolerate ambiguity, and resilient in the face of career obstacles when faced with unpredictable circumstances. Individual workers are encouraged to pursue their own ambitions within the framework of the organization's goals in LEAs as a result of the essential alignment of their requirements with those of the organization (Ghezzi et al., 2021). Similarly, Bhatti et al. (2021) believed that individuals should determine their own career paths, while LEAs should concentrate on their efforts towards promotion of such paths.

#### **2.10.6 Role of Learning and Development Platforms in LEAs**

The training centers of law enforcement serve as the foundation for the personal, vocational, and intellectual growth of professionals. The centers are institutions that offer recruits with learning and development during crucial initial stage to produce competent and accomplished professionals (White, 2008). In addition, transformation, procedure, and philosophy are initially taught to law enforcement employees through training (Birzer & Tannehill 2001). Hence, training institutions need to acquire the role of effective change agents in enabling transformation. Besides White's (2008) stated role, it is essential that training centers offer such course designs that improve productivity, academic standards, and learning methods consistent with the participants' learning preferences. While building learning and development activities, many developers may assume that all learners have the same learning orientations. Similarly, before to 1950, many educators believed that for both kids and elders the same learning and development ideas are applied (Holmes & Abington-Cooper, 2000). HRD practitioners should understand and include learners' learning orientation (their choice for an andragogical or pedagogical learning style) while building effective learning and development curricula (Hunter-Johnson & Closson, 2012). In order to enhance the efficacy of law enforcement training program while endorsing improved learning performance and retention, it is necessary to measure the respondents' learning orientation in order to determine whether law enforcement employees have a pedagogical or andragogical learning orientation. There are implications for the incorporation of learners' learning orientation into curriculum design, the improvement of didactical approaches, and ways to boost learning and development activities

(Christian, 1982). This understanding of learning preferences is essential for planning and development of suitable syllabus, improved educational methodologies, and better learning strategies (Christian, 1982).

#### **2.10.7 Need for Learning and Development in LEAs**

Employees in law enforcement regard their profession as a career and themselves as professionals. Professionals require on-the-job training due to changes in rules, equipment, technology improvements, and the nature of fighting tactics. All of these occurrences necessitate law enforcement professionals learning new and diversified skills (O'Neill, 2016). However, there is one overarching factor in the demand for on-the-job training. Law enforcement management has a legal obligation to give proper and relevant training to their workers (Turner, 2017). In addition to studying the most recent and cutting-edge techniques, on-the-job training includes weaponry and defensive tactics (Northup, 2019). Only by preserving a lifelong dedication to learning can the professional employees develop. Recognizing this, nations maintain annual on-the-job training demands for law enforcement individuals in order to keep them as law enforcement professionals. Since society has become more complicated thus, emerging law enforcement employees are frequently forced to acquire new abilities (Williams & Sondhi, 2022). To have an ability to work after being transferred within various positions in the hierarchical organizational arrangements, a dedicated constant learning is crucial for professionals in the modern day (Stokes & Wyn, 2007).

#### **2.10.8 Need for Career Competencies in LEAs**

The job setting in LEAs has changed because of technological advancement. This trend compels professionals to assess their abilities for maintaining their relevance in the lifelong career. Several professionals have shifted perspective on expecting their career advancement inside present employer (Thomas, 2019). People used to make long-term plans for their futures, but they can no longer do so because of the constant change in knowledge and information (Du Plessis & Sukumaran, 2015). This shift in mindset requires LEAs to find ways to retain their talented employees (Northup, 2019). Once professionals have completed their training, they may adapt to acquire additional courses for inculcation of needed abilities for advancement inside the same organization (Landry, 2015). Professionals understand that learning and development increases obligations (Kirchner & Akdere., 2019). Individuals are also helped through learning and development programs to increase career-oriented skills to stay alive for their future career. Professionals' development and learning initiatives are also exceptional avenues for career success and happiness (Presti et al., 2021).

### 2.10.9 Quality Learning and Development for Career Prospects in LEAs

In order to operate effectively every LEA has particular requirements that must be addressed. Law enforcement administrators must recognize human, organization's physical and financial means to execute its mission, and the finest approach to achieve that goal (Thomas, 2019). It is the responsibility of the management to formulate policies and strategies to succeed in completing the mission of the law enforcement organization. For the purpose, organizational objectives are set to support the processes of achieving the mission (Satterfield, 2019). Professionals must be provided with high quality learning and development programs to execute these objectives. Professionals inside the organization are interested in advancing their careers successfully. Learning and development is also essential to achieve these specific objectives. When business and personal objectives do not align, organizational divergence may occur. Crucial to the effectiveness of in-service learning and development is giving professionals as much freedom as feasible to align their specific objectives with the requirements of the organization as a whole (Walker & Toh, 2017).

## SECTION -XI

### APPRAISAL OF LAW ENFORCEMENT AGENCIES IN PAKISTAN

#### 2.11.1 General Causes of Weaknesses in Pakistan's LEAs

A broader agreement exists regarding LEAs of Pakistan that they are unable to handle law and order situation effectively in order to provide basic security to people by combating crimes and growing militancy. Since 1947, leaders in the helm of affairs have never prioritized law enforcement and police sector for reforms and investment. Resultantly, law enforcement infrastructure as a whole is not well organized. Findings and recommendations of no of commissions' reports to change the status quo in LEAs could not be implemented for the reason that either the recommendations were generic or the authorities were not ready to execute the proposed changes. Some of the major reasons for weakness in the law enforcement infrastructure in Pakistan (Abbas, 2011) are highlighted below.

- a) **Deficiency of Numbers and Resources.** Pakistan has a total population of roughly 220 million people, and the entire provincial and federal law enforcement forces, including paramilitary and allied branches of intelligence organizations, have a total approximate strength of 700,000 individuals (Ghezzi et al., 2021). As a result, the police-to-population ratio is one policeman for every 314 people. Given the nature of Pakistan's law enforcement challenges, it appears that the work force is insufficient. Furthermore, according to UN criteria, a

professional, appropriately resourced by a genuine law enforcement agency can handle law and order concerns, which Pakistan does not have (Pyle & Cangemi, 2019).

b) **Institutional Disconnect.** Since there is no statewide integration in terms of training requirements and harmonization, law enforcement agencies in each province function independently of one another. The Federal Interior Ministry is in charge of overall oversight, while provincial police inspectors general report directly to their individual chief ministers. The provincial government also funds training and development. Furthermore, there is no standard hiring, transferring, or upgrading mechanism in the four provincial police departments, resulting in employment discrepancies. Inadequate information sharing and ineffective operational monitoring result from a lack of coordination among law enforcement organizations (Abbas, 2011).

c) **Political Interference.** Mostly vital field positions are implemented based on political connection due to which many executives of LEAs, especially of Police are politicized. The earlier coercive and dictatorial nature of laws has a rigorous impact on police character and professionalism. Changes to streamline LEA procedures and standards were implemented over the last decade however; these changes were deemed incompatible with legislators' political interests and were weakened through amendments. This clearly demonstrates the degree of partisanship in LEA decision-making (Abbas, 2011).

d) **Lack of Modernization.** Even internal evaluation accepts the lack of credibility of law enforcement force. Experts are not available to handle technical issues due to lack of resource (Khan, 2008). Government of Pakistan is being assisted by the USA, France and the EU (European Union) through establishing an extra police school, deploying specialists at the centers for execution of learning initiatives, and approving finances that are expected to be used to improve training standards and upgrading. Nonetheless, it appears that international donors participating in improving Pakistan's law enforcement capacities require far more cooperation. Perhaps Pakistan can assist coordination in this area (Tajik, 2014).

e) **Dysfunctional Affiliation between Intelligence Services and LEAs.** Absence of cooperation and confidence between the police and intelligence agencies has been a concern for Pakistani law enforcement for a very long time (Ullah et al., 2019). Inadequate data gathering on crimes and their perpetrators is an additional important system flaw. In the recent past, the

Pak Army offered for police capacity upgrading. Hopefully, this will eventually result in improved collaboration between the police and intelligence agencies (Groppi, 2021).

f) **Inadequate Analytical Capability.** A successful plan cannot be developed without access to relevant data and professional ability to analyze the underlying patterns. Both law enforcement and intelligence experts may misjudge the situation. An excess of intelligence information coming in from all directions also contributes to such warnings not being heeded (Ullah et al., 2019).

g) **Ineffective Strategy.** Despite law enforcement personnel heroically confronted many problems and made numerous sacrifices, they have not yet been able to handle things in a methodical manner, which may be owing to an inadequate plan of action (Ghezzi et al., 2021). Even if the situation has improved somewhat, a significant amount of essential time has been lost in the process (Hilal & Litsey, 2020).

h) **An Ineffective Criminal Justice System.** Another critical issue is an insufficient criminal justice system. In Pakistan, there is almost no witness protection mechanism (Ullah et al., 2019). As a result, the courts discharge witnesses due to a lack of evidence (Malik, 2018). The ineffective criminal justice system has had a significant impact on the efficiency of the LEAs, particularly the police (Hussain, 2020).

i) **Lack of Funds and Reform-Oriented Development.** The government has made large financial pledges to bolster police capabilities, and the police budget has more than quadrupled in the previous decade, but the administration has grave worries about the availability of these finances (Huey, 2018). So far, the only result has been a salary boost for police personnel, which is a welcome development but insufficient to overhaul the organization (Malik, 2018).

#### 2.11.2 **Barriers in Harnessing Learning and Human Resource Development in LEAs**

Satterfield (2019) emphasizes the importance of knowledge in human resource development, but it is not an easy process. Sifting through important material, structuring it in a logical form, and disseminating it is a task fraught with difficulties. According to Alnajim (2022), knowledge management is all about gathering and utilizing the value of knowledge and expertise that exists inside an organization's personnel. This might be accomplished by creating a climate in which management see the value of information sharing and are willing to invest in the process. Establishing such circumstances is not simple, as there are several obstacles in the way. Also, the

command structure of LEAs varies, which exacerbates the difficulties. In this context, coordination and joint policy planning for HRD become challenging. Consequently, decisions are poorly implemented. Some of these barriers in managing HRD affairs of LEAs in Pakistan as highlighted by Abbas (2011) along with overall weak areas in LEAs identified by Johnson and Coy (2007) as well as impediments in HRD discovered by Jan (2010) are equally applicable to current study and development process of professionals in LEAs of Pakistan, these are discussed below:-

a) **Rate of Changing Professionals.** Today, the nature of professionals is highly flexible and changes take place speedily. This indicates that the relationship between the experts and the organization is not very strong. The employees, which consists of consultants, vendors, and provisionally enrolled personnel, are yet another segment that does not feel a part of the organization. According to Ahakwa et al. (2021), it is rather challenging for an organization to maximize on the talent, knowledge, and experience of such a staff. The administrator's investment in such a knowledge source is hazardous, thus he is cautious to launch any long-term program in this regard.

a) **Conventional Hierarchical Structure.** Dose et al. (2019) identified the ageing hierarchical system and inflexible career success pathways as another weak area. In the previous system, employees were promoted to the next level of the organization's ladder after acquiring technical expertise. In these conditions, peers who are expected to share their expertise become reluctant to do so because they view their coworkers as rivals for the same post for which they are competing.

b) **Non-sharing of Knowledge.** Reward system is another reason why knowledge is not shared. Each individual is aware that their work will be remunerated on an individual basis, and that by exchanging it with others, they may be deprived of rewards since it may be acquired by others. This prevents them from exchanging ideas, therefore retaining information in their own minds (Dong et al., 2017).

c) **Professional Orientation.** Employees' job-specific focus debars them from contemplating the overall goal of the organization. They fail to view their position as a component of the overall organizational goal. As a result, the individual professional struggles to generate motivation for spreading knowledge. While discussing topic of knowledge management (KM), Du Plessis and Sukumaran (2015) suggested that a typical barrier to the exchange of



organizational learning is that employees tend to focus on their own occupations rather than the organization as a whole. This means that employees are primarily concerned with performing their task and are not focused on the organization's mission, which may define their function in more detail. By relating to the broader image, they may discover openings for themselves.

d) **Reluctance in Appraising Failures.** Professionals go wrong in analyze their past failure for learning purposes, as they are afraid of being blamed for failure. At times, they think it needless to review of past leaning experiences. Additionally, many other impediments to KM exist within the organizations. Before management decides to implement an efficient KM system, several issues need to be resolved (Gaile et al., 2022).

e) **The Learning Culture.** Individuals keep learning throughout their lives, although sometimes it is noticeable and other times it is not. This is related to the variable learning rates. Changes in the conduct and knowledge of the experts are observable when the pace is rapid. Hence, it is possible to deduce that professionals are acquiring learning. During very low rate, at that moment the changes effected by learning are modest rather learning is almost halted. Hence, for learning to occur, an atmosphere conducive to learning must be created (Jan, 2010).

f) **Poor Reward Strategy.** Due to a flawed reward system that fails to recognize accomplishment or account for talents and experience, employees leave the organization in search of a better position. If an incentive is not consistent and equitable, professionals will once again be dissatisfied (Khan, 2018).

g) **Workload Imbalance.** Whether the workload is greater than or less than an individual's capacity, it causes employee discontent in either situation. When they are capable of doing more, it makes them feel as if their job is insignificant (Chandna, 2021).

h) **Inadequate Working Conditions.** The work environment includes both physical and metaphysical elements. Physical considerations include of venue, seats, apparatus, lighting, and so on. Often, metaphysical variables entail organizational culture and behaviour. If a person's culture, ethics, and norms are incompatible with those of the organization and he or she is unable to adapt to the organizational culture, he or she may quit the organization. Some management styles can motivate employees to abandon an organization (Rotatori et al., 2021).

i) **Ineffective Leadership.** When leadership fails to motivate employees effectively, their

performance declines, leading to their dismissal. This occurs when the organization's leadership is unable to align individual and organizational objectives; thus, the person begins to believe that their endeavors are in vain. Therefore, they are unable to connect their interests to those of the organization (Pyle & Cangemi, 2019).

j) **Inadequate Communication System.** Absence of adequate communication creates gaps between seniors, young professionals, and the organization, resulting in misunderstanding of work-related priorities. Hence, the experts are unable to comprehend the organizations objectives, are unable to achieve what is required of them, and consequently lose their positions. Moreover, this communication barrier prevents the management from being aware of the employees' difficulties, which may lead to greater complications and their resignation from the organization. In such circumstances, agencies may incur substantial costs in the form of lost tacit and organizational knowledge, in addition to the frequently high cost of fresh recruitment (Takeuchi et al., 2021).

k) **Improper Career Planning.** Generally, the development of a poor career plan is the consequence of the collection of insufficient or inaccurate information about a professional's career and the use of unsuitable technologies (Presti et al., 2021). In the long run, this has a detrimental influence on career growth since the tactics employed for development cannot address the underlying challenges (Akey et al., 2017).

l) **Lack of Development and Growth Opportunities.** Owing to an abundance of diverse talents in the HR market, the growth chances for employees have diminished (Webb & Karlis, 2019). Currently, organizations may get the necessary talents directly from the market rather than cultivating them within. The organizations view this as a time and cost-efficient alternative to relying on current talents to complete the development cycle and reach the appropriate level (Sodirjonov, 2020). In his study on the global public sector, Ocampo (2005), referenced by Jan (2010), contends that a lack of growth opportunities is one of the key problems influencing the public sector's capacity to retain qualified employees. As a result, individuals become dissatisfied and the best talent tends to depart for better opportunities in the commercial or non-profit sectors (Jan, 2010).

m) **Shortage of Competent Career Counselors.** Many people are hesitant to enter the field of career counseling as specialists since many individuals and organizations do not take career

counseling seriously. As a result, it is frequently selected as a side job by HR professionals causing them to make mistakes in employee development from the perspective of the individual. Eventually, the concern regarding the requirements of professionals is disregarded if such desires are not related to particular objectives of the organization (Malik, 2018).

n) **Lack of Career Guidance and Counseling.** Since many organizations and individuals themselves do not take career guidance seriously therefore, professionals are hesitant to become specialists in the subject of career counseling. Hence, HR professionals (Malik, 2018) normally choose it as a side job.

o) **Non-Application of Artificial Intelligence (AI).** Modern Analytical techniques like AI are hardly applied to analyze and use the data for prediction to improve upon HRD practices.

p) **Technophobia.** Last but not the least, some of the professionals including HR administrators do not feel easy while using of technology (Jan, 2010) causing loss to HRD initiatives. According to Sen and YildizDurak (2022), another hurdle to knowledge sharing is technophobia, as most institutional KM processes incorporate information technology (IT) for customer-friendly access around the world.

## **SECTION – XII**

### **THEORETICAL FRAMEWORK AND RESEARCH MODEL**

#### **2.12.1 Theoretical Framework and Research Model**

To study the effects of learning and development practices on career success, research model presented in Figure 2.4 was used. The interactive nature of career success has been shown to be determined by the mutual relationships between the learning and development factors (career guidance and dialogue, team based learning, and mental model development practices) and attitude to continuous learning.

#### **2.12.2 Theoretical Framework**

In today's employment market, job stability and guaranteed jobs are no more common practices (e.g., Hall & Heras, 2010). This necessitates that young professionals continually assess the circumstances while building their careers (Tomlinson et al., 2018). Thus, learning and development are now among the most studied issues in careers research (Akkermans & Kubasch, 2017). According to researchers, professionalism is the cornerstone for both present and prospective

career success (e.g., Bridgstock, 2019; Fugate et al., 2004). As determinants of career success (Hirschi, 2012), prior studies have highlighted career tools such as career competences (Eby et al., 2005) and movement capital (Forrier et al., 2015). To become professional, youngsters must actively design their careers (Forrier et al., 2015). However, the framework in which career success occurs has been generally overlooked (Mayrhofer et al., 2007). This dearth of empirical studies (Van Der Heijden et al., 2021) and recent calls from career scholars suggest that the environment in which development occurs can have a significant influence on career success (e.g., Inkson, et al., 2012). This study examines the importance of learning and development variables (Akkermans et al., 2018) in the linkage between younger professionals' career guidance and dialogues, team-based learning, mental model development practices and career success.

When referring to both learning and development in this study, HRD has often been used. Theory of human capital is one technique to examine the theme of learning and development (Becker, 1964; Woodhall, 1987). The concept of human capital relates to the reality that individuals invest in themselves or in others via learning, up-skilling, or other capacity development programs, so as to enhancing their prospective profitability and efficiency and thereby expanding their earnings potential. Organizations invest in human capital because they view humans as an asset and expect that such investment will be returned with a positive value in the future. In other words, individuals invest in their learning or development and anticipate that the knowledge and skill earned will enhance to their career advancement (Vejchayanon, 2005). Along with the belief of learning about improving professionals' productivity, many researchers stress the importance of learning and development in the human capital field (Griliches & Regev, 1995; Rosen, 1999). Therefore, human capital theory has been regarded as an important theoretical foundation of human resource development (Swanson & Holton, 2001). Human capital theory therefore, seeks to explain the gains of learning and development as a form of investment in human resources (Aliaga 2001), and the main proposition is that people are considered a form of capital for development (Aliaga 2001; Becker 1993, Benhabib & Spiegel 1994; Engelbrecht 2003; Hendricks 2002). Losey (1999) and Saengchot et al. (2016), among others, report that increasingly organizations seek, through the implementation of sophisticated human resource development and workplace learning, strategies to develop employee competencies to enable them to respond quickly and flexibly to industry needs.

To maximize professional advancement, learning and development programs are the primary methods that organizations use to build organizational human capital capabilities (Holton et al.,

2006). In spite of the large expenditure of financial and other resources, employee educational interventions often fall short of providing the full benefits for which they were intended (Cromwell & Kolb, 2004). Consequently, organizations are continually looking for innovative methods not only for delivering learning and development programs but also for ensuring the effectiveness of these programs in creating and enhancing human capital capabilities, and positively impacting professional growth (Furuya et al., 2007). However, research continues to stress that the effectiveness of employee learning and development programs can be greatly impacted by parameters other than the development programs themselves (Combs & Luthans, 2007).

While human capital theory argues that investing in people makes them productive, HRD also advocates improved workforce development through investment in learning and training (Holton & Naquin 2002). Thus, HRD theory and practice should benefit immensely by having a clear understanding of the human capital theory and its emergence Fitz-Enz (2000). The field of HRD could benefit from a greater understanding of how human capital scholars have clearly defined methods of quantifying returns to investment in learning and development (Pritchett 2001; Psacharopoulos, 1985). This would help to address the urgent need to show the value of HRD to organizations and society. As seen in the definitions of ‘human capital theory’, investment in people through learning and development has a direct and indirect impact on organizations, communities and societies at large (Cho & McLean 2000).

Human capital has been viewed as a source of value in effective organization (Thomas et al., 2013), so there is a significant relationship and interconnection between human capital theory and the field of human resource development (Swanson, 1999; Nafukho et al., 2004; Zula & Chermack, 2007; Mclean, 2006). Furthermore, human capital is a foundational layer upon human resource practices involving learning and development of employee, which are related to other areas of HRD (Epstein & Freund, 1984; Arthur, 1992; Pfeffer, 1994; Huselid, 1994; Mac Duffie, 1995). From the human capital definition and the definitions of HRD of Swanson & Holton (2004) cited in Wuttaphan (2017), it was said that “HRD as a process for developing and unleashing human expertise through organization and personnel training and development for the purpose of improving performance” (p. 4). McLean and McLean (2001) asserted that “HRD as any process or activity that, either initially or over the long term, has the potential to develop professionals’ work-based knowledge, expertise, productivity and satisfaction, whether for personal or group, team gain, or for the benefit of an organization, community, nation, or ultimately, the whole of humanity” (p. 10). Nafukho et al. (2004) stated, “The field of HRD could benefit from a greater understanding of

how human capital scholars have clearly defined methods of quantifying return to investment in learning and development” (p. 549). For the definition, there is a relationship between learning and development, knowledge, skills and abilities, which leads to the performance at a broader level up to an international level. At the national scope of HRD, HRD has been linked to national policies in various countries (McLean et al., 2003).

There is continuing debate in the literature about the effectiveness of learning and development programs and their effects on organizational outcomes. However, Chen and Klimoski’s (2007) review of the training literature observed an overall positive relationship between learning and development on professional growth. They concluded that learning and development are likely to lead to employee productivity gains (e.g., Tharenou et al., 2007), and that education and guidance can affect performance (Becker, 1962) beyond the micro level (e.g., teams and firm performance and is linked to career progression. In sum, an emphasis on learning and development by both academics and practitioners is common because of its direct connections to the development of human capital (Zula & Chermack, 2007) and its relationship to individual careers’ outcomes (Salas et al., 2001; Salas & Kosarzycki, 2003). Fundamental to these findings is the concept that employee learning and development programs, when administered effectively, increase employee productivity and career outcomes.

A pertinent model of staff learning and development existing in the HRD literature (Maurer, 2002) offers a framework for evaluating the development and grooming methods for younger employees in the present study. The model identifies the workplace culture as a factor of impact on the development cycle, which is one of its characteristics. This association is compatible with context-specific developmental theories (Bandura, 1986; Levinson, 1986), although it has not received as much focus in the HRD literature. Maurer’s (2002) model incorporates and expands numerous employee training and development concepts and offers a framework for evaluating the interplay between the learning-related perceptions, behaviors, and determination of young professionals as essential aspects of the development cycle. Consistent with adult learning theory (Bandura, 1986), Maurer’s model recognizes the cognitive component of the self as having a significant role in affecting employee learning and development-related attitudes. The second aspect of Maurer’s model pertinent to the present investigation is the work place setting as a basis of development program. Historically, scholars have examined the workplace as a catalyst for staff behaviors, inspiration, and attitude (Switzer et al., 2005; Tharenou, 2001). For instance, Tracey and

Tews (2005) discovered that career support predicted variation in staff learning-focused self-efficacy perceptions, but they did not investigate co-worker encouragement for growth. Maurer and Weiss (2010) also investigated the notion that coworkers are essential contributors of learning and growth for younger employees, and as a result, may affect their development self-efficacy thoughts.

Maurer's (2002) model has gained overwhelming acceptance in later research (Maurer & Lippstreu, 2008; Mason & Brougham, 2020), proving its viability as a theoretical framework of professionals career success and its suitability for the present study. Though Harrison Cheryl's (1987) six steps model theory also highlights various development activities within the organization that supports individual's learning and development process but, there are a number of links that require more examination. Hence, the current study utilizes Maurer's model as a basic framework for professionals' learning and development, but concentrates on a number of particular features of this process in order to comprehend the grooming of young professionals. An essential feature of the study is examining the mediating effect of 'attitude towards continuous learning' with regard to a variety of critical components and precursors of the growth process for young professionals. Setor and Joseph (2021), in their public sector report for UN have also focused on four potential areas for development in public sector, one of which is the strengthening of the learning and development system.

Learning and development theorists argue that the variance underlying learning and development programs is closely related to such factors as learning motivation, learning program design, and learning transfer climate (Holton et al., 2000; Holton et al., 2003; Kontoghiorghes, 2004). For example, studies have revealed learning and development programs are most effective when individuals are motivated to engage in the learning activity and apply that learning to an appropriate work situation (Bates et al., 2000; Cromwell & Kolb, 2004; Facticeau et al., 1995; Machin & Fogarty, 2004). Given these observations, researcher argue that employee learning and development research would greatly benefit from integrating intervention capacities with career-oriented constructs that may improve the outcomes of human capital development and, subsequently, organizational effectiveness.

Therefore, it may be said that there has not been much research on learning and development with regard to career-oriented HRD (Schmitt, 2020). Hence, it is essential for human resource development (HRD) researchers to research and create theories to support HRD policies (Page-Tickell, 2022). It may be noted that none of the earlier researches, whether those were on general learning or learning in the context of HRD, took into account the elements that affect employees'

career-oriented development (Wickramaratne, 2021). Hence, theoretical framework of this research is to address challenges in the context of learning and development (Bellare et al., 2021). The study focuses on previously under studied elements, such as career guidance and dialogues (Reid, 2022), team-based learning (Keshf & Khanum, 2022), and mental model development practices (Lucrezia et al., 2021), among others (Bagdadli, 2021). To tackle these issues, this research re-conceptualizes and integrates concepts such as career orientated learning and development and career success within organizational settings.

2.12.3 **List of Variables.** The variables are listed as under: -

- a) **Dependent Variable:** Career Success (CS)
- b) **Independent Variables:-**
  - i. Career Guidance & Dialogue (CG &D)
  - ii. Team Based Learning (TBL)
  - iii. Mental Model Development Practices (MMDP)
- c) **Mediating Variable:** Attitude to Continuous Learning (ACL)

2.12.4 **Career Success – Dependent Variable**

2.12.4.1 **Defining Career Success**

The accumulation of favorable outcomes coming from someone employment is termed as career success (Ng et al., 2005). Before defining complicated word career success, the meaning of the simple term success must be established. According to dictionaries, success is the attainment of favorable outcomes, as in the case of an event, achievement and victory (Judge et al., 1995). Success can be viewed as the total of successes in certain social roles, such as those of a spouse, superior, parent, or friend, or as achievements in a chosen profession, such as at work (Metelski, 2019). Several meanings of career success exist in literature. Like Judge et al. describe it as good psychological or job-related outcomes or personal and professional successes resulting from work experiences (Judge et al., 1995). Career success is defined by Arthur et al. (2005) as achieving desired job achievements at any stage in one's career. Bohdziewicz (2010) asserts that the attainment of one's long-term career goal is the most important sign of success for individuals. The aforementioned concepts illustrate that career success can sometimes be defined accurately. Instead of defining the phrase, many researchers immediately continue to operationalize it (Gunz & Mayrhofer, 2011).

There are several definitions of career success in the literature. Career-related accomplishments and favorable outcomes are correlated with success. Career success is a



multifaceted concept, for example Akkermans et al. (2015) describe it as the collective interaction of a number of individual, organizational, and social standards, attitudes, and employment practices. Similarly, Presti et al. (2019) define career success as a person's judgment of his accomplishments in his career experience. Whereas Rowley et al. (2016) define career success as the combined favorable work and psychological effects coming from a person's job experience; others define it as the accumulation of positive work and psychological effects. In this regard, it is emphasized that exploration of career success should encompass accomplishments regardless of their duration or experience, with the understanding that attainment of desirable work-related outcomes is not limited to the conclusion of a person's career (Aliya & Gulnur, 2022).

#### **2.12.4.2 Career Success Concept**

Success in career is an extremely significant issue for both individuals as well as organizations, and scholars have attempted to recognize the human and institutional elements, which contribute to professionals' career success. Employee development is a potential field of study that has received growing attraction and encompasses individual as well as organizational characteristics. As stated by the Society for HRM (Torrington et al., 2008), one of the most prevalent actions taken by organizations, in response to urgent workplace trends has been to spend more in learning and development to improve employee skill sets. Similarly, employee development has emerged as a crucial aspect of employees' careers and professional life (Hall & Mirvis, 1995). According to the literature, the environments of professional success have also evolved. It has shifted from the conventional context, which is centered on a person's hierarchical advancement, to the modern sense, which incorporates the psychological aspects of how an individual sees his or her career success (Rasdi et al., 2009). Although the evidence demonstrates that supporting and fostering employee development may increase tangible results for organizations as well as individuals (Craig et al., 2002; Kraimer et al., 2011), there are significant hurdles in the existing literature.

#### **2.12.4.3 Career Success in Historical Perspective**

During the 1980s, several scholars have shown interest in the organization development literature about career success. The transformation of the world economy from an agrarian to an industrialized and then to a post-industrial civilization has unquestionably had a significant impact on the contemporary conception of a profession and career success (Campbell et al., 1974). Around the beginning of the nineteenth century, the industrialization signaled the end of the agrarian economy in the majority of Western nations, where the dominating community had been the family

and young adults adopted their parents' occupations. In those days, career success was decided by physical safety and survival, as well as the cultivation of character (Savickas, 2000). The beginning of the industrialization was marked by the emergence of enormous bureaucratic organizations with lifelong employment opportunities. Considering that the traditional organizational design was vertical, a career required vertical progression through “a series of linked occupations structured in a hierarchy of prestige” (Wilensky, 1961). Thus, career success was assessed by quantifiable achievements associated with organizational development ladder (Heslin, 2005).

Throughout the second part of the twentieth century, globalization, technological and scientific advances altered Western civilization. In the modern post-industrial environment, which is marked by massive organizational transformation and economic instability, it is argued that the defining characteristics of the conventional organizational career are fading (Savickas, 2000). Individuals continually negotiate work and non-work areas of their lives during various phases of their careers and lives (Ferris et al., 1998). As a result, the concept of career success in the research has been broadened to encompass objectives that are far broader than only upward development (Hall & Mirvis, 1995). So far, the concept of hierarchical development inside an organization continues to be associated with career success, despite the fact that the institutional structures at the beginning of this relationship have undergone substantial change (Heslin, 2005). Although the aforementioned historical tendencies are well documented in the organizational literature, they have rarely been related to the significance of career success (Savickas, 2000). Content reviews of historical accounts, such as novels, newspapers, plays, and other media, pertaining to the connotations attributed to career and career success.

#### 2.12.4.3 **Career Success Theories**

##### 2.12.4.3.1 **The “Constructivist” Theory**

Suitable career strategies with defined benchmarks should be mandatory to address the diverse career success requirements of LEA employees. The constructivist approach invites policymakers to evaluate the significance of common comprehension as course program components. In essence, the strength of Vygotsky and Cole's (2018) constructivist ideas is that they highlight the significance of substantial knowledge in the learning process. Salminen and Miettinen (2019) identify the function of comprehending situations and occurrences as a factor that influences the professional development. For this reason, the experts acknowledge that individual growth does not occur in isolation, rather is influenced by the society within which the learning process occurs. According to Salminen and Miettinen, such difficulties or occurrences are likewise

considered as crucial to the learning process and serve as vital functions for the growth of the learner. In this practice, learning is the process of generating meanings based on a learner's appraisal and comprehension of a specific issue or event, and this requires the learner's capacity to adapt to the operational environment. According to Salminen and Miettinen, a grasp of constructivist theory would aid organizations in shaping the learning process. In order to comprehend the efficacy of career advancement policies for professionals in LEAs, this study considers the constructivist theory's underlying theoretical principles to be essential and relevant to examine.

#### **2.12.4.3.2 The Concepts of “Specialist”**

Otoo and Mishra (2018) have addressed the point by questioning if one should attempt to become an expert in the organization's particular specialty. Using the specialist as a conceptual framework to career success, according to Peters, the key to success is the time-consuming quest of “hidden levers”. Clanchy et al. (2019) suggested that those who believe in experts merely replicate years of experience repeatedly and run the risk of being pigeonholed into particular tasks or responsibilities. Clanchy et al. emphasize that each professional should struggle to seize the necessary information of his or her vocation in order to become important to the organization and therefore assure its success. There is little question brought out by Thomas (2019) that the expert viewpoints have highlighted several fundamental considerations that professionals who have a holistic awareness of their positions within LEAs may contribute productively. Consequently, the theoretical significance incorporated in ‘Specialist’ notions needs to be regarded as relevant for analyzing policy concerns influencing the career growth and advancement of future LEA leaders.

#### **2.12.4.3.3 The Concept of “Life-Long Learning”**

As per Triandani and Anggriani (2015), professional development is an ongoing process of learning. In contrast, according to Rineer (2020), it is undeniable that the value of information and abilities acquired along a career track is reflected in one's advancement, and that learning plays a crucial part in this endeavor. By acknowledging the significance of learning and development initiatives, the concept of continuous learning seeks to address the pragmatic and intellectual needs of professions. According to Triandani and Anggriani, the capacities of continuous learning are highly dependent on the individual's own talents and academic skills. In addition, Carter (2021) opined that the notion found in the concept of continuous learning is pertinent because it is comprised of knowledge-based ideas that form the basis of a provision of valuable situations to examine the efficacy of the career advancement policy for professionals in the LEAs. Thus, the

theoretical notion incorporated in the concept of continuous learning is one of the key terms for understanding the efficacy of career progression policies for professionals in LEAs (Thomas, 2019).

#### **2.12.4.5 Theoretical Perspectives of Career Success**

At least three theoretical perspectives or systems may explain the impact of the many factors on professional achievements explored here. The core concepts of these systems are different, yet they are not incompatible with one another. First is Human capital theory, the contest mobility and sponsored mobility systems are the other two. These will subsequently be discussed in order. Community contest and sponsored mobility are the two types of upward mobility that Turner (1960) identified, as stated by Ng et al. (2005). Contest mobility happens once an individual's work performance and mobility bring value to an organization. Individuals who bring improved skills and performance will be promoted and prosper. When authorities give particular attention to people having great potential, sponsored mobility happens. When individuals get extra focus of their leadership, they get energy, progress, and advance in career. According to human capital concept, professionals spend more in the development of their competencies to convert themselves into a capital (Becker, 1975). Individuals who commit extra time, wealth, and effort in learning and development ought to receive the benefits of their efforts. These investments need to result in higher compensation from the organization, including increased wages.

Characteristics that are employed to determine career success has been examined by Ng et al. (2005) in four ways, which are socio-demographic, endorsement by organizations, human capital and relatively enduring divergences. Person's learning, personal anecdotes and professional experiences are referred to as human capital. Sponsorship by organizations entails the provision of specialized assistance and support, such as education and skills enhancement opportunities and help. Sex, age and marital status are called socio-demographic variables. According to Ng et al. (2005) learning and development prospects are related positively to compensation, overall job contentment and promotions and this construct is a reasonably accurate predictor of sponsorship by organization. Scholars are required to investigate such other factors in further depth in order to comprehend the complexities of success in profession (Ng et al., 2005). Considering the condition of existing research, this meta-analysis was unable to assess individual behavior related to individuals' growth leading to prediction of career success, since this potential linkage has received little focus in the literature. Hence, a more concentrated evaluation of the association between developments of workers leading to career success is needed.

#### **2.12.4.6 Career Success in Relevant Literature**

A small number of research studies have examined the notion of career success and its dimensions. Like Agba et al. (2010) analyzed the association between career development and employee commitment in industrial organizations using career success, career counseling, career opportunities as independent variables and employee commitment as dependent variable. Findings disclosed that career success; career guidance and career chances greatly affect employee commitment. According on an open-ended research study, Chu et al. (2015) developed a five-factor scale of career success, which include success in the workplace, social and emotional success, monetary success, hierarchical achievement, and success in life. In contrast, Walsh et al. (2018) refer to their version of the notion as “life success”, claiming that individuals' own conceptions of career success extend beyond their professional accomplishments. Considerations such as social standing, financial stability, volunteer work, family ties, individual’s sense of purpose in his work, and a feeling of safety are the key criteria. As per Judge et al. (1995), referenced in Rasdi et al. (2009), success in career is characterized by positive behavioral or job consequences or both individual and professional accomplishments.

Moreover, it was elucidated that there are both subjective as well as objective aspects to career success (Gattiker & Larwood, 1988). This is beneficial for both employees and organizations, as employers are able to build more effective human resource development systems, while individuals are able to establish career plans that will lead to work position, career advancement, and financial success (Ellis & Heneman, 1990). According to the findings of Marongiu Ivarsson and Ekehammar (2001), individual and situational elements should form professional success factors. In accordance with this, Kirchmeyer's (1998) study grouped professional success variables into four primary categories: human capital, employee, social, and family. Likewise, according to Judge et al. (1995) inspirational, human capital, demographic, and organizational characteristics are determinants of career success.

Walsh et al. (2018) and Trinh & Dao (2019) have documented internal or intrinsic career success against exterior or external career success in their qualitative investigations. Guo et al. (2019) categorized definitions of career success in their study results into four forms: stability, associations, acknowledgment, and material success. Guan et al. (2015) discovered organizational, personal, and interrelated themes in the speech of career success respondents. Ultimately, Kaše et al. (2020) identified three components regarding construct of career success: material, psychological and social career success. Modern investigation emphasizes the critical need for an accurate qualitative and quantitative description of what career success means (Lo Presti et al, 2018).

According to Smale et al. (2019) and Royle (2015), the idea of professional success has to be broadened, but what that broadening entails will need to be determined through more empirical research study. In light of calls for additional studies that let participants describe career success according to their own perspective and for an extremely fine investigation of the many career success criteria and for a more nuanced look at the numerous factors that contribute to career success, the present study fills both these needs (Smale et al., 2019).

Many studies have investigated the empirical correlations between characteristics like sex, education, personal traits, mentorship associations, and career strategies with resultant career success (Spurk et al., 2019). Individual and organizational characteristics are identified as career success determinants by Taormina (2019). The first type of indicator that refers to individual level variables, involves individual influence factors, such as career phase (Heslin, 2005), career distractions, career choices, parenting expectations, dual-career (Rowley et al., 2016; Naway & Haris, 2017), family or home systems (Walsh et al., 2018; Blokker et al., 2019), career progression influences (Presti et al., 2018), demographic complexities, human capital and work motivation (Clair et al., 2019).

#### **2.12.4.7 Objective and Subjective Indicators of Career Success**

Career success includes both factual and subjective factors (Spurk et al., 2019). Objective career success is an evaluative notion that is defined by generally objective or observable factors when assessed by others, but subjective career success is significant when it is judged by a person in question (Walsh et al., 2018). Hirschi and Koen (2021) described objective success as measurable accomplishments such as pay, number of advancements with current organization, number of career advancements, and employment prestige. These are external characteristics that others may observe and judge objectively (Akkermans et al., 2018). On the other side, subjective career success was defined as an individual's sentiments of success and work satisfaction (Rowley et al., 2016). In addition, subjective career success comprises emotional and behavioral outcomes such as career happiness, work satisfaction, satisfaction with life, progression anticipation, and intention to quit (Weerarathna & Hapurugala, 2019). Based on these conceptualizations, the majority of studies on career success prediction have been conducted.

Friedman and Greenhaus's (2000) work clearly demonstrates the significance of objective and subjective components. More than 800 professionals were asked to rank the relative value of 15 key career success markers. The findings analysis enabled the identification of five characteristics of career success such as: 1) status, 2) spare time, 3) complexity, 4) safety, and 5) social component.

Other than status, they are all subjective qualities that transcend objective variables such as status, authority, wealth, and promotions. This disregard for objective variables may be due to the fact that large salaries and promotions do not necessarily inspire pride or happiness in people. In reality, the contrary may be valid, as a promotion and wage increase may occasionally lead to estrangement and melancholy emotions (Heslin, 2005). When a newly appointed leader fails to assign tasks soon enough and becomes swamped with work, it might occur. This may result in a depressed response and objective and subjective professional failure. A subjective evaluation of job success comprises a person's feelings in response to existing and anticipated work-related changes. It is also influenced by a person's sense of identity, significance, and work-life stability, making it far more complicated than job satisfaction.

#### **2.12.4.8 Career Success Determinants**

Few may contest the significance of a person in perspective of career success as several studies have demonstrated the implications of individual variations on career success prediction. For predictors of career success, individual differences involve demographic profiles cognitive skills, situational character, human capital, social worth and determination (Wolff & Moser, 2009). While greater part of research has emphasized on individual determinants of career success, situational predictors have also been demonstrated. There is scientific proof that, for instance (a) leader-followers association anticipates salary advancement, career progress, and career contentment (e.g., Wayne et al., 1999), (b) career mentoring forecasts promotion rate and remuneration (e.g., Whitely et al., 1991), and (c) organizational backing for advancement helped contribute to career success (e.g., Maurer & Chapman, 2013). The non-work environment (such as family help and societal constraints) may also have an impact on job accomplishment (e.g., Lirio et al., 2007). For example, economic and governmental policies may facilitate more career progression and success (Feldman & Ng, 2007). Tu et al (2006) stated that European ideas on success in career are uniformly applicable to non-Western settings and urged investigators doing cross-national analysis on career topics to focus more on cultural circumstances.

#### **2.12.4.9 Career Management Practices Affecting Career Success in the Organizations**

Although interpreters' of organizational career management practices (OCM) agree that it is a series of practices, however, there is a modest agreement on the involvement of the exact practices, which repeat multiple actions but vary in terms of labeling, substance, and sum of the practices (Gutteridge, 1993). These practices include: career guidance and dialogues, which are the techniques of explaining to the employees their current job responsibilities and success;

proficiencies, and career advancement goals; strategic planning, which assists workforce in making career choices (Baruch & Peiperl, 2000); job postings, a staffing channel that allows staff members to apply to fill vacancies in the organization; employment services and pre-retirement initiatives that assist employees during job transformation; evaluations for the appraisal of professionals' skills and prospects; dual-ladder frameworks, that provide promotions and rewards to employees based on their career planning; and evaluations for the assessment of employees' skills and abilities. Although organizations often combine organizational career management methods, there is hardly any “commonly acknowledged typology of organizational career management practices” (De Vos et al., 2008, p. 162).

Based on exploratory studies, some scholars (e.g., De Vos et al., 2008; Eby et al., 2005) have categorized organizational career management practices, succession-planning methods depending upon their acceptance by organizations and the way they assist professionals in career advancement. Organizational career management practices design career advancement according to organizational goals by incentivizing professionals with promotions, salary, and mobility to the upper echelons of the organization (e.g., Bozionelos, 2003; Kirchmeyer, 1998; Tharenou et al., 1994). In other words, organizations provide organizational career management activities with the core objective of enhancing the individual's output and career growth. From the organization's perspective, subjective career success is a result of this process. Thus, this study discusses an “Organizational Career Management Practices - Career Success” paradigm that explains the conceptual logic (the why) and mechanics (the how) underlying the relationship between career management practices in the organizations and career success. This paradigm enhances career cycle by Rosenbaum's (1984) that did not identify the organizational career management activities involved in the professional development of individuals and their consequences on career progression.

#### **2.12.4.10 Concept of Career Success in LEAs**

In contrast to smaller organizations, LEAs should also define a certain career path for their employees. Then, leaders at all levels should execute this career strategy to the extent of their authority and resources (Thomas, 2019). Career planning should be prioritized for professionals to enable the successful execution of the career development program for professionals in LEAs (Solangi et al., 2021). Officials at the management level of LEAs should develop a comprehensive career plan for future leaders, and commanders at various levels must implement this master plan, described by Thomas as a 'career strategy' over the ranks of LEAs professionals. The argument presented by O'Neil et al. (2016) appears to have significantly increased awareness of the



implications of global competitors on technical developments experienced by LEAs. Thus, planning to address the issues of career success for LEA professionals will be of the utmost significance. Thomas also argued that for professionals to be valuable in their respective disciplines, they must be properly recruited and competently trained. O'Neil supports Thomas's comments on the significance of trained professionals by recommending the introduction of career development agencies as a vital approach for organizations to hedge against future uncertainty. According to Hall and Mirvis (1995), the organization's capacity to recruit, appraise, develop, hire and retain talented employees is crucial to its continued existence and success.

Thomas (2019) asserts that individuals are by nature ambitious creatures, and as a result, it is their desire to realize aspirations that pushes them to undertake actions they feel will be rewarded. Organizations do not need to develop ambition in their employees; rather, they must capitalize on it by demonstrating that their goals are attainable. After archiving this awareness, Akey et al. (2017) suggested that the organization provide incentives for its personnel. The introduction of rewards increases rivalry among staff. Yet, competition may be harmful if not properly governed. It is the responsibility of the LEAs administration to monitor and regulate competition and make it a level playing field for everybody (Cain, 2020). After implementation, it is also vital to guarantee that the competition's rules do not just benefit the winners, but also the organization. In addition, O'Neil et al. (2016) regarded career advancement as a progression through a series of positions involving progressively more complex or diversified activities, resulting in an increase in skills, responsibilities, status, and revenue. Thus, it should be derived from Akey et al. and O'Neil et al. arguments that the aspect of competition in LEAs is neutral since it exists in several ways. Among its incentives are promotions to a higher level, assignment to a senior position, pay increases, etc. These awards are expensive for the LEAs, but they are also essential and reasonable. A professional whom the LEA promotes to a high rank or appoints to a high position may gain from the promotion or appointment, while the LEAs organization benefits from the professional's enhanced performance (Castillo, 2022).

#### **2.12.5 Learning and Development Factors in the Context**

The method by which individuals realize their career objectives is the learning and development process (Lapointe et al., 2019). In this context, the independent variables i.e., career guidance and dialogue, team-based learning, and mental model development practices of young professionals are under investigation. Combining the terms learning and development, we may say that career success is the long-term process of nurturing and developing the design of an individual's

professional life to make the most use of his or her unique strengths, skills, expertise, and interests (Diriye, 2015). Using ‘Maslow's Hierarchy of Needs’, according to which self-actualization is at the top of the pyramid, it may be argued that career success is fundamental to self-actualization (Diriye, 2015). The relevance of the alignment between the organization's and an individual's aspirations and preferences are of significance (Ahakwa et al., 2021). If the synchronization procedure is successful, both the organization and the person will advance.

Learning and development has a personal and organizational component. It is the process of several coordinated individuals’ and organizational activities in which the individuals and the organization become partners in advancing the individual's career (Jan, 2010). Therefore, effective learning and development methods become the most crucial link between an individual and an organization. Professionals who are young, well educated, talented, and competent see learning and development as one of the most essential aspects of their lives (Takeuchi et al., 2021). They maintain a post until they perceive personal and career success opportunities in the horizon (Bimrose & Brown, 2015). Organizations must support and be dedicated to career progression through a continuous learning and development process where employees pass all the way through a succession of phases, every step of that is defined by a comparatively distinct collection of difficulties, contents, or duties (Presti et al., 2021). Lo Presti et al. (2018) describe learning and development strategies as an organization's formal strategy to ensure the availability of personnel with the required credentials and expertise.

#### **2.12.6 Career Guidance and Dialogue– Independent Variable**

There is still extensive discussion on how to define career guidance. Over time and across cultures, the phrases vocational guidance, academic guidance, and career guidance have acquired varied implications (Hughes et al., 2017). Considering that supervisors' behaviors alter when they comprehend an idea, career guidance must be more widely welcomed and comprehended (Kuijpers & Meijers, 2011; Manuti, 2020; Savickas, 2019; Guo, 2019). Due to the inherent complexity of this intervention, most definitions focus on what it accomplishes rather than on what it is. Career guidance allows people to reflect on their aspirations, interests, qualifications and talents (OECD, 2004). In addition, career guidance helps people and groups learn more about job, leisure, and study, examine their role in the world, and prepare for the future (Hooley & Dodd, 2015). The efficacy of career guidance relies significantly upon the ability, experience and competency of the guidance practitioner to be able to enable this learning i.e. “a measure of change” in a person

(Bimrose & Brown, 2015). There is an abundance of scientific material categorizing the ways in which guidance might be deemed “successful” (Manthei, 1997; Bimrose & Brown, 2015; Tahir et al., 2018; Fusco et al., 2020; Hughes et al., 2017; Gati et al., 2019). Vocational guidance is successful when it: increases learner’s happiness; induces personal transformation; and affects results (Bimrose & Brown, 2015; Hughes et al., 2017). The concept of a “measure of change” refers to the kind of benefits individuals might anticipate from guidance, such as new information, enhanced confidence, improved networks, and reassurance (Savickas, 2019).

Establishing a feeling of purpose and identity is difficult (Kuijpers & Meijers, 2011; Guo, 2019; Manuti, 2020, 2020). It entails contemplating one's own motivations and identities and accepting insecurity as part of the learning process (Coffield et al. 2004). The process of developing a feeling for direction should be introspective (Kuijpers & Meijers, 2011; Savickas, 2019). If the establishment of a feeling of direction and identity is viewed as a significant training objective, a compelling learning environment is necessary in which professionals are encouraged to think on their motivations, values, and future goals (Coffield et al. 2004). There are several scientific methods for describing career decision-making cycles and the progression of young people on their path to choosing a future occupation. Because career development is a complex phenomenon, only appropriate career guidance practices should be as extensively integrated as feasible (Patton & McMahon, 2014).

Dialogue is diverse and may be considered, first, as a human relations shape - like a face-to-face communication act or individual communication in groups, which involves a range of standards of conduct and is essentially tied to the personal growth of an individual (Isaacs, 1999; Soika, 2015; Fajardo, 2020). Second, dialogue is a cultural form (Bohm, 2013) since it is context-dependent. Thirdly, it is understanding and interpretation of the text where conversation is understood as a way of thinking and questioning (Senge, 2010; Isaacs, 1999). Due to mutual enlightenment, dialogue is always transformative. This has been noted by several dialogues’ researchers in their investigations (Bohm et al., 2004; Baynes, 2015; Soika, 2015). The discourse is intended to modify and enhance the present condition. Dialoguing reveals a person's awareness and desire for problem solving. In this manner, they acquire new information, experience, and attitude. It is a learning activity in which individuals continually and responsibly examine themselves, environment and society. This process is supported by social contacts and the response of the surrounding community (Fajardo, 2020). It is also an essential method for achieving individual and collective change in behavior. Studies on this subject in Europe (Kuijpers & Meijers, 2011; Magee et al., 2021; Guo, 2019) and in Latvia

(Soika, 2013; 2015) demonstrated that there must be a deliberately focused and directed dialogue between a professional and career counselors, who can assist young individuals find answers to their life and career questions.

A dialogue regarding career allows learners to employ their abilities and establish their career identity incrementally (Savickas, 2015). A sort of story expresses career identity (Fajardo, 2020), and in a dynamic and complicated atmosphere, this “career story” assists individuals in defining themselves and the way to behave in a workplace setting. The story achieves this by providing purpose and path (Wijers & Meijers, 1996) along with generating logic of causation and regularity concerning one's professional path (LaPointe, 2010). A narrative on career emerges from a discourse during which supervisors, trainees and guidance counselors collaborate to provide sense to the professionals' work-related expertise (Kuijpers & Meijers, 2011; Guo, 2019). A study by Hughes et al. (2017), explored the settings under which professionals (aged 16 to 24) were best able to develop career competences that are necessary for the contemporary labor market and form a career identity. What proved to be more significant were (a) a practice-oriented syllabus where learners may get real-world experience and (b) a career conversation during work placements proven to be the most crucial factors. Such a practice-oriented and dialogues based learning atmosphere helps the use of professional competencies (Kuijpers & Meijers, 2011) and it adds to enhanced desire for knowledge acquisition through learning, clarity on success in career, and confidence with regards to career success (Patton & McMahon, 2014).

#### **2.12.7 Team Based Learning – Independent Variable**

It is challenging to arrive at a fixed definition of teamwork. Researchers with expertise in the area of workplace practices hold divergent views on what teamwork truly entails, despite the prevalence of a number of commonly held assumptions (Slagter & Wilderom, 2017). Organizations utilizing teamwork can relate to a variety of concepts, including cross-functional teams, quality circles, virtual teams and self-managing teams (Johnston et al., 2018). Several organizations encourage teamwork with varied degrees of independence (Beier, 2022). Task-specificity is crucial to the establishment of teams. According to the definition by Hacker (2000), a distinguishing characteristic of teamwork on the production line is the sequential assembly of different product components (Clair et al., 2019). When the objective is to enhance productivity, however, group teamwork is far more about complexity, communication, and integrative work (Friedman & Casner-Lotto, 2002). For the sake of this research, teamwork is understood in a larger framework, without

difference between teams and task forces (Koeslag-Kreunen et al., 2018). In recent times, researchers, professionals and journalists have made several assertions about the organizational benefits of work teams (Clair et al., 2019). Specifically, it has been asserted that teams lead to better outcomes for professional organizations through increasing employee productivity or organizational responsiveness and adaptability (McFarlane, 2015). The significant influence of teams on employees' attitudes such as morale and work satisfaction (Eason, 2017) as well as dedication to the organization, are frequently cited as the cause of these advantages (Pandey et al., 2019). The assertion that teams may have a favorable, though moderate, influence on organizations, is supported by data from an enormous range of studies undertaken in a vast array of work situations (Lacerenza et al., 2018). Yet, a number of researchers contend that the evidence suggesting a relationship between teamwork and organization efficiency remains equivocal (Hackett, 2018). It appears that teams have the ability to enhance employee work performance and morale, at best.

In the 1950s and 1960s, the first real efforts to study team dynamics were made, focusing primarily on military teams and work teams that helped them operate more efficiently under the circumstances involving utmost time pressure, constant stress, vague and insufficient information, and dire consequences for acts performed (Goodman et al., 1988). Globalizations, availability of information in terms of speed and quantity, and greater competition have transformed how organizations operate and respond (Katzenbach, 1998). Since teams may more effectively deliver a focused and coordinated effort to handle complex task challenges, organizations have increased their reliance on teams considerably (Stewart & Barrick, 2000). Despite the fact that reliance on teams has increased substantially since the beginning of the 1980s, research on team building has been unable to keep up with the demand to comprehend how teams might achieve successful outcome (Antoni, 2005).

Organizational behavior specialists are focusing more on team-related issues today. They have investigated these issues by analyzing the elements that affect the manifestation of human behavior at the organizational and team levels of study (Friedman & Casner-Lotto, 2002). Hence, organizations have identified that their workforce is the only mean that can give them the edge on the extremely competitive international marketplace of the present day. Moreover, leaders have accepted the premise that any change should commence with development of employees. Development of professionals through teamwork and the use of self-regulated work group have been demonstrated to correlate significantly with increased organizational effectiveness (Hamilton et al., 2003). Aware of the fact that their people are their competitive advantage, contemporary

organizations are placing a lot of importance on professionals conduct in the place of work and methods intended at enhancing improvements by means of grooming employees. Leaders are team players now a day. They facilitate employees and teams, and grant organization with the capabilities to monitor and inspire people in an efficient and effective manner (Antoni, 2005). However, teams are not always effective; they have to be planed, managed, and bolstered for maximum results.

Prominent scholars in the field of work organization, Burgess et al. (2019), believe that individuals who work in a team are more productive, less susceptible to stress, and exert more effort. In addition, they are less frequently unable to work, generate new ideas, and strive to enhance their career. In their study on the banking industry in Pakistan, Sohaib et al. (2013) employed team-based learning as one of the independent variable and discovered that when teams are beginning to learn, individualized learning effectiveness also improves. The findings of this study indicate that strong positive correlation exists between the characteristics of learning organizations, including team-based learning, and knowledge and financial performance. In another study, Manzoor et al (2011) employed teamwork as the independent variable to assess the influence of teamwork on employee job performance. The study determined that there is strong indication that teamwork and other metrics of employee performance are positively associated with employee performance and advises adapting teamwork techniques to enhance employee productivity. Research work by Shujaat et al. (2017) also revealed that employees who report more optimistic social interactions on work teams report greater levels of organizational commitment and are less inclined to show an intention to quit.

Khan et al. (2014) study determined that the overall success of the organization would enhance through picking the correct employees, assigning them a task in teams, and training them the appropriate skills to complete that task. Consequently, based on the majority view of professionals, teamwork should improve both organizational performance and staff well-being (Moore-Davis et al., 2015), provided that the situation facilitates independent decision-making, along with the matching authority as well as responsibility for given mission. Work in teams enhances individuals' interest and drive, not just within the framework of the employee's job assignment, but also within the context of the organization's overall plan. Increasing employee happiness should be the key to boosting corporate productivity. According to Watzek and Mulder (2019), teamwork mitigates performance variations and boosts employee morale. Team members are more likely to acquire new skills at work compared to non-team members. Likewise, the gap

between team employees learning new things and non-team employees learning new things is rather large.

Organizational teams differ greatly in their ability to carry out team missions and achieve objectives established by the team and the company (Johnston et al., 2018). Here, the researcher is primarily concerned with how the team based learning might affect the careers of individuals. Slagter and Wilderom (2017) discovered a correlation between team members' perceptions of team success and higher morale and satisfaction. These elements contribute to the success of both individuals and teams. A winning team, according to Widmann et al. (2019), contains employees' morale in their combined effectiveness. Clair et al. (2019) also remarked that team members' opinions in the team's efficacy might be a crucial and advantageous aspect for career success.

#### **2.12.8 Mental Model Development Practices – Independent Variable**

Mental models (MMs) are mental representations of the external world. Craik (1943), a psychologist, first presented the concept of a mental model when he suggested that everyone carry a miniature model of how the world functions within his or her head (Johnson-Laird, 2004). In his study on human thinking, Johnson-Laird (1983) extended Craik's concept of a mental model after several decades. A mental model, according to Johnson-Laird, is a reasoning process that resides in a person's working memory. Senge (2010) describes mental model as assumptions, generalizations, visions, and images that are firmly embedded in our thoughts and have the power to influence how we perceive the world and how we act. Arygris (2003) uses a different phrase to describe metal models than theories in use. In reality, the phrase mental model refers to an idea that is modern, has no limitations, and includes continual evolution. Culmination of examination, thoughts, perception and imagination is called mental model (Goldvarg & Johnson-Laird, 2001). Modern and widely recognized definitions of mental models are derived from a theoretical work on reasoning, as metal models are a fundamental part of reasoning (Andrews et al, 2022).

Prior to developing a metal model, there must be a compelling motive to do so. For the development of metal models, the problem must be well comprehended. The formation of metal model occurs in stages. In general, it is a whole that comprises of components which impact each component of the system on a regular basis, that are interconnected, and that is built according to a general plan and directed towards a goal in order to accomplish a particular operation (Senge, 2010). According to Ackoff (2015), a system as a whole composed of variables that have a connection with one another, act towards a certain objective, and are interconnected. The hypotheses of metal models are employed to uncover the truth, whereas the framework emphasizes

on the outcome by selecting the reasonable output of the metal model. Hence, developing metal models becomes the cause for integrating system-thinking-related abilities. According to Senge (2010), the majority of research concentrates on helping managers with the combination of metal model-forming and system-thinking abilities (Senge, 2010). Collins and Gentner (1987) state that when a person describes a realm with which they are acquainted, they prefer to draw parallels to a domain with which they are acquainted and consider to be comparable. This includes importing the relationship structure of an existing mental model into some other realm. According to studies, things that cannot be observed directly are frequently understood in this manner (Rickheit & Sichelshmidt, 1999). Hence, metal models serve as inferential frames (Norman et al., 1983), as first presented by Craik (Norman et al., 1983). In recognizing their idea on cognitive mapping, Abel et al. (1998) define a cognitive map as a “spatial mental model”.

The deployment of organizational innovations that enable the use of new abilities in everyday practice is necessary to increase an organization's operating capacity through metal models. Metal models alter our way of thinking. Organizations must adapt their thought processes, or in other words, learn how to think (Yazici et al., 2011). Metal models development techniques are very significant in the learning process. Argysis (2003) asserts that our mental models proactively affect the choices we make in life. When these metal models are utilized in a way to facilitate leaning within the organizational structure, they will have great impact. Organizations exist to pursue a shared path to realize goals that an individual cannot achieve alone (Lim & Klein, 2006). We create internal metal models of ourselves, of other people, and the technological objects we deal with by engaging with our surroundings (Ehrlich, 1996; Norman et al., 1983). The conceptualizations we bring to a task have a significant impact on how metal model develops. These conceptual frameworks include our opinions, perceptions, and behaviors about the following: (a) the world; (b) ourselves as student or educators; (c) our abilities and background knowledge; (d) the duties we perform; (e) the issues we face; and (f) the approaches we use (Norman et al., 1983). Internal metal models relate to the external actual reality they reflect since they are cognitive representations (Johnson-Laird, 2004).

Metal models are dynamic entities that must be acquired and updated constantly (Johnson & O'Connor, 2008). Globalization, rapid technical advancements, and economic shifts from manufacturing to the services sector have created a work environment in which employees and organizations must continually adapt (Chell & Tracey, 2005; Ilgen et al., 1994; Jarvenpaa & Shaw, 1998). Training of individuals is one effective method for acquiring metal models for their



positions. Development and interpretation of metal models are regarded as crucial processes for the success of professionals (Marcy & Mumford, 2010). Developing the proper mental model can facilitate employees' performance. A popular measure for assessing and training metal models is to utilize a model created by an expert as the benchmark. Studies have demonstrated that a metal model that resembles expert results cause greater productivity (Cuevas et al., 2002). Components of training assist in the development of leader metal models. Diagrams in training, for instance, facilitate the development of correct participant metal models (Ehrlich, 1996). According to the findings of one study, training has a direct effect on performance metrics, accounting for the disparities between high and low quality leadership models (Marcy & Mumford, 2010). Very limited research has been conducted on mental model development practices. New MMs are necessary, and existing models must expand in depth and complexity. Hence, challenging situations play a crucial role in leader development and the growth of metal models. It is possible that challenging experiences are insufficient to generate good mental models. Clearly, the same occurrences that provide learning opportunities for certain professionals can wreck the careers of others (Leslie & Van Velsor, 1996).

Challenges should start early and keep coming up throughout a person's career. Kotterman (2006) has pointed out that the common professionals' career pattern in most organizations is that one's career path is a succession of jobs that are narrow in scope, tactical in focus, and within the same functional area. Then at the age of forty-five or so, a professional is thrust into a major leadership position with the expectation that he or she is capable of making important general and strategic decisions. Kotter suggests that at this point it may be too late to become an effective professional. In contrast, the successful professionals Kotter studied, benefited from a variety of on-the-job challenges early, and throughout, their careers. Thus the earlier the challenges occur, the better the leadership development. Professionals must be accountable for their own growth and must be aware of the actions that will advance their careers. Learners have to recognize that the key to their success is establishing effective mental models. Several of these actions are extremely challenging to understand and perform, and one of the most essential responsibilities of an HRD practitioner is to assist professionals in learning to lead (Johnson & O'Connor, 2008). In conclusion, the approach of HRD practitioners involved in leadership development should be to concentrate on establishing valid and effective mental models in present and future leaders, as opposed to providing learning, training, or experience per se.

#### **2.12.9 Attitude to Continuous Learning – Mediating Variable**

In their research on the concept of continuous learning, London and Sessa (2006) state that continuous learning involves attempting something fresh and witnessing anything old in a novel way. According to Tannenbaum (1997), continuous learning at the personal level entails the frequent modification of behavior based on the enhancement and expansion of one's abilities, knowledge, and perspective (Lynch, 2008; Evans et al., 2013). Nowadays, continuous improvement or continuous learning has emerged as an intriguing study topic. The literature on lifetime learning encompasses several researches on continuous learning from a variety of academic disciplines and points of view (Mandal, 2012). With the premise that humans are lifelong learners (Woodrow, 1999; Knapper, 2001), it has been asserted that the interest in continuous learning is a result of the fast transformation at global level, especially in career success area (Pak, 2013) and in interpersonal human interactions (Jackson, 2003; Pak, 2013). John Dewey, Eduard Lindeman, and Basil Yeaxle coined the notion of continuous learning in the 1920s (Aksoy, 2008). The concept was initially explored in England in 1919 because of the necessity of learning for professionals in the military and industry (Amasyali & Ersoy, 2009).

In a world that is evolving always, continuous learning offers individuals with the chance to acquire the skills and information they need to be successful (Sharples, 2000). Continuous learning, which is required to refresh skills, assists professionals in enhancing their talents (Demirel, 2009). The basic premise of continuous learning (Coşkun & Demirel, 2010), which is centered on (Nind, 2007) how the careers of the learners may be enhanced further, is continuing to study intentionally and with intent. Similarly, Dunlap and Grabinger (2003) described continuous acquisition of knowledge as an intentional set of learning to enhance both the life characteristics and professional advancements of individuals (Bryce, 2004). Lifelong learners must have the abilities of thinking critically and innovatively, researching, communicating, problem-solving, using information technology, consuming resources efficiently, collaborating in team work, respecting diversity, and self-management abilities in order to grow and learn throughout their entire lives (Ryan & Deci, 2000).

Individual and organizational success over the short and long-terms is dependent on continuous learning. As continuous knowledge acquisition has the potential to improve output, it is advantageous for organizations to maintain their effectiveness, innovation, and competitiveness. Due to the significance of continuous learning for both employees and organizations, this subject requires consideration. The capacity to acquire and improve skills is becoming a key characteristic in the workplace (Hall & Mirvis, 1995). Professionals are more accountable for their own career

paths, which frequently include diverse skill sets and specialized expertise. This transformation has fundamentally altered the learning process. The capacity to consistently acquire new competencies and enhance current ones has become a crucial ingredient for career success (Maurer & Weiss, 2010). If the culture of an organization acknowledges and rewards those who employ novel concepts and skills, it may favorably affect the continuous learning of its workforce.

To stimulate and maintain employee motivation for continual learning and receptivity to new ideas, the workplace must promote taking risks (Gundry & Rousseau, 1994; McGill et al., 1992). Tharenou (1997) revealed empirical proof that manager and colleague support is the most essential element in pursuing growth chances. In addition, Maurer et al. (2003) found that social support for learning at work and outside of work has a favorable effect on individuals' engagement in development activities. Experience gained by elder workers should be appreciated. Training must be more individualized and must emphasize the application of current knowledge and abilities. There should be working groups where younger professionals may learn from their senior colleagues (Canning, 2011). These learning exercises can boost morale and inspire a desire for further learning (Corney, 1995). Mohamed et al. (2016) presented case studies of four organizations that have built an organization-wide culture of continuous improvement. Moreover, Marsick and Watkins (1992) provide evidence of what continuous learning entails in organizations, and encourage the deployment of reflective practice, and recommend strategies to engage in continuous acquisition of knowledge.

Smith (1968) described attitude as beliefs, behaviors and emotions that are methodically connected to a psychological entity by a specific person and is said to enhance proficiency during the learning process. In addition to understanding how to study, obtaining information from a variety of resources, and establishing a good attitude towards learning, learners must have a desire to acquire knowledge and self-determination in that direction to become successful lifelong learners (Demirel, 2009). Coskun and Demirel (2010) created a measure to assess the opinions of learners in the university about the strategy to continuous learning. To date, however, no scale has been devised to measure the attitude of learners for continuous learning with varied life phases and employment experiences. In other terms, it is necessary to collect data to identify the attitudes of the learners towards their career advancement and individual learning skills. Attitude to learning may involve any or all of the following features: the capacity to acquire new information quickly, the propensity to seek new development prospects, the willingness to embrace new ideas, the desire to acquire knowledge, unlearn, and re-learn, and the identification

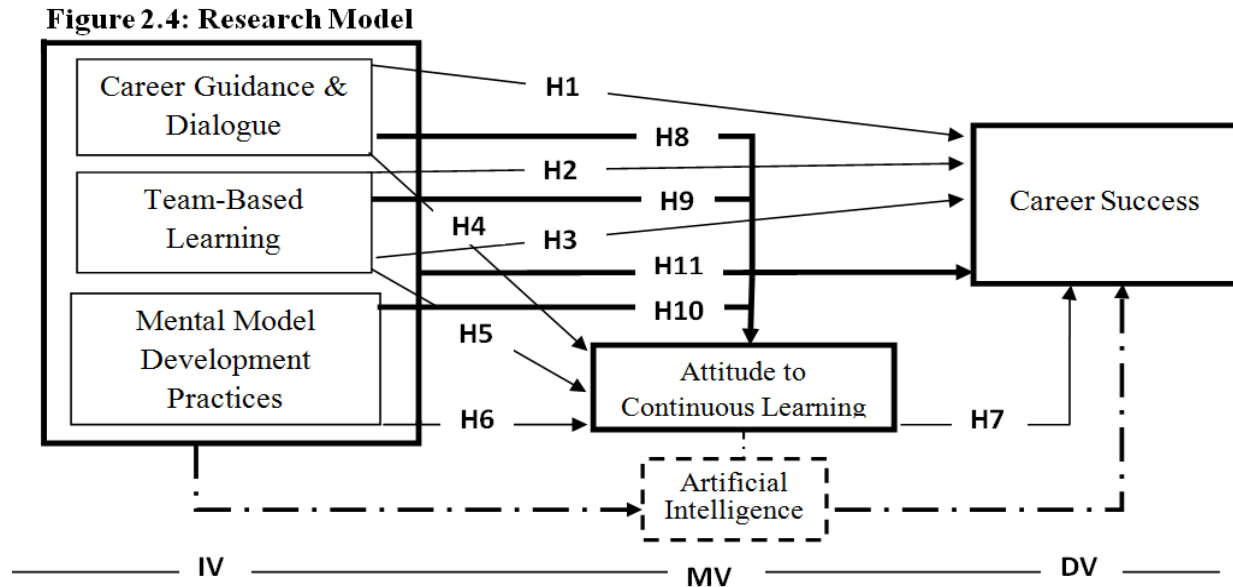
of one's vulnerabilities (Maurer & Weiss, 2010). Attitudes are frequently connected to the learner's learning priorities. To get insight into how professionals interpret and understand the significance of continuous learning, it is necessary to investigate attitudes towards continuous learning (Sadler-Smith, 1996).

The notion of career-oriented continuous learning represents one method for addressing learning motivation (e.g. London and Smither, 1999). It is described as an individual-level procedure that involves self-initiated, deliberate, and proactive behaviors, which are maintained over time for career success (London and Smither, 1999). Although the notion of career-oriented continuous learning has received a lot of interest from both scholars and professionals, it emerged relatively independently from the organizational learning studies. Connecting the two fields of study appears essential for several reasons (Maurer, 2001; London and Smither, 1999). Secondly, 'career-oriented continuous learning' surpasses the mere collection of new knowledge or education for its own sake (see Kluge and Schilling, 2003) due to the promise of advancing one's own career through participation in learning activities (O'Sullivan, 1999). Third, as individual learning and organizational learning are connected (Kyriakidou and O zbilgin, 2004), continual career-focused learning may be advantageous for leveraging organizational (Popper & Lipshitz, 2000). Previous studies have concentrated on the personal and organizational antecedents of career-oriented continuous learning to ascertain how career-oriented continuous learning can be fostered in an organization, whereas the current research will examine the impact of career and career-specific attitudes on institutional career-oriented continuous learning program.

#### 2.12.10 Model

Keeping in view theoretical framework, model of this study focuses on long-term strategies for the development of young professionals that can be accomplished through the mediating role of attitude to continuous learning. According to Amberg and McGaughey (2019), learning and development has progressed from one-off means for development of employees to a critical strategic resource to forward-thinking establishments. In this respect, three major learning and development factors for young professionals leading to career success are being studied assuming that following such practices results in the correct development of young professionals. To study the effect of these three learning and development practices on career success, research model presented in Figure 2.4 has been developed. The interactive nature of career success is envisaged to be determined by the mutual relationships between the learning and development factors (career

guidance and dialogue, team based learning, and mental model development practices) through mediation of attitude to continuous learning.



*Source: Researcher's own processing based upon conclusions from literature review.*

Where: IV denotes Independent Variable; DV means Dependent Variable; MV stands for Mediating Variable.

### 2.12.11 Hypotheses

**H1** ↔ Career guidance and dialogues have significant positive effect on young professionals' career success.

**H2** ↔ Team based learning has significant positive effect on young professionals' career success.

**H3** ↔ Mental model development practices have significant positive effect on young professionals' career success.

**H4** ↔ Career guidance & dialogues have significant positive effect on young professionals' attitude to continuous learning.

**H5** ↔ Team based learning has significant positive effect on young professionals' attitude to continuous learning.

**H6** ↔ Mental model development practices have significant positive effect on young professionals' attitude to continuous learning.

**H7**↔Attitude to continuous learning has significant positive effect on career success of young professionals’.

**H8**↔Attitude to Continuous Learning mediates the relationship between Career Guidance & Dialogues and Career Success of young professionals.

**H9**↔ Attitude to Continuous Learning mediates the relationship between Team Based Learning and Career Success of young professionals.

**H10**↔Attitude to Continuous Learning mediates the relationship between Mental Model Development Practices and Career Success of young professionals.

**H11**↔Attitude to continuous learning mediates the relationship between L&D factors (career guidance & dialogues, team based learning, and mental model development practices) and career success of young professionals.

#### 2.12.12 Summary

This chapter examined the research on HRD theories and ideas, learning and development, and career-oriented development challenges influencing career success. The chapter has provided a precise description of the LEAs in Pakistan, focusing on their capacity, management, and training and development related issues. Several of their shortcomings and deficiencies have been substantially emphasized in this review focusing mainly on HRD, learning and development and career aspects of young professionals. The intent was to provide a fair assessment of the research issues from the aspects of the literature, which may result in the discovery of new ideas and approaches that would assist in visualizing the strategies required to address these deficiencies in career success necessities of young professionals in the LEAs. The rationale of this examination of literature was to determine what elements contribute to career success. Why organizations implement learning and development initiatives, and what organizational factors influence the initial advancement of fresh professionals for long-term advantages (Landry et al., 2015).

Learning and development is a broad phrase that refers to a variety of efforts aimed at enhancing both individual and organizational performance (Rowley et al., 2016). Involvement in developmental activities improves career success prospects through career guidance and dialogues, team-based learning, and mental model development practices;

albeit no real evidence on these correlations exists. Based on the literature research, it is possible to conclude that organizational practices affecting the development of young professionals can be modified by the introduction of formal learning and development factors. Law enforcement professionals also agree that experience at various levels within an organization enables a professional to handle and organize his career problems more successfully (Marya, 2015). This proves that learning and development is vital for individuals as well as for the organizations and its importance is felt in private sector, public sector and in LEAs alike. All these evidences proved that there are number of issues including lack of proper development of professionals through quality HRD process that exists in current structure of LEAs, which needs to be addressed squarely. Without formulating effective strategy for induction and grooming of future leadership, LEAs cannot succeed.

## **CHAPTER 3**

### **RESEARCH METHODOLOGY**

#### **3.1 General**

Methodologies employed including design, evaluation and implementation have been described in this chapter of the study. The chapter is sub-divided into sections. First, research methodology and design have been explained, followed by the methods and procedures employed in population sampling and survey administration; measurements applied in the study; and methods used in data screening and analysis. Application of two-stage sampling method is elaborated as stratified sampling approach was applied in the first step to proportionately categorize professionals of the organizations in major groups for sampling size then systematic random sampling method was employed in the second stage to collect data. After the presentation of the sample's descriptive statistics, the data collection approach, research instrument, and data analysis procedures are elucidated. Subsequently, the procedure for AI prediction of career success utilizing the same data on L&D factors has been described to reach at rather better conclusion regarding applicability of learning and development factors to career success.

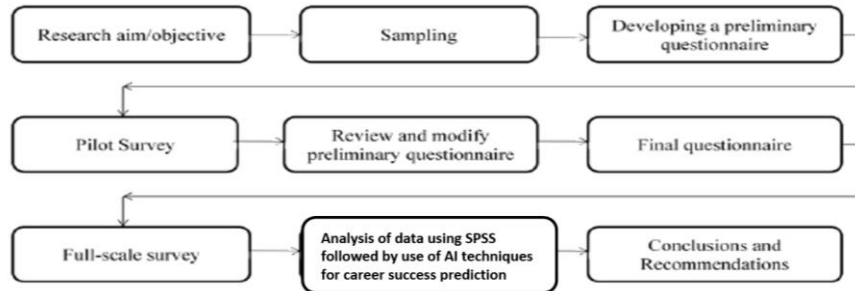
#### **3.2 Research Methodology**

Methodology consists of the study design, population, sample, apparatus, technique for data analysis, and statistical tools used to analyze the hypothesis. In accordance with the empirical investigative method, hypotheses are formed and then tested in the research process. Research methodology is dependent on method and procedure of survey and the core program for data analysis. The survey on the learning and development aspects for professionals engaged in both the Police and Civil Armed Forces was conducted and reviewed. Pilot study was carried out, the purpose of which was to test that the questionnaire contains clear questions to be responded in a way to help achieve the research targets. The questionnaire was distributed in respondents for collection of data. The number of questionnaires distributed in LEAs were 1000 in total, and 764 were received back. Out of 764 responses, 14 were rejected being not properly responded and finally 750 responses were selected for analysis. For data analysis and discussion, various tests were run employing SPSS (Statistical Program for the Social Sciences). Applying Artificial Intelligence approaches, the same data was utilized to anticipate the influence of independent factors via mediator on dependent variables. Artificial Intelligence analysis was done for better prediction and accuracy of the results and to provide a lead to future researchers for application of AI techniques in research domain of L&D. SPSS and AI analysis results were compared and evaluated



in line with intended objectives of the study. Based upon results after analysis, certain conclusions were drawn from study findings to formulate recommendations, which are discussed in Chapter 4. Diagram showing sequence of steps adopted in this research is mapped in Figure 3.1.

**Figure 3.1: Research Methodology**



*Source: Researcher's own processing/articulation.*

### 3.3 Design of Research

Design in research may be characterized as fundamental testing strategy (Rubin, 1987). The primary purpose is to systematize and organize the research study to improve its validity (Marais et al., 2016). It is an all-encompassing method for managing the research design process and its associated elements. The research was non-contrived, cross-sectional, and quantitative. The descriptive analytical approach was used. Hypotheses were established and evaluated throughout the study process. The survey was carried out regarding learning and development factors for the young professionals employed both in Police and in CAFs, which were reviewed and evaluated. The questionnaires were distributed amongst the population of around 1000 professionals for data collection. For data processing and interpretation, a two-pronged technique was adopted. First, various tests were applied using SPSS for data analysis followed by use of Artificial Intelligence (AI) technique to predict effect of learning and development factors on career success and its accuracy.

#### 3.3.1 Nature of Research

The goal of this research was to evaluate the influence of learning and development components (career guidance & dialogue, team based learning and mental model development practices) on success in professional career in presence of 'attitude to continuous learning' as mediator. The study was causal in nature.

#### 3.3.2 Study Setting

This was a field study given the fact that professionals from various LEAs located in Islamabad, provinces of Punjab and Khyber Pakhtunkhawa, Sind and Baluchistan filled out the questionnaires, while performing routine duties in their usual work settings.

### 3.3.3 Time Horizon

The data was collected with a time lag for various groups of professionals.

### 3.3.4 Unit of Analysis

Employees working in different departments of LEAs were the unit of analysis.

## 3.4 Research Population

A population in research is characterized as a faction of individuals or products, which shares comparable features (Roseburg et al., 2016 as stated in Wazir, 2018). According to Wikipedia and Abbas (2011), the entire manpower of law enforcement and intelligence agencies of Pakistan along with their cross-provincial authority is roughly 704000, with Pakistan Police having 429000 and civil armed forces (CAFs) consisting of 275000 personals. Workforce strength of all these LEAs is tabulated below: -

**Table 3.1: Manpower Strength of LEAs**

<i>S/No</i>	<i>Organization</i>	<i>Manpower</i>			<i>Total</i>
		<i>Officers (Top/Middle Management)</i>	<i>Young Professionals</i>	<i>Others</i>	
<b><i>Police</i></b>					
<i>a.</i>	<i>Punjab Police</i>	<i>5398</i>	<i>44980</i>	<i>129543</i>	<i>179921</i>
<i>b.</i>	<i>Sind Police</i>	<i>3855</i>	<i>32125</i>	<i>92500</i>	<i>128500</i>
<i>c.</i>	<i>KPK Police</i>	<i>2100</i>	<i>17500</i>	<i>50400</i>	<i>70000</i>
<i>d.</i>	<i>Baluchistan Police</i>	<i>1140</i>	<i>9500</i>	<i>27360</i>	<i>38000</i>
<i>e.</i>	<i>Islamabad Police</i>	<i>375</i>	<i>3125</i>	<i>9000</i>	<i>12500</i>
<b><i>©Total Police</i></b>		<b><i>12870</i></b>	<b><i>107250</i></b>	<b><i>308880</i></b>	<b><i>429000</i></b>
<b><i>CAFs</i></b>					
<i>f.</i>	<i>Punjab Rangers</i>	<i>3000</i>	<i>25000</i>	<i>72000</i>	<i>100000</i>
<i>g.</i>	<i>Sind Rangers</i>	<i>750</i>	<i>6250</i>	<i>18000</i>	<i>25000</i>
<i>h.</i>	<i>Frontier Corps KPK</i>	<i>3000</i>	<i>25000</i>	<i>72000</i>	<i>100000</i>
<i>i.</i>	<i>Frontier Corps Baluchistan</i>	<i>1500</i>	<i>12500</i>	<i>36000</i>	<i>50000</i>
<b><i>®Total CAFs</i></b>		<b><i>8250</i></b>	<b><i>68750</i></b>	<b><i>198000</i></b>	<b><i>275000</i></b>
<b><i>Grand Total (©+®)</i></b>		<b><i>21250</i></b>	<b><i>176000</i></b>	<b><i>506880</i></b>	<b><i>704000</i></b>
<b><i>% Age of Each Group</i></b>		<b><i>3%</i></b>	<b><i>25%</i></b>	<b><i>72%</i></b>	<b><i>100%</i></b>

*Source: Khan, D. (2008). Pakistan's Law Enforcement Agencies--Harnessing their Potential to Combat Terrorism. Naval Postgraduate School Monterey CA & Wikipedia.*

## 3.5 Sampling of Organizations

The research population included LEAs (Police and CAFs) of Pakistan located in Islamabad,

provinces of Punjab, Sind, Khyber Pakhtunkhwa and Baluchistan. Totals 18 small as well as large organizations were earmarked for data collection (10 from Police and 8 from CAF) out of which 10 were selected for study according to criteria of maximum professionals having experience of working in teams. Out of these five organizations were from Police and four were from CAFs. A proportionate balance of population between Police and CAFs was also maintained keeping in view overall workforce strength of each organization. Based on sampling frame for the organizations, every second organization whether small or large from Police and CAF was selected out of total selected from each set up. It was ensured that any selected organization comprised of at least more than 2000 professionals.

### **3.6 Sampling Method for Research Sample**

Sampling was executed in two stages. Since the population was known therefore, probability-sampling method was followed. Within probability sampling approach, population was categorized using stratified sampling in the first step and in the second stage; data was collected using systematic random sample method where respondents were picked according to sampling frame. Various groups of professionals of LEAs were included in the survey in order to have balance view as young professionals might not had experience to holistically understand the implications of various L & D processes. Moreover, criterion for categorizing young professionals was based on their service experience, which restricted to ten years. Accordingly, the population was divided into three strata for stratified sampling as follows:-

Strata -1 ↔ All officers (top/middle management) of LEAs.

Strata -2 ↔ All young professionals of LEAs having less than 10 years of service.

Strata -3 ↔ Other staff of LEAs, categorized as 'others'.

### **3.7 Research Sample**

The research sample included 1000 professionals of all categories from LEAs. The sample was chosen based upon different groups of professionals for both Police and CAFs, which included representation from senior management, fresh entry of young professionals as well lower and middle level professionals of the organization. Since there are 21120 officers (top/middle management), 506880 other staff and 176000 young professionals, then true representation from each of this major group was 3%, 72% and 25% respectively. Hence, sample size included 30 officers (senior/middle management), 720 other staff and 250 young professionals. All groups of professionals were handed over 1,000 questionnaires, 764 surveys were received. Out of these, 14 surveys were excluded due to the reason that these were not properly filled. Hence, total 750

respondents were selected for analysis, with response rate 75%. Details are shown in Table 3.2 to 3.3 below:-

**Table 3.2: Sample Size Group Wise**

<i>S/No</i>	<i>Group</i>	<i>Strength</i>	<i>Percentage</i>	<i>Sample Size</i>
1	<i>Officers /Top/ Middle Management</i>	21120	3%	30
2	<i>Other Staff</i>	506880	25%	720
3	<i>Young Professionals</i>	176000	72%	250

**Table 3.3: Sample Size Organization Wise**

<i>S/No</i>	<i>Type</i>	<i>Police</i>	<i>CAF</i>	<i>Total</i>
1.	<i>Middle and Senior (M&amp;S) Level Management</i>	14	9	23
2.	<i>Young Professionals (YP)</i>	113	75	188
3.	<i>Others (Officers, Junior and Potential Junior Leaders)</i>	323	216	539
<b><i>Total</i></b>		<b>450</b>	<b>300</b>	<b>750</b>

*Source: Research Questionnaire Part-1*

### 3.8 Data Collection Procedure

A systematic random sampling method was employed to collect primary data from employees for this research model. Information was acquired via questionnaires, statistical data, and direct research. Sampling frame was determined using formula,  $N/n$  (where 'N' represents Population and 'n' depicts size of sample). Hence, for Police, every 715 and for CAF every 687 respondent was selected from the list of professionals. The criterion for selecting professionals was that a respondent must have served in a particular organization for at least two years and should preferably have worked in teams.

#### 3.8.1 Nature of Data

Information for this research model was sought through a survey (questionnaire), statistical data, and direct research. Questionnaire was employed to gather primary data for the purpose of achieving the research objectives. However, for assessment of literature and theoretical discourse, secondary and tertiary resources were also explored for which numerous references, bibliographical and Internet sources were used. A questionnaire was distributed to the respondents to ascertain their

perceptions on the effectiveness of learning and development factors for young professionals in LEAs. There were also several bibliographical, online, and reference materials employed.

### 3.8.2 Data Collection Tools

The questionnaire tool was adapted to reflect the study questions and hypotheses. This questionnaire was used to obtain information from senior and middle management, young professionals as well as all other junior and potential junior leaders. All questions were structured. Five point Likert scale was selected with ratings of one (1) equal to ‘Very Low’; and five (5) equal to ‘Very High’ degree of distribution. The questionnaire's reliability, consistency, and validity were assessed using a pilot survey. The questionnaire items were adapted, then modified and upgraded after extensive discussions with professionals, scholars, the supervising team and colleagues.

3.9 **Research Instrument.** Questionnaire was adapted using sources as shown in Table 3.4.

**Table 3.4: Table of Research Instrument**

<i>S/No.</i>	<i>Variable</i>	<i>Items No.</i>	<i>Source</i>
1.	<i>Career Success (DV)</i>	01-09	<i>Wickramaratne (2021).</i>
2.	<i>Career Guidance &amp; Dialogues (IV)</i>	10-16	<i>Ibrahim et al. (2014).</i>
3.	<i>Team Based Learning (IV)</i>	17-25	<i>Carson &amp; Mennenga (2019).</i>
4.	<i>Mental Model Development Practices (IV)</i>	26-33	<i>LaMere et al. (2020).</i>
5.	<i>Attitude to Continuous Learning (MV)</i>	34-43	<i>Hursen (2016).</i>

*Source: Researcher's own processing.*

#### 3.9.1 The Questionnaire

According to Collis and Hussey (2003), a questionnaire is a series of well designed questions selected after extensive testing in order to elicit credible replies from a selected sample. The objective is to determine what a certain set of individuals does, thinks, or feels. It is well-known that use of questionnaire is a common data collection strategy.

#### 3.9.2 Questionnaire Design

In an effort to address the primary issue of the study, the researcher adapted a questionnaire as a measuring tool to collect data that would allow him to evaluate critically the extent to which learning and development elements for young professionals in LEA influence their career success. Each component of the questionnaire was comprised of a distinct set of questions. According to Collis et al. (2003), the Likert rating scale is one of the most commonly employed forms of scale.

Participants were asked to rank a list of things according to their significance. The Likert scale employed had the following scale range: “Strongly Disagree”; “Disagree”; “Neutral”; “Agree” and “Strongly Agree”.

The questionnaire comprised of 43 items in total. The variety of all these questions was designed to meet the study's goals and gather all relevant information necessary for the discussion, conclusions, and recommendations. A covering letter explaining the purpose of the study, the technique of response, the purpose of the study, and the privacy of the information, was provided with the questionnaire to encourage a significant response rate. On the cover page, the sample requirements were clearly outlined. The questionnaire (**Annexure B & C**) comprised of in two parts. The purpose of the first part was to gather data about respondents and demographic information of the organization. The other part was covered under five sections as following:

- a) **Section I** - It features nine items related to Career Success (DV) identified after thorough literature research to help the researcher to gain insight into how respondents perceive about this construct.
- b) **Section II** - It includes seven items related to Career Guidance & Dialogues (IV) identified through literature research to allow the researcher to obtain opinions on how respondents feel about the effect of the Learning and Development factor (Career Guidance & Dialogues) on Career Success.
- c) **Section III** - It includes nine items on Team Based Learning (IV) identified after thorough literature review to obtain respondents' opinions on the effect of Learning and Development factor (Team Based Learning) on Career Success.
- d) **Section IV** - It includes eight items on Mental Model Development Practices (IV) identified through literature review to obtain respondents' opinions on the effect of the Learning and Development factor (Mental Model Development Practices) on Career Success.
- e) **Section V** - It includes ten items concerning Attitude to Continuous Learning (MV) identified after detailed literature review to gauge respondents' feelings about the mediation effect of Attitude to Continuous Learning between Learning and Development factors and Career Success.

### 3.10 Model Estimation Using Statistical Analysis Tools and Techniques

For data analysis through quantitative method, the SPSS version 26 was employed. The following statistical techniques and procedures were used in this process:

- a) A questionnaire was adapted in accordance with the model's specifications, and the necessary data was collected.
- b) Data collected from professionals' responses was directly entered into SPSS.
- c) Evaluation of personal characteristics of the respondents' that include age, sex, education, job title, years of experience, and length of service in the organization, were examined.
- d) A factor analysis test using SPSS was performed to establish whether the questionnaire contributes significantly to the factor being measured and to group items according to the factor being measured.
- e) A normality analysis was performed through Shapiro-Wilk Test, Histogram of Residuals and Normal Probability Plot (NPP) to determine whether the data was normal or not.
- f) Park Test was performed to identify any problem of Hetrosadastisity.
- g) Confirmatory factor analysis was done to assess construct validity by using the maximum likelihood method.
- h) To analyze multicollenarity problem amongst independent variables, correlation test was performed for these variables.
- i) To assess the reliability, Cronbach Alpha test was performed using raw data on professionals' replies, which was assessed independently for each of the constructs being examined (CG & D, TBL, MMDP, and ATCL & CS).
- j) To find out standard deviations as well as means of each construct, a descriptive statistics test was performed.
- k) Correlation analysis was performed, and a linkage between IVs and DVs was discovered.
- l) Regression analysis for specified model was done to validate acceptance or rejection of model as well as stated hypothesis. For this analysis, both the 'F' and 'T' tests were used.
- m) An ANOVA test was performed to determine the fitness of model.

### 3.11. Questionnaire Testing

According to Blumberg (2008), a pilot test is undertaken to identify design and measurement flaws and to give proxy data for the choosing of a probability sample. Therefore, it should draw subjects from the target group and imitate the methods and protocols intended for data gathering. Due to the fact that the questionnaire for this study was derived from a variety of the sources, it was necessary to evaluate the items' reliability and validity. Hence, the researcher selected 60 persons from each of the intended population groups to complete the questionnaire in order to discover any potential issues or weaknesses such as uncertainty in the interpretation of the survey questions in the various sections of the questionnaire. The results demonstrated that the questionnaire items were plain and self-explanatory.

### 3.12 Validity and Reliability

Validity is the degree to which an instrument measures what it is designed to gauge (Pilot & Hungler, 1997), while reliability is the level to which an instrument consistently assesses the attributes it is intended to measure. Validity refers to the extent to which the study results correctly reflect the circumstance (Collis et al., 2003). According to Blumberg et al. (2008), estimation of the level to which a measurement is free of unstable or random mistakes is defined as reliability. Hence, it is essential that the questions answered by the researcher agree with the explanation provided to respondents on the purpose of the study.

### 3.13 Pilot Research Study

Before acquiring the outcomes of individual responses, a preliminary study was attempted to evaluate feasibility of the questionnaire. It is a sort of test trial for the questionnaire that includes evaluating the wording of the question, finding out questions, which are not clear, checking the methodologies employed to gather information, and determining the efficacy of the standard invitation to participants. This study's sample consisted of sixty professionals with representation from each category. The Likert scale was utilized for the study.

### 3.14 External (Pre-Pilot) Validity of the Questionnaire

The external validity of the questionnaire was determined by analyzing, with the help of a supervisor, whether the questions aligned with the degree, items and scope to which these items represent the idea of the study question. The reviewers concurred that the questionnaire was valid for its intended purpose. Their feedback was taken into consideration with little changes.



### 3.15 Statistical Validity of the Questionnaire

Two statistical tests were employed to evaluate the validity of the tools and the questionnaire's suitability for evaluating correlations between variables. The first test often known as the Pearson Test was the criterion-related validity test, which examines the correlation coefficient between every item and the whole field. This test was followed by structural validity test, for which the Pearson test was utilized again to evaluate the validity of the structure of the questionnaire by assessing the reliability of every field and the entire questionnaire. It assessed the correlation coefficient between a particular field and all questionnaire fields with the same scale level.

#### 3.15.1 Application of Artificial Intelligence Techniques

In this study, the collected data was learnt by applying machine learning method to predict the success of the young professionals. The machine learning technique, which was adopted is explained in succeeding paragraphs. The performance of this of techniques was compared with success prediction by SPSS analysis and the best one was identified for application.

#### 3.15.2 Techniques of Artificial Intelligence

ANN (Artificial Neural Network) technique was applied for career success prediction. ANNs are supervised learning techniques inspired by the working of biological neural networks (Ciresan, 2010). It is made up of artificial neurons, that are linked units or nodes and receive inputs and multiply them with certain weights to produce output. The output is then fed into another neuron. This forms a network of neurons through connections. The ANN is trained by specifying the rate of learning, unseen number of layers, neurons number per layer, and batch size. ANN normally fits well on different types of linear/nonlinear and complex datasets compared to all other techniques. ANN is considered to be a data hungry algorithm and produces low generalization error in the case of big data. In this study, the number of layers used in ANN vary from 1 to 4, with the number of neurons per layer from 1 to 128 neurons.

#### 3.15.3 Artificial Intelligence Train-Test Split

The dataset was separated in test set and training set at random. The data for training set comprising 80% of the data was used for the training of the machine learning algorithms whereas as the test set consist of remaining 20% data which was used only to evaluate and compare the performance of different machine learning algorithms

#### 3.15.4 Data Labeling in Artificial Intelligence

To use ANN for supervised learning and classification task, the collected data is labeled by experts. Each respondent's response regarding the independent and control variables questions is analyzed by the experts and a decision is made whether there is a career success or non-success on the respondent side. The labeling of each respondent in the form of career success and non-success is taken as target variable having Boolean values, in order to implement a binary classification task by the ANN. As mentions above, the data used for training is 80% and remaining 20% is for testing purposes.

#### 3.16 Summery

Methodology followed for current study has been discussed in detail in this chapter. The population, research design, instrument, sample, data analysis process, and statistical analysis methods and tools for empirical testing of hypothesis for estimation of linear model have all been explained in this chapter. Characteristics of sample have been analyzed using SPSS and results are shown. Procedure for use of instrument and survey questionnaire has been mentioned in detail. Method used for ensuring reliability and validity of data and pilot testing procedure have been highlighted as well. Modus operandi adapted for application of Artificial Intelligence techniques required to predict the outcome using same data have also been illustrated. Overall, this chapter describes the complete process of conduct of research for generalization of results in future.

## **CHAPTER 4**

### **DATA ANALYSIS AND RESULTS**

#### **4.1 Overview**

This chapter presents study findings under various headings. For the purpose of data analysis, SPSS Version 26 was used to perform various tests. First, characteristics of sample evaluated to categorize respondents according to sector, type of the organization, age, sex, qualifications, experience, length of service and job title in the organization have been shown. This is followed by results of factor analysis for learning and development factors which was performed to assess if the questions posed in the questionnaire contribute significantly to the component they measure. Thereafter, normality test results are presented to show whether the data follows a normal distribution or otherwise. Subsequently results of reliability tests, confirmatory factor analysis and cronbatch alpha are also tabulated. Confirmatory factor analysis was done to assess construct validity by using the maximum likelihood method. Next, correlation and regression analysis and, ANOVA results along with explanation and interpretation are exhibited. Keeping in view, study purpose, correlation test was run to discover the association among independent variables i.e., 'Career Guidance & Dialogues', 'Team based Learning', 'Mental Model Development Practices' and dependent variable i.e., Career Success and the results are discussed. This followed the conduct of regression test for model fitness and confirmation of hypothesis, and the results along with interpretation are represented in this chapter. Regression tests results showing function of 'Attitude to Continuous Learning' in mediating the association between independent and dependent variables are also depicted. Afterwards, the results of hypotheses tests showing effect of every independent variable on the dependent one (career success) and separate test results to see the effect of mediator are discussed. Finally, results showing prediction of learning and development factors on career success using Artificial Intelligence technique are also presented.

#### **4.2 Sample Characteristics**

##### **4.2.1 Organizational Characteristics Evaluation**

The organizational characteristics of sample of LEAs were evaluated and reflected, based upon the responses including the sector and category of the organization. Tables 4.1 to 4.2 illustrate the properties of the sample.

###### **4.2.1.1 Organization's Sector According to the Respondents**

**Table 4.1: Organization's Sector**

<i>S/No.</i>	<i>Organization's Sector</i>	<i>Frequency</i>	<i>Percentages</i>
1.	<i>Field Companies/Police Lines</i>	270	36.00
2.	<i>Static /Support Units/Police Stations</i>	150	20 .00
3.	<i>Training Establishments</i>	180	24.0 0
4.	<i>HQs/HRM Staff</i>	105	14.00
5.	<i>Others</i>	45	6.00
<b><i>Total</i></b>		<b>750</b>	<b>100</b>

*Source: Survey Questionnaire: Part- 1*

According to Table 4.1, 36% of the organization's sector is 'Field Companies/Police Lines,' 20% is 'Static/Support Units/Police Stations', 24% is 'Training Establishments', 14% of the organization's sector is 'HQs/HRM Staff' and 6.0% of the organization's sector is 'Others'.

There is a diversification of LEAs, meaning that all kinds of entities and departments available around Rawalpindi/Islamabad as well as in the provinces, which are essential part of security agencies, are included in the survey to have balance opinion about the study under investigation. The prominent organization sector is 'Field Companies/Police Lines' for the reason that these companies/setup carry out operation to maintain law and order and consist major portion of LEAs. Second is 'Training Establishments' due to the fact that the department is directly related to learning and development of young professionals. The third category is 'Static /Support Units/Police Stations,' which shows that there are also LEA units that support the field units system in various ways for the execution of operational activities. Fourth type is 'HQs/HRM Staff' that manages and coordinates all sorts of operational, training and administrative actions or activities and assist top management in execution of their plans. Fifth category is all those professionals who are part of different fields or entities, and are small in numbers but cannot be ignored.

#### 4.2.1.2 The Type of Organization According to the Respondents

**Table 4.2: The Type of Organization**

<i>The Type of Organization</i>	<i>Frequency</i>	<i>Percentage</i>
<i>Police</i>	435	58 .00
<i>CAF</i>		
<i>Rangers</i>	155	20.6
<i>Frontier Corps (FC)</i>	130	17.4
<i>Others (Intelligence set up etc.)</i>	30	4.00
<b><i>Total</i></b>	<b>750</b>	<b>100.0</b>

*Source: Survey Questionnaire: Part- 1*

Table 4.2 shows that 58.0% of organization types is 'Police' and 42% are 'CAFs' of which 20.6% are from 'Rangers', 17.4 % are from 'FC' and 04 % are 'Others'. Hence, there is diversification of LEAs. Although there are various types of LEAs with widely varying ancestries, each one has its own culture, operational procedures, and organizational objectives. Each of these factors will affect young professionals' learning, development, and career success in distinct ways.

#### 4.2.2 Evaluation of Personal Characteristics

The respondents' personal attributes that include age, sex, education, job title, years of experience, and length of service in the organization, were examined. The subsequent tables (4.3 to 4.12) describe the properties of the sample.

##### 4.2.2.1 Age Group

**Table 4.3: Age Group**

<i>S/No.</i>	<i>Age Group</i>	<i>Frequency</i>	<i>Percentages</i>
1.	< 20 Years	8	1.06
2.	21 - 30 Years	179	23.8
3.	31 - 40 Years	342	45.6
4.	41 - 50 Years	198	26.4
5.	51 - 60 Years	23	3.06
6.	60 Years <	0	0
<b>Total</b>		<b>750</b>	<b>100.00</b>

*Source: Survey Questionnaire: Part- 1*

Table 4.3 reveals that 1.06% age of sample is '20 years or less', 23.8% age of sample is between '21 to 30 years', 45.6% sample of age is between '31 to 40 years', 26.4% age of sample is between '41 to 50 years', and none of the professional in the sample have an age above '60 years'. According to Super's theory of life and career development, individuals investigating their career interests and navigating the available possibilities before settling into an appropriate position fall in stage three. Such groups of individuals should be focused while they are at the early stages of their careers, and are in a position to acquire more skills and advance to higher positions.

**Table 4.4: Summary of Age Group of Respondents**

<i>S/No</i>	<i>Age Bracket</i>	<i>M&amp;S</i>	<i>%</i>	<i>YP</i>	<i>%</i>	<i>Others</i>	<i>%</i>	<i>Total</i>	<i>Total % / Age Bracket</i>
1.	< 20 Years	0	0	8	1.06	0	0	8	1.06
2.	21 – 30 Years	0	0	179	23.8	0	8	179	23.8
3.	31 – 40 Years	83	11.06	0	0	259	34.53	342	45.6
4.	41 – 50 Years	24	3.2	0	0	174	23.2	198	26.4
5.	51 -60 Years	23	3.06	0	0	0	0	0	3.06
6.	60 Years <	0	0	0	0	0	0	0	0

*Source: Survey Questionnaire: Part- 1*

According to Table 4.4, approximately 25% of the respondents in the study are between the ages from 18 to 30. This accounts for one-quarter of the whole sample. Many responders in this age group have little experience with organizational learning and development elements. This limitation may have an impact on their expectations or judgments about how learning and development factors affect career success or whether or not these requirements are adequately addressed by the organizations. To cater for this, other professionals have also been included in the survey. It may be noted that the majority of responders are quite young, with approximately 70% being under the age of 40 years.

#### 4.2.2.2 Sex

**Table 4.5: Distribution of Sample According to Sex**

<i>S/No.</i>	<i>Sex</i>	<i>Frequency</i>	<i>Percentages</i>
1.	Male	711	94.8
2.	Female	39	5.2
	<b>Total</b>	<b>750</b>	<b>100.00</b>

*Source: Survey Questionnaire: Part- 1*

According to Table 4.5, male comprise 94.8% of the sample, whereas 5.2% is female. The statistics show that there are fewer girls than males in the LEAs. The major reason is that in Pakistani culture, Police or security agencies have not been priority sector of employment to females hence, males dominate the organizations.

#### 4.2.2.3 Education

**Table 4.6: Sample Distribution with Regard to Education**

<i>S/No.</i>	<i>Education</i>	<i>Frequency</i>	<i>Percentages</i>
1.	<i>High School Certificate (HSC)/Matric</i>	174	23.2
2.	<i>Higher Secondary School (HSSC)/FA/F sc.</i>	273	36.4
3.	<i>Diploma</i>	6	0.8
4.	<i>Bachelor Degree</i>	240	32.2
5.	<i>Master Degree</i>	57	7.6
6.	<i>Ph.D.</i>	0.00	0.00
<b><i>Total</i></b>		<b>750</b>	<b>100.00</b>

*Source: Survey Questionnaire: Part- 1*

Table 4.6 demonstrates that 23.2% of the sample's education is 'High School', 0.8% of the sample's education is 'Diploma', 36.4% of the sample's education is 'FA/Fsc', 32.2% of the sample's education is 'Bachelor Degree' and in the last, 7.6% of the sample's education is 'Master Degree'. The bulk of the sample's education state is above FA/Fsc, indicating that LEAs are attracting educated staff. Furthermore, some of the sample possess masters degrees, indicating that professionals are making efforts to advance their careers by gaining higher education.

**Table 4.7: Summary of Respondents' Qualification**

<i>S/No.</i>	<i>Qualification</i>	<i>M&amp;S Level</i>	<i>%</i>	<i>YP</i>	<i>%</i>	<i>Others</i>	<i>%</i>	<i>Total</i>	<i>Total % / Qualification</i>
1.	<i>HSC/Matric</i>	0	0	20	2.6	154	20.6	174	23.2
2.	<i>HSSC/FA/Fsc</i>	3	0.4	70	9.3	186	24.8	273	36.4
3.	<i>Diploma</i>	0	0	0		6	0.8	6	0.8
4.	<i>Bachelor Degree</i>	12	1.6	75	10	167	22.3	240	32.0
5.	<i>Master Degree</i>	8	1.06	23	3.06	26	3.48	57	7.6
<b><i>Total</i></b>		<b>23</b>		<b>188</b>		<b>539</b>		<b>750</b>	<b>100%</b>

*Source: Survey Questionnaire, Part- 1.*

According to Table 4.7, the highest percentage of the respondents' (39.6%) qualifications are graduate or above, indicating that the respondents are educated in general. Nevertheless, only a few of the respondents have completed degree in masters.

#### 4.2.2.4 Distribution of Sample According to Job Title

**Table 4.8: Job Title**

<i>S/No.</i>	<i>Job Title</i>	<i>Frequency</i>	<i>% Age</i>
1.	<i>Executives/ DIG /Comd /Deputy Comd /Equivalent</i>	5	0.6
2.	<i>Top Mgmt/ CO/Wing Comd/CCPO/SSP/Equivalent</i>	7	0.9
3.	<i>Middle Mgmt/ Company Comd/SP/ASP/Equivalent</i>	11	1.4
4.	<i>Operational Mgmt/Platoon Comd/Junior Leaders/Inspector/ Sub Inspector/ Equivalent</i>	260	34.6
5.	<i>Field Staff/ Section Comd/ Potential Junior Leaders/ ASI/ Equivalent</i>	359	47.8
6.	<i>Others/Adm Staff/DSP/ Junior Leaders/ Equivalent</i>	108	14.4
<b><i>Total</i></b>		<b>750</b>	<b>100</b>

Source: Survey Questionnaire, Part- 1.

According to Table 4.8, 0.6% of the sample's job titles are 'Executives/Equivalent', 0.9% are 'Top Management/Equivalent,' 1.4% are 'Middle Management/Equivalent', 34.6% are 'Operational Management/Equivalent', 47.8% are 'Field Staff/Equivalent', and 14.4% are 'Others/Administrative Staff/Equivalent'. The bulk of the sample is comprised of operational, field, and administrative management levels, which have less influence and control over their careers and the organizations choices them their seniority levels. On the other hand, a portion of the sample is comprised of middle and senior management, and this indication demonstrates that these individuals also have an effect on the career success of young professionals.

**Table 4.9: Summary of Respondents' Job Titles**

<i>S/No.</i>	<i>Job title</i>	<i>No. of Respondents</i>	<i>% Responses</i>
1.	<i>Executives</i>	5	0.6%
2.	<i>Middle and Senior (M&amp;S) Level Management</i>	18	2.4%
3.	<i>Operational / Field Staff</i>	619	82.6%
4.	<i>Others/Administrative Staff</i>	108	14.4%
<b><i>Total</i></b>		<b>750</b>	<b>100.00%</b>

Source: Survey Questionnaire, Part- 1.

Table 4.9 illustrates the split of the job titles of the individuals who took part in the research.

#### 4.2.2.5 Distribution of Sample according to Years of Experience



**Table 4.10: Years of Experience**

<i>S/No.</i>	<i>Years of Experience</i>	<i>Frequency</i>	<i>Percentage</i>
1.	< 5 Years	24	3.2%
2.	6 -7 Years	113	15.06%
3.	8 - 10 Years	51	6.8%
4.	11 - 15 Years	418	55.7%
5.	15 Years <	144	19.2%
<b>Total</b>		<b>750</b>	<b>100.00%</b>

*Source: Survey Questionnaire: Part- 1*

Table 4.10 reveals that 3.2% of the sample has 'less than 5 years' of experience, 15.06% of the sample has '6 to 7 years' of experience, 6.8% has '8 to 10 years' of experience, 55.7% has '11 to 15 years' of experience, and 19.2% has beyond '15 years' of experience. As can be observed, almost 25% sample have not more than 10 years of experience, indicating that they are just in early stage of their careers and may benefit from organizational initiatives in enhancing their career progression.

#### 4.2.2.6 Distribution of Sample according to Service Tenure

**Table 4.11: Service Years in the Organization**

<i>S/No.</i>	<i>Years of Service in the Organization</i>	<i>Frequency</i>	<i>Percentages</i>
1.	< 2 Years	19	2.5%
2.	3 - 5 Years	107	14.2%
3.	6 -10 Years	62	8.2%
4.	11 - 15 Years	491	65.4%
5.	15 Years <	71	9.4%
<b>Total</b>		<b>750</b>	<b>100.00%</b>

*Source: Survey Questionnaire, Part- 1.*

According to Table 4.11, 2.5% of the sample have 'less than 2 years' of service in the organization, 14.2% have '3 to 5 years' of service in the organization, 8.2% have '6 to 10 years' of service in the organization, 65.4% have '113 to 15 years' of service in the organization and 9.4% have 'beyond 15 years' of service in the organization. Hence, it is acknowledged that the bulk of the sample is serving in the same organization for less than 15 years. It sounds realistic that just a small portion of the sample is serving for more than 15 years and that few working for less than 10 years.

**Table 4.12: Summary of Length of Service of Respondents**

<i>S/No.</i>	<i>Length of Service</i>	<i>M&amp;S Level</i>	<i>%</i>	<i>YP</i>	<i>%</i>	<i>Others</i>	<i>%</i>	<i>Total</i>	<i>Total % /Length of Service</i>
1.	< 2 Years	0	0	19	2.5	0	0	19	2.5%
2.	3-5 Years	0	0	107	14.2	0	0	107	14.2%
3.	6 -10 Years	0	0	62	8.2	0	0	62	8.2%
4.	11 -15 Years	0	0	0	0	491	65.4	491	65.4%
5.	15 Years <	23	3.06	0	0	48	6.4	71	9.4%
<b>Total</b>		<b>23</b>		<b>188</b>		<b>539</b>		<b>750</b>	<b>100%</b>

*Source: Survey Questionnaire: Part- 1*

Table 4.12 indicates, more than 80% of individuals have served in the specific outfit for above five years. According to the researcher, working for at least five years might be enough time for an employee to have exposure to any organization, become familiar with "how various methods are used," and be qualified to respond to the survey questions included in this research study. As a result, the researcher is more confident in the accuracy of the vast majority of survey results.

#### 4.3 Model Fitness Test

A model fitness test was performed for learning and development factors in order to assess whether the learning and development factors contribute significantly to any variance in dependant variable in the model. Results alongwith explanation and interpretation are presented in Table 4.13.

**Table 4.13: Model Fitness Test**

<i>Items No.</i>	<i>Values</i>	<i>CG &amp;D</i>	<i>TBL</i>	<i>MMDP</i>
1-43	<i>Eigen value</i>	8.705	3.324	2.159
	<i>% of variance</i>	27.203	10.338	6.784
	<i>Cumulative %</i>	27.203	37.591	<b>50.531</b>

*Source: Primary data.*

Learning and development factors include three variables: CG & D, TBL, and MMDP. The Eigen value of 'CG & D' is 8.705 and the percentage variance is 27.203. TBL has an Eigen value of 3.324 and a variance percentage of 10.338. The Eigen value of 'MMDP' is 2.159, and the percentage variance is 6.784. Overall, the factors account for 50.531% of the variation in learning and development factors.

#### 4.4 Normality Tests

A normal distribution is a distribution with a bell shape. The Skewness and Kurtosis of a random normal variable are equal to zero (0) and three (3), respectively. A distribution may be skewed to the left or right; if it is symmetrical ( $S = 0$ ), it is not skewed. With relation to a normal distribution, kurtosis indicates skewed or flat data. A normally distributed data has a Kurtosis equal to three; distributions with longer and shorter tails relative to the normal distribution will have K values larger than and less than three, respectively. There are various approaches to assess the normalcy of disturbances/residuals, however only the following three tests are employed for current data:

- a) Shapiro-Wilk Test
- b) Histogram of Residuals
- c) Normal Probability Plot (NPP)
- d) Correlation Test ( For Multicollinearity)

##### 4.4.1 Shapiro-Wilk Test

**Table 4.14: Shapiro-Wilk Test Results**

	<i>Kolmogorov-Smirnov<sup>a</sup></i>			<i>Shapiro-Wilk</i>		
	<i>Statistic</i>	<i>df</i>	<i>Sig.</i>	<i>Statistic</i>	<i>df</i>	<i>Sig.</i>
<i>CG &amp;D</i>	.090	750	.000	.969	750	.000
<i>TBL</i>	.130	750	.000	.931	750	.000
<i>MMDP</i>	.090	750	.000	.955	750	.000
<i>ATCL</i>	.090	750	.008	.939	750	.005
<i>CS</i>	.075	750	.042	.955	750	.008

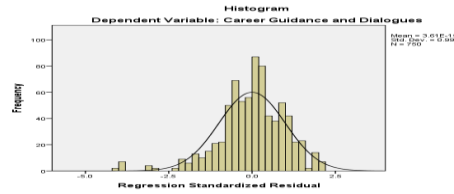
*a. Lilliefors Significance Correction*

Table 4.14 reveals that the significance of the test that is below 0.05, indicating that the data diverges from a normal distribution.

##### 4.4.2 Normality Tests Results for Career Guidance & Dialogues

a) **Histogram of Residuals**

**Figure 4.1: Histogram CG &D**



A visual examination of the histogram brings out the fact that residuals in majority of the case lie inside the normal curve, while only some are outside, not only towards left part, creating Skewness, but also on the top peak, causing Kurtosis.

b) **Normal Probability Plot (NPP)**

**Figure 4.2: NPP FOR CG &D**

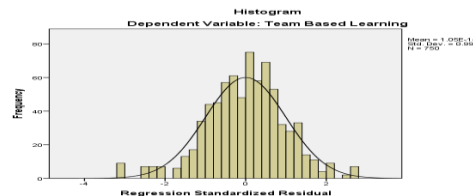


If NPP draws a straight line, then the residuals are normally distributed. Most of the NPP in the preceding graph appears to be roughly like a straight line, barring a little portion that is not exactly overlapping the straight line. As a result, we can conclude that the majority of the data looks to be regularly distributed because it follows the diagonal line.

#### 4.4.3 Normality Test Results for Team based Learning

a) **Histogram of Residuals**

**Figure 4.3: Histogram TBL**



A visual examination of the histogram brings out the fact that residuals in majority of the case lie inside the normal curve, while only some are outside, not only towards left part, creating Skewness, but also on the top peak, causing Kurtosis.

## b) Normal Probability Plot (NPP)

**Figure 4.4: NPP FOR TBL**

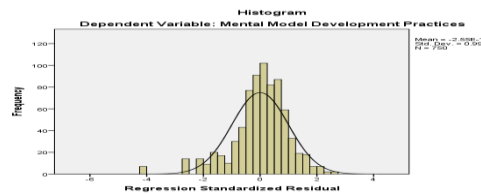


In the preceding scenario, the majority of the NPP appears to be roughly like a straight line, bearing a little portion that is not exactly overlapping the straight line. We can conclude that the data looks to be regularly distributed in general.

### 4.4.4 Normality Test Results for Mental Model Development Practices

#### a) Histogram of Residuals

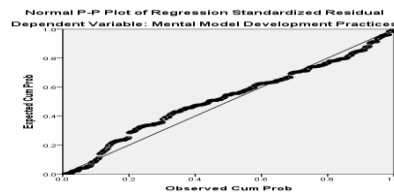
**Figure 4.5: Histogram MMDP**



A visual examination of the histogram brings out the fact that residuals in majority of the case lie inside the normal curve, while only some are outside, not only towards left part, creating Skewness, but also on the top peak, causing Kurtosis.

#### b) Normal Probability Plot (NPP)

**Figure 4.6: NPP FOR MMDP**

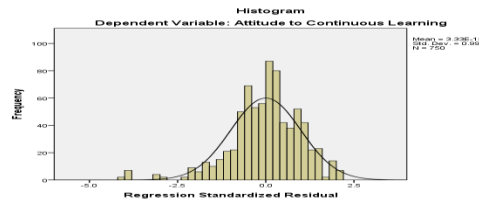


In the preceding scenario, the majority of the NPP appears to be roughly like a straight line, bearing a little portion that is not exactly overlapping the straight line. We can conclude that the data looks to be regularly distributed in general.

#### 4.4.5 Normality Test Results for Attitude to Continuous Learning

##### a) Histogram of Residuals

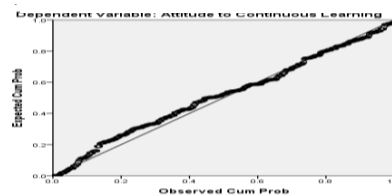
**Figure 4.7: Histogram ATCL**



A visual examination of the histogram brings out the fact that residuals in majority of the case lie inside the normal curve, while only some are outside, not only towards left part, creating Skewness, but also on the top peak, causing Kurtosis.

##### b) Normal Probability Plot (NPP)

**Figure 4.8: NPP FOR ATCL**

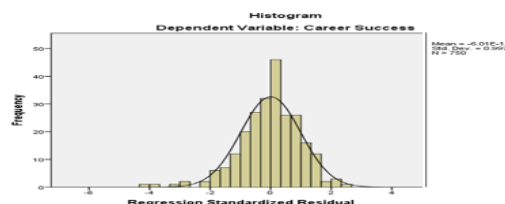


In the preceding scenario, the majority of the NPP appears to be roughly like a straight line, baring a little portion that is not exactly overlapping the straight line. We can conclude that the data looks to be regularly distributed in general.

#### 4.4.6 Normality Test Results for Career Success

##### a) Histogram of Residuals

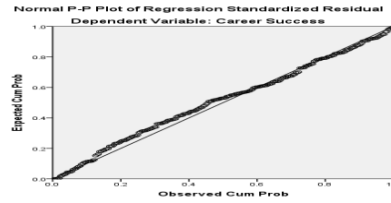
**Figure 4.9: Histogram CS**



A visual examination of the histogram brings out the fact that residuals in majority of the case lie inside the normal curve, while only some are outside, not only towards left part, creating Skewness, but also on the top peak, causing Kurtosis.

## b) Normal Probability Plot (NPP)

**Figure 4.10: NPP FOR CS**



In the preceding scenario, the majority of the NPP appears to be roughly like a straight line, barring a little portion that is not exactly overlapping the straight line. We can conclude that the data looks to be regularly distributed in general.

## 4.5 Heteroscedasticity

Park Test results to identify Heteroscedasticity problem are represented in Table 4.11.

**Table 4.15: Results of Park Test**

<i>Model</i>	<i>Un-standardized</i>		<i>Standardized</i>		<i>t</i>	<i>Sig.</i>
	<i>Coefficients</i>		<i>Coefficients</i>			
	<i>B</i>	<i>Std. Error</i>	<i>Beta</i>	<i>B</i>	<i>Std. Error</i>	
<i>(Constant)</i>	.240	.098		2.450		.015
<i>LCG &amp; D</i>	-.056	.032	-.129	-1.748		.342
<i>LTBL</i>	-.157	.026	-.455	-6.124		.007
<i>LMMDP</i>	.026	.024	.069	1.075		.283

Except for LTBL, all of the coefficients (LCG&D and LMMDP) are statistically insignificant, highlighting no Heteroscedasticity problem in the data.

## 4.6 Multicollinearity Test

According to one of the standard assumptions of the Ordinary Least Squares (OLS) estimation technique, independent variables should not linearly correlate or affect each other; if they do, the problem is referred to as multicollinearity. It is a problem originating from the nature of the data as it exists. In practice, one can reduce multicollinearity but cannot altogether eliminate it. If explanatory variables are perfectly collinear, the regression coefficients will be indeterminate, as standard errors are infinite. In case, multicollinearity is less than perfect, the regression coefficients, although indeterminate, will possess large standard errors, meaning the coefficients cannot be estimated with great precision or accuracy. The correlation tests was conducted for IVs to observe whether this problem exists or otherwise, the results are shown in Table 4.16 below.

**Table 4.16: Results Multicollinearity Test**

<i>Variable</i>		<i>Career Guidance &amp; Dialogues</i>	<i>Team Based Learning</i>	<i>Mental Model Development Practices</i>
<i>Career Guidance &amp; Dialogues</i>	<i>Pearson Correlation</i>	1	.152	.196
	<i>Sig. (2-tailed)</i>		.334	.215
	<i>N</i>	750	750	750
<i>Team Based Learning</i>	<i>Pearson Correlation</i>	.152	1	.132
	<i>Sig. (2-tailed)</i>	.334		.311
	<i>N</i>	750	750	750
<i>Mental Model Development Practices</i>	<i>Pearson Correlation</i>	.196	.132	1
	<i>Sig. (2-tailed)</i>	.215	.311	
	<i>N</i>	750	750	750

Results in Table 4.16 show that there is no major issue of multicollinearity between independent variable as all values are insignificant. Although there is some correlation between variables but that is insignificant as it cannot be eliminated altogether. Hence, it can be concluded that the data is quite normal.

#### 4.7 Confirmatory Factor Analysis

Confirmatory factor analysis is done to assess construct validity by using the maximum likelihood method. After applying the method, the standardized coefficient estimates for career success (CS) are between 0.29 and 0.86. The acceptable level is 0.3. Only one item is slightly below the acceptable level which shows the convergent validity is not satisfactory. For career guidance & dialogues (CG&D), the values lie between 0.25 and 0.97. All are acceptable except one which is slightly below the set threshold. For team based learning (TBL) and mental model development practices (MMDPs) implementation of all factor loadings are well above the set benchmark. For attitude to continuous learning (ATCL), the values lie between 0.28 and 0.87. All are acceptable except one which is slightly below the set threshold. The R-squared value explains the percentage of variation by each item in its respective factor. The best item for CS is item number 3, for CG&D is item number 10, for TBL is item number 20, for MMDPs is item number 32 and for ATCL implementation is item number 36. All the values are given in the table 4.17 below.



**Table 4.17: Results Confirmatory Factor Analysis**

<i>Item Number</i>	<i>Factor Loading (Standardized)</i> <i>&gt;0.3</i>	<i>R-Squared Value</i>
<b><i>Career Success (CS)</i></b>		
1	0.58	0.34
2	0.70	0.49
3	0.86	0.74
4	0.79	0.62
5	0.29	0.09
6	0.48	0.21
7	0.49	0.23
8	0.71	0.47
9	0.81	0.69
<b><i>Career Guidance &amp; Dialogues (CG&amp;D)</i></b>		
10	0.97	0.94
11	0.35	0.12
12	0.58	0.34
13	0.25	0.06
14	0.48	0.26
15	0.69	0.51
16	0.78	0.62
<b><i>Team Based Learning (TBL)</i></b>		
17	0.46	0.22
18	0.48	0.23
19	0.69	0.48
20	0.79	0.60
21	0.47	0.33
22	0.53	0.22
23	0.77	0.50
24	0.78	0.66
25	0.59	0.31
<b><i>Mental Model Development Practices (MMDPs)</i></b>		
26	0.67	0.45
27	0.80	0.64
28	0.35	0.12
29	0.76	0.58
30	0.57	0.39
31	0.73	0.46
32	0.82	0.69
33	0.68	0.56

<i>Item Number</i>	<i>Factor Loading (Standardized)</i>	<i>R-Squared Value</i>
	<i>&gt;0.3</i>	
<b><i>Attitude to Continuous Learning (ATCL)</i></b>		
34	0.61	0.35
35	0.71	0.48
36	0.87	0.76
37	0.69	0.65
38	0.45	0.29
39	0.49	0.25
40	0.79	0.47
41	0.75	0.63
42	0.28	0.08
43	0.57	0.38

The construct fitness indexes are given in Table 4.18. The chi-square value should be minimum, probability/significance level should be greater than 0.05, GFI, AGFI, CFI, TLI values should be close to 1, RMSEA value should be between 0 and 0.08 and Chi-square/df value should be less than 3.0. Almost all the values in the table below qualify the benchmarks and in few, one needs to exercise precautions.

**Table 4.18: Results Construct Fitness Indexes**

<i>Variable</i>	<i>Chi-Sq</i>	<i>Sig. Level</i>	<i>GFI</i>	<i>AGFI</i>	<i>TLI</i>	<i>CFI</i>	<i>RMSEA</i>	<i>Chi-sq/df Ratio</i>
<i>CS</i>	6.698	0.244	0.959	0.878	0.961	0.981	0.076	1.33
<i>CG&amp;D</i>	1.105	0.576	0.991	0.955	1.093	1.000	0.000	1.306
<i>TBL</i>	2.629	0.269	0.980	0.900	0.950	0.983	0.073	0.552
<i>MMDPs</i>	3.589	0.366	0.896	0.789	0.977	0.963	0.087	1.316
<i>ATCL</i>	2.612	0.271	0.978	0.888	0.967	0.989	0.072	1.314

#### 4.8 Cronbach Alpha Coefficients

To assess the consistency of the questionnaire between every field and the averages of all fields, Cronbach Alpha test was performed. Greater the value of Cronbach Alpha, greater will be the degree of internal consistency. Cronbach Alpha has a normal range of alpha values between 0.0 and + 1.0.

**Table 4.19: Cronbach Alpha Test Results**

<i>S/No</i>	<i>Variable</i>	<i>No. of Items</i>	<i>Cronbach Alpha</i>
1.	<i>Career Guidance &amp; Dialogues</i>	9	0.905
2.	<i>Team Based Learning</i>	7	0.964
3.	<i>Mental Model Development Practices</i>	9	0.936
4.	<i>Attitude to Continuous Learning</i>	10	0.915
5.	<i>Career Success</i>	8	0.873
<b>Total</b>		<b>43</b>	<b>0.895</b>

In Table 4.19, the value of alpha coefficient of Cronbach is shown. The range of results is between 0.873 and 0.964, and the reliability for all items overall is 0.895. This range is believed to be considerable, which assures the questionnaire's validity. Therefore, it can be claimed that the questionnaire was valid, dependable, and suitable for delivery to the sample in the net shell.

#### 4.9 Descriptive Statistics

The Table 4.20 highlights the standard deviations and means of variables.

**Table 4.20: Descriptive Statistics**

<i>Variable</i>	<i>Mean</i>	<i>Std. Deviation</i>	<i>N</i>
<i>Career Success</i>	3.0620	.61245	750
<i>Career Guidance &amp; Dialogues</i>	4.0432	.17280	750
<i>Team Based Learning</i>	3.9587	.24492	750
<i>Mental Model Development Practices</i>	4.2604	.65903	750
<i>Attitude to Continuous Learning</i>	3.34536	.497	750

The aforementioned figures are descriptive statistics that provide the mean value for all independent factors and the dependent variable, i.e., career success. Table 4.20 also displays the deviation from the mean or how far each variable's value deviates from the mean, which is little.

#### 4.10 Pearson Correlation

Pearson Correlation test was run to establish the association between Career Guidance & Dialogues, Team based Learning and Mental Model Development Practices in the context of learning and development factors and career success (DV) based on the objective of the study. The results of the correlation are shown in the Table 4.21.

**Table 4.21: Pearson Correlation Table**

<i>S/No</i>			<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
<i>1</i>	<i>Career Success</i>	<i>Pearson Correlation</i>	<i>1</i>			
		<i>Sig. (2-tailed)</i>				
		<i>N</i>	<i>750</i>			
<i>2</i>	<i>Career Guidance &amp; Dialogues</i>	<i>Pearson Correlation</i>	<b><i>.856**</i></b>	<i>1</i>		
		<i>Sig. (2-tailed)</i>	<i>.000</i>			
		<i>N</i>	<i>750</i>	<i>750</i>		
<i>3</i>	<i>Team Based Learning</i>	<i>Pearson Correlation</i>	<b><i>.813**</i></b>	<b><i>.230**</i></b>	<i>1</i>	
		<i>Sig. (2-tailed)</i>	<i>.000</i>	<i>.000</i>		
		<i>N</i>	<i>750</i>	<i>750</i>	<i>750</i>	
<i>4</i>	<i>Mental Model Development Practices</i>	<i>Pearson Correlation</i>	<b><i>.867**</i></b>	<b><i>-.468**</i></b>	<b><i>.127*</i></b>	<i>1</i>
		<i>Sig. (2-tailed)</i>	<i>.000</i>	<i>.000</i>	<i>.044</i>	
		<i>N</i>	<i>750</i>	<i>750</i>	<i>750</i>	

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

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

Career guidance & dialogues and career success has a significant positive association between them ( $r = 0.856$ ,  $P \leq 0.01$ ). This means that the more emphasis on career guidance & dialogues of young professionals, the higher the career success.

Team based learning and career success has significant positive association between them ( $r = 0.813$ ,  $P \leq 0.01$ ). This means that the more emphasis on team based learning for young professionals, the higher the career success.

Mental model development practices and career success has a significant positive association between them ( $r = 0.867$ ,  $P \leq 0.01$ ). This means that the more emphasis on mental model development practices for young professionals, the higher the career success.

#### 4.11 Regression Analysis

To investigate the strength of influence of learning and development factors (CC, TBL and TOD) on career success, regression analysis test was performed, the results are represented below.

## 4.11.1 Evaluation and Interpretation of the Estimated Models

**Table 4.22: Model Summary<sup>b</sup>**

<i>R</i>	<i>R Square</i>	<i>Adjusted R Square</i>	<i>Std. Error of the Estimate</i>	<i>Durbin-Watson</i>
.880 <sup>a</sup>	.775	.761	163.378	1.797

a. Predictors: (Constant), Career Guidance & Dialogues, Team Based Learning, Mental Model Development Practices

b. Dependent Variable: Career Success

R Square value in Table 4.22 indicates that 77.5% variation in career success is due to learning and development factors (Career Guidance & Dialogues, Mental Model Development Practices and Team Based Learning) while remaining 22.50% variation is due to other factors. The fact that the value of Durbin-Watson is 1.797 (closer to 2) at the 1% level of significance obviously suggests that the result is within the no autocorrelation zone.

**Table 4.23: ANOVA<sup>b</sup>**

<i>Model</i>		<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>
1	<i>Regression</i>	77493.516	3	43746.758	18.572	.000 <sup>a</sup>
	<i>Residual</i>	28878.032	746	2355.522		
	<i>Total</i>	106371.548	749			

a. Predictors: (Constant), Career Guidance & Dialogues, Team Based Learning, Mental Model Development Practices,

b. Dependent Variable: Career Success

In Table 4.23, variance analysis is shown. The first column indicates that the variation produced by the explanatory variable is only 77493.512, while the residual (error term) variance is 28878.032. This indicates that other factors exist that have a direct effect on career success, but they are absent from this model. The probability of the F-statistic is less than 1%, suggesting that both independent factors have a substantial influence on the dependent variable. Regression/Explained Sum of Square (ESS) is much greater than Residual Sum of Square (RSS), indicating model fitness.

Combined effect of all independent variables can be checked with the F-statistics value, as in this case the calculated value of F-statistics is 18.572. When we compare this value with tabulated

value of F-statistics, it comes out to be 3.32 (at 1% significance) which is much lesser than calculated value of F-statistics.

Hence, joint significant effect of all the independent variables on dependent variable is proved that at 1% level of significance.

#### 4.11.2 Individual Independent Variables Evaluation (Testing of H1 to H3)

**Table 4.24: Coefficients<sup>a</sup>**

<i>Model</i>	<i>Un-standardized</i>		<i>Standardized</i>	<i>t</i>	<i>Sig.</i>
	<i>Coefficients</i>		<i>Coefficients</i>		
	<i>B</i>	<i>Std. Error</i>	<i>Beta</i>		
<i>1 (Constant)</i>	2.648	.199		13.297	.000
<i>Career Guidance &amp; Dialogues</i>	.109	.046	.191	2.381	.001
<i>Team Based Learning</i>	.040	.042	.082	2.771	.000
<i>Mental Model Development Practices</i>	.126	.043	.218	2.966	.003

*a. Dependent Variable: Career Success*

The coefficient +.109 means that holding the other two factors constant, on average, 1 unit increase in CG & D cause 0.109 units increase in CS. Similarly, the coefficient + 0.040 is the partial regression coefficient of TBL and means that while keeping other two factors constant (CG & D and MMDP), on average, 1unit increase in TBL causes 0.040 units increase in CS. The third coefficient + 0.126 mean that holding the other two factors constant (CG &D and MMDP), on average, 1 unit increase in MMDP causes 0.126 units increase in CS. Basing on the values of Table 4.24, first three hypotheses are accepted as under:

The  $\beta$  value of CG & D under Standardized Coefficients is + 0.191 which means that CG &D will be significant statistically at 5% level (of significance) because calculated t- Statistics value (2.381) is higher than tabulated values of t-Statistics (1.96) at 5% level of significance.

Hence, the H1 is accepted as Career Guidance & Dialogues of young professionals has significant effect on Career Success at significance level  $\alpha= 0.05$ .

Similarly the  $\beta$  value of TBL under Standardized Coefficients is + 0.082 which means that

TBL will be significant statistically at 5% level (of significance) because calculated t-Statistics value (2.771) is higher than tabulated values of t-Statistics (2.576) at 1% level of significance.

Hence, the H2 is accepted as Team based Learning for young professionals has significant effect on Career Success at significance level  $\alpha= 0.01$ .

The third is  $\beta$  value of MMDP under Standardized Coefficients which is +0.218 that means MMDP will be significant statistically at 5% level (of significance) because calculated value of t-Statistics (2.966) is higher than tabulated values of t-Statistics (2.576) at 1% level of significance.

Hence, the H3 is accepted as Mental Model Development Practices of young professionals have significant effect on Career Success at significance level  $\alpha= 0.01$ .

Overall, the results indicate that the variables CC, TB, and MMDP all positively contribute to career success. Mental Model Development Practices contribute in the highest percentage towards career success followed by TBL, whereas CG & D contributes the least towards career success. Thus, learning and development factors do influence young professionals, which ultimately affect their career success.

#### 4.11.3 Individual Independent Variables Evaluation (Testing of H4 to H6)

**Table 4.25: Coefficients<sup>a</sup>**

<i>Model</i>	<i>Un-standardized Coefficients</i>		<i>Standardized Coefficients</i>	<i>t</i>	<i>Sig.</i>
	<i>B</i>	<i>Std. Error</i>	<i>Beta</i>		
<i>1 (Constant)</i>	<i>2.539</i>	<i>.189</i>		<i>13.261</i>	<i>.000</i>
<i>Career Guidance &amp; Dialogues</i>	<i>.120</i>	<i>.048</i>	<i>.195</i>	<i>2.913</i>	<i>.003</i>
<i>Team Based Learning</i>	<i>.051</i>	<i>.041</i>	<i>.083</i>	<i>2.865</i>	<i>.001</i>
<i>Mental Model Development Practices</i>	<i>.131</i>	<i>.044</i>	<i>.213</i>	<i>2.637</i>	<i>.000</i>

*a. Dependent Variable: Attitude to Continuous Learning*

The coefficient + 0.120 is the partial regression coefficient of CG & D and means that holding the other two factors constant, on average, one unit increase in CG & D causes 0.120 units increase in ATCL. Similarly, the coefficient + 0.051 is the partial regression coefficient of TBL and

means that while keeping other two factors constant (CG & D and MMDP), on average, 1 unit increase in TBL causes 0.051 units increase in ATCL. The third coefficient + 0.131 means that holding the other two factors constant (CG & D and TBL), on average, 1 unit increase in MMDP causes 0.131 units increases in ATCL. Basing on the values of Table 4.25, hypotheses 4 to 6 are confirmed as under:

The  $\beta$  value of CG & D under Standardized Coefficients is +0.195 which means that CG & D will be significant statistically at 5% level (of significance) because calculated t- Statistics value (2.913) is higher than tabulated values of t- Statistics (1.96) at 5% level of significance.

Hence, the H4 is accepted as Career Guidance & Dialogues of young professionals has significant effect on Attitude to Continuous Learning at significance level  $\alpha= 0.05$ .

Similarly, the  $\beta$  value of TBL under Standardized Coefficients is +0.083 which means that TBL will be significant statistically at 5% level (of significance) because calculated t- Statistics value (2.865) is higher than tabulated values of t- Statistics (2.576) at 1% level of significance.

Hence, the H5 is accepted as Team based Learning for young professionals has significant effect on Attitude to Continuous Learning at significance level  $\alpha= 0.01$ .

The third is  $\beta$  value of MMDP under Standardized Coefficients which is +0.213 that means MMDP will be significant statistically at 5% level of significance because calculated value of t- Statistics (2.693) is higher than tabulated values of t- Statistics (2.576) at 1% level of significance.

Hence, the H6 is accepted as Mental Model Development Practices of young professionals has significant effect on Attitude to Continuous Learning at significance level  $\alpha= 0.01$ .

Overall results suggest that variables CG & D, TBL and MMDP positively contribute towards ATCL. CG & D contributes in the highest percentage towards ATCL followed by TBL, whereas Mental Model Development Practices contribute the least towards CS. Thus, learning and development factors do influence young professionals, which ultimately affect Attitude to Continuous Learning.

All above six hypotheses are true which reinforces the importance of CG & D, TBL and MMDP as learning and development factors for young professionals. These positive findings support key organizational and learning and development trends in LEAs where the development of



young professionals is crucial to the overall organizational learning and development strategy and practice (Vardi et al., 2003). Also, the findings support the study by Baruch (2004), which concluded that the organization's role in determining career success should not be underrated, and that career advancement schemes should be placed and handled well to achieve spirit and guarantee the benefits of dynamic human capital for the organization's overall benefit.

#### 4.11.4 Individual Independent Variable Evaluation (Testing of H7)

**Table 4.26: Coefficients<sup>a</sup>**

<i>Model</i>	<i>Un-standardized</i>		<i>Standardized</i>	<i>t</i>	<i>Sig.</i>
	<i>Coefficients</i>		<i>Coefficients</i>		
	<i>B</i>	<i>Std. Error</i>	<i>Beta</i>		
<i>1 (Constant)</i>	2.545	.193		13.211	.000
<i>Attitude to Continuous Learning</i>	.111	.047	.189	2.161	.005

*a. Dependent Variable: Career Success*

The coefficient + 0.111 means that, on average, 1 unit increase in ATCL causes 0.111 units increase in CS. Basing on the values of Table 4.26, the hypotheses is accepted as under:

The  $\beta$  value of ATCL under Standardized Coefficients is +0.189 meaning thereby statistical significance of ATCL at 5% level of significance because calculated t- Statistics value (2.161) is higher than tabulated values of t- Statistics (1.96) at 5% level of significance.

Hence, the **H7** is accepted as Attitude to Continuous Learning (as independent Variable) of young professionals has significant effect on Career Success at significance level  $\alpha= 0.05$ .

#### 4.12 Regression Analysis with Attitude to Continuous Learning (ATCL) as Mediator (Testing of H8 to H11)

Baron and Kenny's (1986) method was followed to verify whether Attitude to Continuous Learning will mediate the relationship between IVs (Career Guidance & Dialogues, Team based Learning and Mental Model Development Practices) and DV (Career Success). First, direct effect of each IVs on DV was found and then mediator was introduced to see the results before and after controlling IVs. To augment the validity of mediation test, Bootstrap method of mediation was also applied.

#### 4.12.1 Mediating Effect of Attitude to Continuous Learning (ATCL) between Career Guidance & Dialogues (CG & D) and Career Success (CS) – Testing H8

**Table 4.27: Model Summary**

<i>Model</i>	<i>R</i>	<i>R Square</i>	<i>Adjusted R Square</i>	<i>Std. Error of the Estimate</i>	<i>Change Statistics</i>				
					<i>R Square Change</i>	<i>F Change</i>	<i>df1</i>	<i>df2</i>	<i>Sig. F Change</i>
1	.775a	.600	.586	.54209	.600	37.946	2	747	.000
2	.771b	.595	.585	.54245	.005	1.324	1	746	.002

a. Predictors: (Constant), Career Guidance & Dialogues, Attitude to Continuous Learning

b. Predictors: (Constant), Career Guidance & Dialogues, Attitude to Continuous Learning, Mod1

**Table 4.28: ANOVA<sup>c</sup>**

<i>Model</i>		<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>
1	<i>Regression</i>	72.290	2	7.037	37.946	.000a
	<i>Residual</i>	21.110	747	.294		
	<i>Total</i>	93.400	749			
2	<i>Regression</i>	72.679	3	10.360	35.210	.000b
	<i>Residual</i>	20.721	746	.294		
	<i>Total</i>	93.400	749			

a. Predictors: (Constant), Career Guidance & Dialogues, Attitude to Continuous Learning

b. Predictors: (Constant), Career Guidance & Dialogues, Attitude to Continuous Learning, Mod1

c. Dependent Variable: Career Success

**Table 4.29: Coefficients<sup>a</sup>**

<i>Model</i>		<i>Un-standardized Coefficients</i>		<i>Standardized Coefficients</i>	<i>t</i>	<i>Sig.</i>
		<i>B</i>	<i>Std. Error</i>	<i>Beta</i>		
1	(Constant)	1.685	.660		2.554	.011
	Attitude to Continuous Learning	.517	.189	.612	2.743	.007

		<i>B</i>	<i>Std. Error</i>	<i>Beta</i>	<i>t</i>	<i>Sig.</i>
	<i>Career Guidance &amp; Dialogues</i>	.241	.140	.421	2.724	.005
2	(Constant)	2.408	.201		11.999	.000
	<i>Attitude to Continuous Learning</i>	.311	.058	.368	5.368	.000
	<i>Career Guidance &amp; Dialogues</i>	.086	.039	.151	2.210	.028
	<i>Mod1</i>	.461	.037	.443	2.151	.002

*a. Dependent Variable: Career Success*

Table 4.27 shows that in Model 1 without the effect of Attitude to Continuous Learning (MV) on Career Guidance & Dialogues, the R square value is 0.600 and  $p = 0.00$ ; this means that 60.0% of Career Success (DV) can be attributed to Career Guidance & Dialogues (IV). However, after the mediation effect of Attitude to Continuous Learning R square value in Model 2 is 0.595 and value of  $p$  is 0.002. This shows an R square change ( $\Delta R^2$ ) of 0.005 and  $p$  equal to 0.002, indicating partial significant mediation effect of Attitude to Continuous Learning on Career Success since  $0.002 < 0.05$ . The results show that both CG&D and ATCL are positively and significantly accounted for CS, when CG&D is controlled. After implementing the above analysis, the study found that the strength of the relationship between the independent variable (CG&D), and the dependent variable (CS) reduced from 0.421 to 0.151 ( $\beta$  values) when the study added the mediating variable (ATCL). Thus, **H8** is supported (mediation of ATCL between CG&D and CS) which signifies that there exists a partial mediating effect and the amount of indirect effect is 0.27.

Attitude to Continuous Learning has reducing effect on the strength of association between Career Guidance & Dialogues and Career Success. Thus, the null hypothesis is rejected and **H8** accepted since Attitude to Continuous Learning has mediating effect on the association between Career Success and Career Guidance & Dialogues. Based on Table 4.27 to 4.29, it is clear that young professionals' ATCL plays an important role in making Career Guidance & Dialogues practices successful.

#### 4.12.2 Mediating Effect of Attitude to Continuous Learning (ATCL) between Team Based Learning (TBL) and Career Success (CS) – Testing H9

**Table 4.30: Model Summary**

<i>Model</i>	<i>R</i>	<i>R Square</i>	<i>Adjusted R Square</i>	<i>Std. Error of the Estimate</i>	<i>Change Statistics</i>				
					<i>R Square Change</i>	<i>F Change</i>	<i>df1</i>	<i>df2</i>	<i>Sig. F Change</i>
1	.782 <sup>a</sup>	.612	.602	.54221	.612	33.900	2	747	.000
2	.768 <sup>b</sup>	.590	.584	.54656	.014	4.979	1	746	.001

a. Predictors: (Constant), Team Based Learning, Attitude to Continuous Learning

b. Predictors: (Constant), Team Based Learning, Attitude to Continuous Learning, Mod2

**Table 4.31: ANOVA<sup>c</sup>**

<i>Model</i>		<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>
1	<i>Regression</i>	73.785	2	7.026	33.900	.000 <sup>a</sup>
	<i>Residual</i>	19.615	747	.294		
	<i>Total</i>	93.400	749			
2	<i>Regression</i>	72.321	3	9.808	32.831	.000 <sup>b</sup>
	<i>Residual</i>	21.079	746	.299		
	<i>Total</i>	93.400	749			

a. Predictors: (Constant), Team Based Learning, Attitude to Continuous Learning

b. Predictors: (Constant), Team Based Learning, Attitude to Continuous Learning, Mod2

c. Dependent Variable: Career Success

**Table 4.32: Coefficients<sup>a</sup>**

<i>Model</i>		<i>Un-standardized</i>		<i>Standardized</i>	<i>t</i>	<i>Sig.</i>
		<i>Coefficients</i>		<i>Coefficients</i>		
		<i>B</i>	<i>Std. Error</i>	<i>Beta</i>		
1	(Constant)	2.534	.192		13.211	.000
	Attitude to Continuous Learning	.705	.175	.834	4.038	.000
	Team Based Learning	.319	.131	.648	2.438	.001
2	(Constant)	1.275	.595		2.141	.002
	Attitude to Continuous Learning	.341	.063	.404	5.435	.000
	Team Based Learning	.039	.037	.078	2.054	.003
	Mod2	.919	.035	.078	2.231	.004

*a. Dependent Variable: Career Success*

Table 4.30 shows that in Model 1 without the effect of Attitude to Continuous Learning (MV) on Team Based Learning (TBL), the R square value is 0.612 and  $p = 0.001$ ; this suggests that Team Based Learning accounts for 61.2% of Career Success (DV) (IV). Nevertheless, following the mediation effect of Attitude to Continuous Learning in Model 2, value of R square is 0.590 and that of  $p$  is 0.001. This demonstrates a R square change ( $\Delta R^2$ ) of 0.014 and a  $p$  value of 0.001, indicating partial significant mediation effect of Attitude to Constant Learning between IV and DV since  $0.001 < 0.05$ . The results show that both TBL and ATCL are positively and significantly accounted for CS, when TBL is controlled. The study found that the strength of the relationship between TBL, and CS reduced from 0.648 to 0.078 ( $\beta$  values) when the mediating variable (ATCL) was added. Thus, **H9** is supported (mediation of ATCL between TBL and CS) which signifies that there exists a partial mediating effect and the amount of indirect effect is 0.57.

Attitude to Continuous Learning has reducing effect on the strength of association between Team based Learning and Career Success. Thus, **H9** accepted since Attitude to Continuous Learning has partial mediating effect on the association between Team based Learning and Career Success. Based on Table 4.30 to 4.32, it is clear that young professionals' ATCL plays an important role in making Team based Learning practices more fruitful.

#### 4.12.3 Mediating Effect of Attitude to Continuous Learning (ATCL) between Mental Model Development Practices (MMDP) and Career Success (CS) – Testing H10

**Table 4.33: Summary of the Model**

<i>Model</i>	<i>R</i>	<i>R Square</i>	<i>Adjusted R Square</i>	<i>Std. Error of the Estimate</i>	<i>Change Statistics</i>				
					<i>R Square Change</i>	<i>F Change</i>	<i>df1</i>	<i>df2</i>	<i>Sig. F Change</i>
1	.777 <sup>b</sup>	.604	.595	.53464	.604	38.918	2	747	.000
2	.754 <sup>a</sup>	.569	.563	.54161	.023	7.477	1	746	.003

a. Predictors: (Constant), Mental Model Development Practices, Attitude to Continuous Learning

b. Predictors: (Constant), Mental Model Development Practices, Attitude to Continuous Learning

**Table 4.34: ANOVA<sup>c</sup>**

<i>Model</i>		<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>
1	<i>Regression</i>	70.317	2	7.694	38.918	.000 <sup>a</sup>
	<i>Residual</i>	23.083	247	.286		
	<i>Total</i>	93.400	249			
2	<i>Regression</i>	72.455	3	10.473	35.702	.000 <sup>b</sup>
	<i>Residual</i>	20.945	246	.293		
	<i>Total</i>	93.400	749			

a. Predictors: (Constant), Mental Model Development Practices, Attitude to Continuous Learning

b. Predictors: (Constant), Mental Model Development Practices, Attitude to Continuous Learning, int3

c. Dependent Variable: Career Success

**Table 4.35: Coefficients<sup>a</sup>**

<i>Model</i>		<i>Un-standardized Coefficients</i>		<i>Standardized Coefficients</i>	<i>t</i>	<i>Sig.</i>
		<i>B</i>	<i>Std. Error</i>	<i>Beta</i>		
1	(Constant)	2.368	.205		11.572	.000
	Attitude to Continuous Learning	.887	.220	1.049	4.035	.000
	Mental Model Development Practices	.493	.151	.853	3.263	.001

		<i>B</i>	<i>Std. Error</i>	<i>Beta</i>	<i>t</i>	<i>Sig.</i>
2	<i>(Constant)</i>	.329	.773		.426	.000
	<i>Attitude to Continuous Learning</i>	.306	.058	.362	5.319	.000
	<i>Mental Model Development Practices</i>	.094	.039	.162	2.380	.005
	<i>Mod3</i>	1.229	.041	.111	2.734	.003

*a. Dependent Variable: Career Success*

Model 1 in Table 4.33 demonstrates that in the absence of the effect of Attitude to Continuous Learning (MV) on Mental Model Development Practices, the value of R square is 0.604 and  $p = 0.00$ , indicating that Mental Model Development Practices account for 60.0% of Career Success. However, after the mediation effect of ATCL (Attitude to Continuous Learning), the R square value in Model 2 is 0.569 and  $p = 0.003$ . This demonstrates  $\Delta R^2$  of 0.023 with value of  $p = 0.003$ , indicating partial significant mediation effect of Attitude to Continuous Learning on Career Success since  $0.003 < 0.05$ . The results show that both MMDP and ATCL are positively and significantly accounted for CS, when MMDP is controlled. After implementing the above analysis, the study found that the strength of the relationship between the independent variable (MMDP), and the dependent variable (CS) reduced from 0.853 to 0.162 ( $\beta$  values) when the study added the mediating variable (ATCL). Thus, **H10** is supported (mediation of ATCL between MMDP and CS) which signifies that there exists a partial mediating effect and the amount of indirect effect is 0.69.

Attitude to Continuous Learning has reducing effect on the strength of association between Mental Model Development Practices on Career Success. Thus, the null hypothesis is rejected and **H10** is accepted since Attitude to Continuous Learning has mediating effect on the association between Mental Model Development Practices and Career Success. Based on Table 4.33 to 4.35 results, it is clear that young professionals' ATCL plays a significant role in making Mental Model Development Practices a successful endeavor.

#### 4.12.4 Mediating Effect of Attitude to Continuous Learning (ATCL) between Learning and Development Factors (CG &D, TBL and MMDP) and Career Success (CS) – Testing H11

**Table 4.36: Model Summary**

<i>Model</i>	<i>R</i>	<i>R Square</i>	<i>Adjusted R Square</i>	<i>Std. Error of the Estimate</i>
1	.888 <sup>a</sup>	.789	.768	.53261
2	.856 <sup>b</sup>	.729	.726	.18164

a. Predictors: (Constant), Attitude to Continuous Learning, Mental Model Development Practices, Career Guidance & Dialogues, Team Based Learning.

b. Predictors: (Constant), Attitude to Continuous Learning, Mental Model Development Practices, Career Guidance & Dialogues, Team Based Learning, Mod1, Mod3, Mod2.

**Table 4.37: ANOVA<sup>c</sup>**

<i>Model</i>		<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>
1	<i>Regression</i>	68.648	4	3.536	22.465	.000a
	<i>Residual</i>	24.752	745	.284		
	<i>Total</i>	93.400	749			
2	<i>Regression</i>	71.669	7	5.433	18.572	.000 <sup>b</sup>
	<i>Residual</i>	21.731	742	.293		
	<b><i>Total</i></b>	<b>93.400</b>	<b>749</b>			

a. Predictors: (Constant), Attitude to Continuous Learning, Mental Model Development Practices, Career Guidance & Dialogues, Team Based Learning

b. Predictors: (Constant), Attitude to Continuous Learning, Mental Model Development Practices, Career Guidance & Dialogues, Team Based Learning, Mod1, Mod3, Mod2

c. Dependent Variable: Career Success



**Table 4.38: Coefficients<sup>a</sup>**

<i>Model</i>		<i>Un-standardized Coefficients</i>		<i>Standardized Coefficients</i>	<i>t</i>	<i>Sig.</i>
		<i>B</i>	<i>Std. Error</i>	<i>Beta</i>		
1	(Constant)	2.284	.211		10.807	.000
	<i>Career Guidance &amp; Dialogues</i>	.075	.213	.131	2.350	.006
	<i>Team Based Learning</i>	.312	.211	.633	2.480	.004
	<i>Mental Model Development Practices</i>	.376	.162	.650	2.326	.002
	<i>Attitude to Continuous Learning</i>	.921	.257	1.090	3.586	.000
2	(Constant)	.004	.904		.004	.000
	<i>Career Guidance &amp; Dialogues</i>	.073	.045	.128	1.623	.004
	<i>Team Based Learning</i>	-.020	.043	-.042	2.478	.006
	<i>Mental Model Development Practices</i>	.079	.043	.137	1.859	.000
	<i>Attitude to Continuous Learning</i>	.279	.066	.330	4.204	.000
	<i>Mod1</i>	.091	.057	1.079	2.596	.001
	<i>Mod2</i>	.039	.057	.421	2.684	.000
	<i>Mod3</i>	-.872	.044	.079	2.772	.000

*a. Dependent Variable: Career Success*

Results of Table 4.36 in Model 1 indicate that without the effect of Attitude to Continuous Learning (MV) on Learning and Development Factors (CG&D, TBL, and MMDP), the R square value is 0.789, indicating that 78.9% of Career Success (DV) can be attributed to Learning and Development Factors (CG&D, TBL and MMDP). However, after the mediation effect of ATCL (Attitude to Continuous Learning) on Learning and Development Factors i.e., CG&D, TBL and MMDP) in Model 2 the R square value is 0.729. This shows that R square change ( $\Delta R^2$ ) of 0.06 has taken place, indicating partial significant mediation effect of Attitude to Continuous Learning on Career Success. All the values are statistically significant at 0.5% significance level as shown vide Table 4.38 meaning that ATCL is mediating partially between L&D factors (CG & D, TBL and

MMDP) and CS as  $\beta$  values of all independent variable are also showing reducing effect. Thus **H11** is accepted. Based on Table 4.36 to 4.38 results, it is clear that young professionals' ATCL plays an valuable role in making L&D factors (CG & D, TBL and MMDP) effective for their career success.

#### 4.12.5 Mediating Effect of Attitude to Continuous Learning through Bootstrap Method

**Table 4.39: Table of Regression Results for Mediation**

	<i>Index</i>	<i>SE (Boot)</i>	<i>LL95% CI</i>	<i>UL 95% CI</i>
<i>Results of Bootstrap for indirect impact of career guidance &amp; dialogues, team-based learning and mental model development practices on career success</i>	.02	.01	.00	.05

*Note. Un-standardized regression coefficients reported. Bootstrap sample size 750. LL = lower limit; CI = confidence interval; UL = upper limit*

The bootstrapping approach was utilized to evaluate the mediating influence of "attitude towards continuous learning". It is the application of indirect mediation testing to multiple regression analysis. For this test, sample means are calculated many times to eliminate error bias. Table 4.39 demonstrates that the average indirect effect of learning and development factors (career coaching & dialogues, team-based learning, and mental model development practices) on the dependent variable, i.e. career success, via the mediator 'attitude to continuous learning,' is considerable. The bootstrap values range from 0.00 to 0.05, with a 95% confidence interval that excludes zero. These findings demonstrate that association between learning oriented development factors and career success is partially mediated by 'attitude to continuous learning.

Hence, the H11 is approved as the association between learning and development practices (career guidance & dialogues, team based learning and mental model development practices) and Career Success is mediated by 'Attitude to Continuous Learning' at significance level  $\alpha= 0.05$ .

#### 4.13 Results Artificial Intelligence Prediction

4.13.1 **Performance Metrics.** Performance metrics applied to evaluate the performance of ANN are Recall, Precision, Accuracy and F1-score. Functional form of this equation is as under:

$$\text{Accuracy} = (\text{TP} + \text{TN}) / (\text{TP} + \text{TN} + \text{FP} + \text{FN})$$

$$\text{Precision} = (\text{TP}) / (\text{TP} + \text{FP})$$

$$\text{Recall} = (\text{TP}) / (\text{TP} + \text{FN})$$

$$\text{F1} = (2 \times \text{Precision} \times \text{Recall}) / (\text{Precision} + \text{Recall})$$

Where: TP is True Positive; TN is True Negative; FP is False Positive and FN denote False Negative.

**Table 4.40: Table of Comparison of ANN Architectures for Career Success Prediction**

<i>Method</i>	<i>Accuracy</i>	<i>Precision</i>	<i>Recall</i>	<i>F1 score</i>
<i>ANN 1-2</i>	<i>0.923</i>	<i>0.462</i>	<i>0.5</i>	<i>0.48</i>
<i>ANN 1-4</i>	<i>0.923</i>	<i>0.462</i>	<i>0.5</i>	<i>0.48</i>
<i>ANN 1-8</i>	<i>0.913</i>	<i>0.461</i>	<i>0.495</i>	<i>0.47</i>
<i>ANN 1-16</i>	<i>0.923</i>	<i>0.462</i>	<i>0.5</i>	<i>0.48</i>
<i>ANN 1-32</i>	<i>0.903</i>	<i>0.461</i>	<i>0.489</i>	<i>0.47</i>
<i>ANN 1-64</i>	<i>0.897</i>	<i>0.461</i>	<i>0.486</i>	<i>0.47</i>
<i>ANN 1-128</i>	<i>0.897</i>	<i>0.461</i>	<i>0.486</i>	<i>0.47</i>
<i>ANN 2-2</i>	<i>0.923</i>	<i>0.462</i>	<i>0.5</i>	<i>0.48</i>
<i>ANN 2-4</i>	<i>0.923</i>	<i>0.462</i>	<i>0.5</i>	<i>0.48</i>
<i>ANN 2-8</i>	<i>0.923</i>	<i>0.462</i>	<i>0.5</i>	<i>0.48</i>
<i>ANN 2-16</i>	<i>0.907</i>	<i>0.461</i>	<i>0.491</i>	<i>0.47</i>
<i>ANN 2-32</i>	<i>0.89</i>	<i>0.46</i>	<i>0.482</i>	<i>0.47</i>
<i>ANN 2-64</i>	<i>0.89</i>	<i>0.46</i>	<i>0.482</i>	<i>0.47</i>
<i>ANN 2-128</i>	<i>0.897</i>	<i>0.461</i>	<i>0.486</i>	<i>0.47</i>
<i>ANN 3-2</i>	<i>0.923</i>	<i>0.462</i>	<i>0.5</i>	<i>0.48</i>
<i>ANN 3-4</i>	<i>0.923</i>	<i>0.462</i>	<i>0.5</i>	<i>0.48</i>
<i>ANN 3-8</i>	<i>0.907</i>	<i>0.461</i>	<i>0.491</i>	<i>0.47</i>
<i>ANN 3-16</i>	<i>0.897</i>	<i>0.461</i>	<i>0.486</i>	<i>0.47</i>

<i>Method</i>	<i>Accuracy</i>	<i>Precision</i>	<i>Recall</i>	<i>F1 score</i>
<i>ANN 3-32</i>	<i>0.873</i>	<i>0.46</i>	<i>0.473</i>	<i>0.46</i>
<i>ANN 3-64</i>	<i>0.89</i>	<i>0.46</i>	<i>0.482</i>	<i>0.47</i>
<i>ANN 3-128</i>	<i>0.88</i>	<i>0.46</i>	<i>0.477</i>	<i>0.46</i>
<i>ANN 4-2</i>	<i>0.923</i>	<i>0.462</i>	<i>0.5</i>	<i>0.48</i>
<i>ANN 4-4</i>	<i>0.923</i>	<i>0.462</i>	<i>0.5</i>	<i>0.48</i>
<i>ANN 4-8</i>	<i>0.923</i>	<i>0.462</i>	<i>0.5</i>	<i>0.48</i>
<i>ANN 4-16</i>	<i>0.887</i>	<i>0.46</i>	<i>0.48</i>	<i>0.47</i>
<b><i>ANN 4-32</i></b>	<b><i>0.897</i></b>	<b><i>0.512</i></b>	<b><i>0.505</i></b>	<b><i>0.50</i></b>
<i>ANN 4-64</i>	<i>0.877</i>	<i>0.46</i>	<i>0.475</i>	<i>0.46</i>
<i>ANN 4-128</i>	<i>0.887</i>	<i>0.46</i>	<i>0.48</i>	<i>0.47</i>

Table 4.40 shows a comparison of different ANN architectures for predicting career success. Here ANN L-N represents the number of layers (L=layers) and number of neurons per layer (N=number of neurons per layer). From the comparison, it can be seen that ANN 4-32 achieves the best F1 score of 0.50% compared to others. This is due to the better ability of the ANN architecture to better understand the non-linear pattern in the data and predict the outcomes with high accuracy. The values of accuracy are mostly above 90% indicating L&D factors as better predictors of CS under the given circumstances. However, maximum value of F1 score is 0.50 mainly due to the fact that AI recalling capacity is reduced once the data is not very big. Moreover, very limited number of respondents has responded negatively. The AI takes such data as imbalance. Like in the case of this study, only 70 odd individuals have responded negatively thereby reducing the recalling capacity of the AI. Overall results of AI are quite satisfactory as far as accuracy of prediction is concerned. Compared to SPSS analysis for L&D as predictors of CS, the values of AI show better accuracy (77 versus 90%). Hence, AI can be an effective tool to observe the prediction of L&D factors for CS. Besides L&D factors, identified in this study do predict career success of young professionals if followed in true spirits.

## **CHAPTER 5**

### **DISCUSSION**

#### **5.1 Overview**

In this chapter, findings of the study, applicability of hypothesis results to LEAs, and the effects of outcome highlighting theoretical and practical implications of the study have been discussed. Following that, appropriate recommendations are made based on the study's findings for the initial grooming and development of young professionals in hierarchical public sector organizations including LEAs, which can even be applicable to similar organizations in private sector as well. This is followed by directions proposed for future researches and finally, after highlighting limitations, the study has been concluded.

#### **5.2 Study Findings**

The research was set out to study the learning and development factors affecting career success of young professionals in LEAs in Pakistan. This section presents summary of the most important aspects of findings, some recommendations based on these findings, and study limitations, with the hope that the current research has accomplished its goal of assessing organizations' as well as individuals' roles in learning and development in LEAs. Variables affecting quality grooming as well as best practices for future research on learning and development, and career success have also been identified.

##### **5.2.1 Hypothesis Results**

###### **5.2.1.1 Significance of Career Guidance & Dialogues for Career Success**

A significant positive relationship has been found between career guidance & dialogues and career success. The positive nature of the relation indicates that if the career guidance & dialogues practices are introduced to improve quality of grooming and development of young professionals these will definitely affect the desired results. This is in line with French & Bell (1984) conclusion that in learning and development process, organizational activities are aimed at improving efficiency and quality of work to enable individuals solve their problems and renewal process. Since the correlation of the study is positive between career guidance & dialogues and career success therefore, it is concluded that young professionals in LEAs need quality career guidance and dialogues on regular basis to improve upon individual commitment and involvement to realize better output and career advancement of employees. Super (1980) also highlighted the need to guide professionals to effect their careers during various stages of their professional life.

### **5.2.1.2 Importance of Team-based Learning for Career Success**

In the correlation and regression run between team-based learning and career success, team-based learning correlated significantly with career success and also influenced it positively once cause and effect relationship was established. The positive effect of TBL on CS entailed that there was a direct relationship between team-based learning and career success. This means that if the team-based learning is adopted to train young professionals, it would result in better outcome such as employee involvement and commitment compared to conventional mode of training. When individuals and groups improve their relationship, there is great focus on task accomplishment by teams, which enhances learning. This finding supports Beer & Walton (1990) view that organizational improvement can start with structural changes. This would then result in improved output. For poorly implemented training of fresh entrants, negative results may be expected.

### **5.2.1.3 Impact of Mental Model Development Practices on Career Success**

Positive and significant relationship has been observed between mental model development practices and career success. This positive effect of MMDPs on CS meant that well thought out and executed mental model development practices would yield better chances of career advancement since this practice is linked to the decision making quality of the professionals. This is in line with the fact that organization's success is dependent on effective communication between individuals and their management (Beer & Walton, 1990). This positive impact of MMDPs on CS entailed that positive change in the mental model development process would result in career success since it is directly linked with decision-making process, essential for development of future leaders.

### **5.2.1.4 Mediating Effect of Attitude to Continuous Learning**

Results have shown a significant reducing change effect between learning and development factors and career success association when the test was run using ATCL as mediator. This means that in order to have learning and development factors to be effective, there has to be lifelong attitude to continuous learning and involvement of young professionals for their career success and the achievement of organizational objectives. Therefore, study augments previous research by Celik & Uzunboylu (2022) according to which, positive attitude towards learning and performance improvement is a prerequisite for career progression of professionals.

## **5.3 Theoretical Implications**

The purpose of this research was to investigate how L & D factors contribute to career success in law enforcement organizations. The research validates the significance of early atmosphere for fresh entry of employees concluded in previous researches by Taylor & Kent (2002),

Smith (2002) and Vaughan (2003). In addition, the body of knowledge has been augmented by this research through establishment of the fact that different components of basic guidance and training environment influence development and learning in various manners. The study also supports findings of Andresen et al. (2020) where it was found that the way in which young professionals are treated is not only seen as strengthening the chances of career success, but the one in which attitude is seen as an essential prerequisite for professional competence through continuous learning. As identified by Mostafa (2022), the study highlights that equipping coworkers to help and encourage one another in the learning process may have an impact on fresh entrants' attitudes toward continuous learning for promotion given that coworkers' support is directly related to young professionals' development. This research has also advanced Maurer (2003) finding suggesting that in order to help young professionals evaluate their strengths and limitations and find any potential for professional development, it would be useful to involve them in activities at group level. The study further strengthens Cain (2020) arguments that professionalism must be cultivated for career progression; and Klimova & Kondykov (2021) findings that organizations and peers must consistently encourage young professionals to thrive in their fields.

The results confirm the research findings of Ramadhan (2021) who claimed that when young professionals are well groomed directed properly about their roles and, it changes their learning attitudes and motivates them to improve their professional abilities, which is crucial for their success. The study also endorses Suwardi (2021) research, which discovered that developing new employees in a practical and focused manner increases both, likelihood of their long-term success as well as motivation to learn. Hence, as discovered by Numonjonov (2020), quality learning and development factors are directly linked to the career success of professionals as well as strength of the organization. The study also approves that when professionals realize the benefits of learning, as revealed by Tharenou (2001), they voluntarily engage in development activities. In view of these effects, as also concluded by Dalal & Akdere (2021), organizations may wish to examine the extent to which learning and initial development is valued, emphasized and communicated through organizational policy and practice. However, research demonstrates that not all young professionals have the same level of access to the chances of training and growth (Bryson, et al., 2006) in their careers therefore; special efforts are needed to provide such opportunities. To ensure that all young professionals may reach their full potential, it would be wise for organizations to analyze the availability and provision of such chances, as also pointed by Melnyk et al. (2021). Research also shows that AI and learning have a manifold relationship (Sakka et al., 2022) hence; this study also confirms that AI can also positively influence career prediction as discovered by Chima (2022). Organizations must therefore, employ these

cutting-edge methodologies to determine the correct learning and development variables in order to better educate young professionals in the right direction so that they can succeed in their careers.

## 5.4 **Practical Implications**

### 5.4.1 **Development of Young Professionals**

Designing and validation of a career oriented learning and development model for young employees was the main purpose of current research in which ‘attitude towards continuous learning’ was to play a mediating role. Broadly, professional respondents approved the model as a realistic and credible description of learning and development variables. Considering the significance of young professionals for enduring viability and effectiveness of an organization, researchers as well as practitioners must comprehend the aspects that either directly or indirectly influence their advancement. The results of this research have several effects on improving the abilities of young professionals.

Firstly, to boost the efficacy of training for fresh professionals, organizations may consider strategies to improve the learning abilities and attitudes of young professionals. Any enhancements to these factors are likely to have a favorable impact on a person's confidence, desire, and motivation to study for career advancement. Such finding is in line with the Wrenn et al. (2003) argument that professionals feel some traits are more flexible than others. Knowing which abilities young professionals regard as the most flexible might help organizations optimize individual engagement in learning and professional development by focusing on this dimension.

Realizing that the encouragement of teammates has a direct correlation with the development of emerging professionals enables colleagues to assist and inspire each other during the process of knowledge acquisition. This might enhance endeavors of professionals in the context of learning. Individuals are more driven to learn and engage in development programs when they recognize the value of training (Tharenou, 2001). In the light of this, it would be beneficial to involve new professionals team based activities to assist them evaluate their abilities and deficiencies and find chances for talent growth as a means of enhancing their participation in learning activities. As established by Maurer (2008), such exercises may also educate employee on their expectations regarding results of various learning activities, raise their ideas about the value of training for their profession, career, or future, and assist them in relevant suitable learning objectives.

Secondly, results highlight that organizational support improves the attitude of young adults through their eagerness to learn and shape up their careers, whereas support from coworkers



improves their self-confidence and aptitude for learning. Like Maurer's (2002) findings, this research also confirms significance of conducive learning environments and organization's assistance for development of young professional. Moreover, there is widespread consensus that organizational norms, rules, and procedures have a significant impact on career progression, particularly through affecting the quantity and availability of resources necessary for individuals to participate in training programs.

When young professionals think that organization supports learning for their development and career growth, they become highly inspired to find learning chances thus becoming further prone to view their professions as more appropriate to their career objectives. Such appraisals have a direct impact on a professional's decision to participate in organizational development initiatives for their efficacy. Therefore, an organization's patronage for learning and development is crucial for a conducive learning environment and individuals' career growth.

Social interactions or inter-personal relations too are an essential part of the learning culture inside an organization. According to research, a substantial percentage of learning happens via interactions with peers (Hughes, 2004). Hence, as established by Billett (2004), people do not acquire knowledge in isolation, but as members of a "work group". Coworkers are especially valuable sources of knowledge acquisition for both experienced (Coetzer, 2007) and inexperienced professionals (Vaughan, 2008). Considering the significance of colleagues for employee learning, organizations that seek to foster an atmosphere where learning is valued and encouraged may need to consider how to enable employees to assist each other in the process of learning.

Moreover, in accordance with the research findings of Fuller & Unwin (2004), this study supports the fact that by engaging in development programs themselves, teammates serve as role models to encourage the learning of others, which might be extremely useful in the context of learning and development. The results of this study also reveal that such supportive system is linked to the learning attitude of young professionals. Providing chances for professionals to participate in and assist each other's learning, as a component of their daily activities is crucial to their career advancement as also established by Vaughan (2008). Hence, fostering an atmosphere conducive to learning boosts not just the personal skills and expertise, but also the group capacity for career success. It is vital for quality development and an institution's ability to adapt to changing work settings to have younger professionals who appreciate as well as encourage learning and are inspired to acquire knowledge.

Research also suggests that creating conducive learning conditions is advantageous for HRD. For example, encouraging workplace culture, as concluded by Sonnentag et al. (2004), have been linked to enhanced employee productivity, training responsiveness, and knowledge transfer. Furthermore, in consistent with outcome of study by Moore et al. (2007), training, as an inherent component of a learning process, has also been associated with higher individual work contentment, career success, and overall productivity and quality. Clearly, funding and promoting the learning and development of young professionals at an organizational level helps the organizations to compete in a world that is becoming extremely competitive.

In light of these implications, organizations may choose to assess as to what degree early learning and development is appreciated, emphasized and addressed via organizational pursuance and procedures as also concluded earlier by Fuller & Unwin (2004). Moreover, like revelations of Bryson et al. (2006), findings of current study highlight that not all new professionals have equal opportunities for development and training. In light of this, it would be prudent for organizations to assess the provision and availability of such chances in order to guarantee that all young professionals may reach their full potential.

In conclusion, this study elucidates the factors behind the learning and development practices for young professionals. Professionals' perception about themselves and learning, as well as their coworkers' and organization's involvement, all have a significant effect in their participation in learning and development activities. The results also demonstrate the significance of differentiating between various characteristics of the workplace in order to recognize the effect of each one on grooming and nurturing of younger employees.

#### **5.4.2 Young Professionals as a Distinct Group of Employees**

This study demonstrates the need of analyzing young professionals as a distinguishable category of employees. This adds to the Maurer (2002) research that says, a growing number of researches indicate that age is a crucial element that influences an employee's participation in development and learning activities, the learning mechanisms through which professionals acquire knowledge, and for the result of education and training practices. In recent years, HRM and HRD researchers have paid significant attention to senior employees. As the population ages, the proportion of older employees in the workforce will increase. This tendency has ramifications for organizations' efforts to develop and maximize the potential of both older and younger professionals. Hence, Sonnentag et al. (2004) findings are supported, according to which older workers engage in development programs less frequently than their younger counterparts do. As

investigated by Maurer & Weiss (2010), an individual's degree of engagement is also influenced by his own perceptions regarding the degradation of their abilities and their optimism in acquiring new skills or expertise. These findings affirm the assumption about crucial role of age for learning and development methodology as well as the fact that the specialized education tactics may be employed to boost acquisition of knowledge for professional development.

Additional individual elements such as goal orientation, organizational support, and workplace engagement may have a very important function in the growth of young professionals, as seen by more experienced professional (Maurer & Weiss, 2010). Furthermore, Weiss et al. (2003) had shown that through development of self-efficacy, young person's learning orientations had significantly affected their improvability views, but this link appeared moderate for older employees. Finally, the study demonstrates the significance of encouraging learning settings for the development of young professionals. Significantly, the study illustrates teammates as facilitators of development through learning and organizational backing as a basis of inspiration for knowledge acquisition and success in career. Despite this, there is a lot to acquire as to how new generation learn and develop while being in the profession and how their abilities, awareness, and talents can be developed successfully. To conclude, developmental and generational elements are essential for comprehending the growth of young professionals in order to produce great work.

#### **5.4.3 Learning and Development Practices for Young Professionals in the Organizations**

There is a reciprocal association between the organization and professionals in terms of career management and growth; nevertheless, the mutual relationship is poor in several crucial elements of career development. Because of inadequate attention on young professionals, organizations and individuals continue to employ a poor conventional approach to career management. Moreover, the CAFs are stronger at implementing the learning and development factors than the Police. This distinction is the result of intrinsic organizational strength and leadership. However, existing learning and development practices in LEAs hardly affect youngsters' success in their careers. Presence of an employee development plan in the organization, participation in a career planning seminars or any other career-related activities, such as offering career guidance, and the adoption of team-based learning or mental model development-like techniques are inadequate in LEAs. This situation affects the development cycle of young professionals, as they are skilled to augment significantly to their career success if they have the organizational structure and support for advancing their careers. Therefore, findings of current research are likely to rejuvenate the process of professional grooming.

#### 5.4.4 Application of Artificial Intelligence in LEAs

Overall results of Artificial Intelligence were quite satisfactory as far as accuracy of prediction is concerned. Compared to SPSS analysis for L&D as predictors of CS, the values of AI show better accuracy (77 versus 90%). Hence, AI can be an effective tool to observe the prediction of L&D factors for CS. Besides L&D factors, identified in this study do predict career success of young professionals if followed in true spirits. Therefore, Artificial Intelligence may be used in learning and development to support a variety of purposes, including tailored learning assistance and response or feedback, processes of learning and applications, evaluation and assessment, profiling and prediction, and competence management. Moreover, research demonstrates that Artificial Intelligence and learning have a complex connection as established earlier by Chima (2020). Therefore, organizations must make use of such latest techniques to find out correct learning and development factors to better guide young professionals in right direction so that they can excel in the career.

#### 5.5 Recommendations

The study established that learning and development factors mediated by attitude to continuous learning are positively and significantly correlated with the career success. This therefore, means that LEAs needs quality development initiatives for young professionals if they want to realize valuable improvement in efficiency and effectiveness in the long run. Keeping in view the initial learning and development process as major predictor of career success in the study, organizations should look at application of all factors sequentially to identify talent through team based performance and then development of the same through regular team based training and feedback. Some of the relevant recommendations for implementation at policy level are:-

- a) LEAs should plan strategically, considering long-term objectives for training and development and strengthening organizational human capital competence to optimize advantages through nurturing professionals.
- b) It will be an advantage to the LEAs if the career guidance and dialogues are conducted as a successful learning and development approach, and the organization's skills profile may be used to detect individuals' vulnerabilities.
- c) Commanders and supervisors should obtain training on career guidance, counseling, and mentorship in order to assist their followers in achieving career success.
- d) Talented professionals choose to join the organizations that complement and advance their careers and that can ensure their long-term success, as the non-profit sector relies heavily on human asset to perform the tasks on ground. Hence, it is strongly recommended that LEAs

collaborate with their professionals to advance their careers and establish as much proportion as possible between organizational and individual interests.

e) LEAs must take into account the perspective, objectives, and motivations of young professionals since they run the risk of losing talented individuals whose aspirations are not satisfied inside the organization and who may be drawn to other organizations. Team-based learning must be utilized as conformance test to find out talent that best fits young professionals in their roles and as a foundation for defining their career objectives based on their abilities, potentials, and individual characteristics.

f) It is highly recommended that LEAs begin adopting diverse learning and development tools, such as mental model development practices, career management and planning workshops, leadership development, job enlargement and enrichment, intellectual development plan, career guidance, and financial plan for staff' professional development programs associated with their career advancement and organization development objectives.

g) The learning, development and career advancement initiatives should be evaluated based on their intended effect on both the career success of the professionals and the organization's objectives.

h) The young professionals should continue building their capacities regardless of the number of learning and development activities planned by the organization, through developing a career strategy and objectives, reviewing progress towards reaching them, and modifying them when warranted.

i) Organizations should employ global administrative and workforce management approaches and practices, which enhance learning and development opportunities.

j) LEAs must encourage building up Artificial Intelligence-related competences and Artificial Intelligence-based technology should also be utilized to develop methodologies, incorporated into current learning and development settings, or through using intelligent contexts for learning resolves.

## 5.6 Future Research Directions

This research work offers a comprehensive insight on young professionals' learning and growth process. Nonetheless, there is still much to know about the learning and development experiences of young professionals. Hence, this study's findings provide several avenues for further work:-

- a) First, further research is required to determine to what degree learning and development represents the integration of employee career progression and organizational career management.
- b) Future researchers might benefit from examining which sorts of assistance have the significant influences on the learning and development of young adults. For instance, do instructional reinforcements such as coaching and guidance are most effective or verbal inducement against emotional motivation.
- c) It might be helpful to find out whether the presumed assistance has a higher impact on young professionals' development in very first year of their careers in new workplace settings and declines afterwards or it remains significant throughout the initial years of their careers.
- d) These are preliminary findings of this study about the impact of management efforts on advancement and motivation of young professionals. It would be desirable to further investigate leaders' role in the growth of these young professionals. In fact, whereas prior research (e.g., Marinova & Chiaburu, 2005) has suggested a correlation between supervisor encouragement and learning motivation for experienced workers, the benefits have been moderate. Thus, elucidating the influence of leaders and supervisors on the assessments related to learning of younger employees will be advantageous.
- e) Research should also be conducted for other law enforcement organizations like Army and larger hierarchical public sector outfits to identify the learning and development factors and to expand organizational and individual role for efficiency and effectiveness.
- f) A study on the influence of the environment on young professional for their career success should also be conducted along with the mechanism as to how Artificial Intelligence predictions can be used to improve such and environment.
- g) Last but not the least; a comparative study should be conducted in future, to observe the effects of career oriented development factors and traditional career development efforts on career success of professionals.

### **5.7 Limitations of the Study**

Organizations in the field of law enforcement adopt flat hierarchical systems. The top management group is rather small in proportion. These organizations have well-established operational standards and well-defined methods and procedures. The limitations of this research are as follows:

- a) HRM and HRD in law enforcement is supervised and controlled by provincial, regional, and federal authorities; hence, findings of this research might not be generalized to various business and industrial sectors that are not subjected to the same stringent regulations like LEAs.
- b) Law enforcement is a newer and emerging field of study where research and procedures are continually evolving to meet the public's requirements. Thus, there is a paucity of research and publication on the problems relevant to this subject.
- c) With regard to the sampling size, the use of relatively small sample was due to employment of LEAs over wide geographical areas where the majority of young professionals were located. It is possible that organizations and young employees have significantly different experiences than those highlighted in this study. Therefore, this eventuality must be acknowledged.
- d) There could be additional critical aspects that change the intentions and behavior of younger employees that were not investigated in this study. Thus, it would be beneficial to include a measurement of further aspects in future research, which are behavioral and developmental in nature.
- e) Obtaining data from security related organizations was an uphill task. Moreover, to collect people at one place to fill up questionnaire was also very difficult due to nature of employment of LEAs. At some places, cooperation was also not extended. At places, no one was aware of importance and benefits of study for their organizations.
- f) The sample was limited to law enforcement entities of moderate size, which suggests caution in this area as well.
- g) In conclusion, although this research has its constraints, the approaches followed afforded a large and varied sample of professionals, qualifying for the validity of the results.

## 5.8 Conclusion

Developing the capabilities of young professionals so that they are able to add more productively to the organizational objectives is one of the core priorities of HRD in LEAs (Washington & Jacobs, 2003). It is crucial for HRD researchers to comprehend how professionals develop and advance their careers at work and how this mechanism may be improved. Concerns over the consequences of an older workforce on organizational capabilities have prompted experts to focus on the developmental requirements of younger employees (Fuller & Unwin, 2004). Nevertheless, developing individuals once they join the workforce is equally essential, especially for the long-term viability of an organization. As older employees leave, organizations must guarantee that fresh entry of professionals is prepared to assume key roles more than ever before.

However, unfortunately, organizational researchers have mainly ignored this segment of professionals. In an effort to fill such gap in the research literature, this study introduced and evaluated a model of learning and nurturing for young professionals.

There is evidence to show that a person's life stage has a vital role in his or her learning and development. Thus, a conducive learning culture is essential for both seasoned and inexperienced personnel. This is particularly crucial for younger generations who have had lower learning experiences in the past, like at school. Recognizing which elements have the most bearing on the development approach allows organizations to develop the knowledge and abilities of young individuals more efficiently. Moreover, assistance from coworkers is particularly important for younger employees. Employees who believe their coworkers to be helpful have greater confidence in their capacity to acquire new skills, which has a direct impact on their drive to acquire knowledge.

This research adds in a variety of ways to the HRD literature. Firstly, the study establishes a conceptual model for analyzing the effect of the learning cultural and development method on young professionals. Secondly, the data imply that certain parts of the development and learning process vary for young employees and more experienced professionals of LEAs. Finally, the study revealed that learning and development factors have a direct and significant relationship with career success. This means that if the initial development activities of young professionals are handled properly, they would positively influence their success in professional career and organizations would be able to achieve quality in HRD as well.



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**REQUEST FOR QUESTIONNAIRE ASSESSMENT**

Dear Respondent,

My name is Tariq Hussain Khan. As a student of PhD (HRM) at National University of Modern Languages (NUML) Islamabad, I am collecting data for my research work. The main objective of my study is to study the **‘Learning and Development Factors Affecting Career Success Using Artificial Intelligence: Evidence from Professionals of Law Enforcement Agencies.’**

It will take your 15-20 minutes to answer the questions and to provide the valuable information. I assure you that data will be strictly kept confidential and will only be used for academic purposes. To ensure anonymity, you are not supposed to write your name or name of organization anywhere in the questionnaire.

Thanks a lot for your help and support!

Sincerely,

Tariq Hussain Khan

PhD Scholar

National University of Modern Languages (NUML)

H-9 Islamabad

**QUESTIONNAIRE IN ENGLISH****PART-I****1. Personal Information**

Please select one of the following alternatives:

**a. Age**

Less than 20	20-Less than 30	30- Less than 40	40- Less than 50	50- Less than 60	60Years &Above

**b. Gender**

Female	Male

**c. Level of Education Attained**

Matric	FA/Fsc	Diploma	Bachelor's Degree	Master's Degree	PhD

**d. Job Title**

Executives	Top Management	Middle Management	Operational Management	Field Staff	Others
DIG/Comd/ Dy Comd/ Equivalent	CO/Wing Comd/ CCPO SSP/ Equivalent	Company Comd/SP/ASP Equivalent	Platoon Comd/ Inspector/SI/ Equivalent	Section Comd/ ASI/Post Comd// Equivalent	Adm Staff/DSP/ Junior Leader/ Equivalent

**e. Length of Service within the Organization**

Less than 2 Years	2-Less than 5 Years	5-Less than 10 Years	5-Less than 7 Years	10-Less than 15 Years	15 Years & Above

**f. Years of Experience outside the Organization**

Less than 2 years	2-Less than 5 years	5-Less than 7 years	7-Less than 10 years	10-Less than 15 years	15 Years & above

**2. Information about Organization**

a.	<b>Organization's Sector</b>				
b.	<b>The Organization Type</b>				
c.	<b>Number of Employees</b>	20- 30	31-40	41-50	51 & Above
d.	<b>Age of Organization</b>	5- 10	11-15	16-20	21 & above

**PART-II**

S/No	Statement	SD	D	N	A	SA
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**Career Success**

1. Career goals of the individuals should be considered while planning learning and development activities.
2. Individuals must expand their skill sets to perform better.
3. Individuals should stay current with changes in their profession for long term success.
4. Individuals should continuously improve by developing their skill set.
5. Individuals need not to pursue work that only meets their personal needs and preferences.
6. Conducive environment is essential for learning and development of individuals.
7. Individuals feel satisfied when they make progress towards meeting their overall career goals.

8. Individuals feel motivated while making progress towards meeting goals in their professional pursuits.
9. Organization should strongly consider individuals aspiration while planning learning and development activities.

#### **Career Guidance & Dialogue**

10. Individuals should be assisted in dealing with their career issues.
11. Employees are not interested in motivation by others to work hard.
12. Career tests and inventories are useful in understanding individual differences, personality, interests, values, and abilities.
13. Organizations should help individuals to achieve their career goals.
14. Individuals should be assisted in long term development of professional life.
15. Individuals should be facilitated for career group discussions.
16. Adequate career information should be provided to the individuals who seek it.

#### **Team Based Learning**

17. Individuals enjoy while learning from their colleagues.
18. Informal learning is an effective approach to learning and development process.
19. Individuals easily remember what they learn when working in a team.
20. .Group interaction skills help in meeting learning objectives.
21. Individuals perform better in the field when teamwork is appreciated in the organization.
22. Social learning activities are a waste of time.
23. Team members expect assistance from each other in learning process.
24. Discussions with colleagues help the individuals in deeper understanding of a subject.
25. Learning in groups helps individuals in improving their careers.

#### **Mental Model Development Practices**

26. Mental picture of any subject exist in a person's working memory.
27. Creative thinking style is valuable for decision making process.
28. Sharing mental images amongst colleagues is beneficial for success of team.
29. Creating mental sketches should be considered during problem solving activities in the organization.
30. Development of conceptual diagram carries a great significance in learning process.
31. Mental planning or assumption is not essential to solve any problem.
32. Mind mapping exercises are essential to enhance decision making skills.
33. Development of mental sketches is helpful in organizing thoughts and opinions while learning.

#### **Attitude to Continuous Learning**

34. Self-motivation during learning process is necessary for professional development.
35. It is not necessary to learn new things in all stages of life.
36. Individuals should have a constant desire to learn in order to be successful.
37. Individuals who have promotion in their career do not need to participate to the professional development activities.
38. Individuals should do planning for their professional development.
39. Exchanging information with colleagues in learning a new subject increases success.
40. Individuals should have the conscience of the constant change of information in their career field.
41. Individuals' participation to the professional development activities increases the professional creativity.
42. Individuals' lack of knowledge in their career field must be disregarded.
43. Exchanging information with colleagues in learning a new subject increases success chances.

**QUESTIONNAIRE IN URDU****سوالنامہ**

نمبر شمار	بیان	بالکل درست	درست	معلوم نہیں	غلط	بالکل غلط
		۵	۳	۳	۲	۱

**کیرینرز کی کامیابی**

- 1 سیکھنے اور ترقیاتی سرگرمیوں کی منصوبہ بندی کرتے وقت افراد کے کیرینرز کے اہداف کو مدنظر رکھا جانا چاہیے۔
- 2 افراد کو بہتر کارکردگی کا مظاہرہ کرنے کے لیے اپنی مہارت کے سیٹ کو بڑھانا چاہیے۔
- 3 طویل مدتی کامیابی کے لیے افراد کو اپنے پیشے میں تبدیلیوں کے ساتھ واقف رہنا چاہیے۔
- 4 افراد کو اپنی مہارت کے سیٹ کو ترقی دے کر مسلسل بہتری لانی چاہیے۔
- 5 افراد کو ایسے کام کو آگے بڑھانے کی ضرورت نہیں جن کا مقصد صرف ان کی ذاتی ضروریات اور ترجیحات کو پورا کرنا ہو۔
- 6 سکھلائی اور افراد کی ترقی کے لیے سازگار ماحول ضروری ہے۔
- 7 جب لوگ اپنے کیرینرز کے مجموعی اہداف کو پورا کرنے کی طرف پیش رفت کرتے ہیں تو وہ مطمئن محسوس کرتے ہیں۔
- 8 افراد اپنے پیشہ ورانہ تعاقب میں اہداف کو پورا کرنے کی طرف پیش رفت کرتے ہوئے حوصلہ افزائی محسوس کرتے ہیں۔
- 9 محکمے کو سیکھنے اور ترقیاتی سرگرمیوں کی منصوبہ بندی کرتے وقت افراد کی خواہشات پر سختی سے غور کرنا چاہیے۔

**کیرینرز بنمانی اور باہمی گفتگو**

- 10 افراد کو اپنے کیرینرز کے مسائل سے نمٹنے میں مدد کی جانی چاہیے۔
- 11 ملازمین دوسروں کی طرف سے محنت کرنے کی ترغیب دینے میں دلچسپی نہیں رکھتے۔
- 12 کیرینرز کے ٹیسٹ اور انوینٹری انفرادی اختلافات، شخصیت، دلچسپیوں، اقدار اور صلاحیتوں کو سمجھنے میں مفید ہیں۔
- 13 محکموں کے افراد کو اپنے کیرینرز کے اہداف حاصل کرنے میں مدد کرنی چاہیے۔
- 14 افراد کو ان کی پیشہ ورانہ زندگی کی طویل مدتی ترقی میں مدد کی جانی چاہیے۔
- 15 افراد کو کیرینرز گروہی بحث کے لیے سہولت فراہم کی جانی چاہیے۔
- 16 کیرینرز کی مناسب معلومات ان افراد کو فراہم کی جانی چاہیے جو اسے تلاش کرتے ہیں۔

**ٹیم میں سکھلائی**

- 17 افراد اپنے ساتھیوں سے سیکھتے ہوئے لطف اندوز ہوتے ہیں۔
- 18 غیر رسمی سکھلائی، سیکھنے اور ترقی کے عمل کے لیے ایک مؤثر طریقہ ہے۔
- 19 ٹیم میں کام کرتے وقت لوگ جو کچھ سیکھتے ہیں اسے آسانی سے یاد رکھتے ہیں۔
- 20 گروپ کی بات چیت کی مہارتیں سیکھنے کے مقاصد کو پورا کرنے میں مدد کرتی ہیں۔
- 21 جب محکمے میں ٹیم ورک کو سراہا جاتا ہے تو افراد میدان میں بہتر کارکردگی کا مظاہرہ کرتے ہیں۔
- 22 سماجی تعلیمی سرگرمیاں وقت کا ضیاع ہیں۔
- 23 ٹیم کے ارکان سیکھنے کے عمل میں ایک دوسرے سے مدد کی توقع رکھتے ہیں۔
- 24 ساتھیوں کے ساتھ بات چیت سے افراد کو کسی موضوع کی گہرائی سے

- سمجھنے میں مدد ملتی ہے۔
- 25 گروپوں میں سیکھنے سے افراد کو اپنے کیریئر کو بہتر بنانے میں مدد ملتی ہے۔
- دماغی ماڈل کے نشوونما کی مشقیں
- 26 کسی بھی موضوع کی ذہنی تصویر انسان کے کام کرنے کی یادداشت میں موجود ہوتی ہے۔
- 27 فیصلہ سازی کے عمل کے لیے تخلیقی سوچ کا انداز قیمتی ہے۔
- 28 ساتھیوں کے درمیان ذہنی تصاویر کا اشتراک ٹیم کی کامیابی کے لیے فائدہ مند ہے۔
- 29 محکمے میں مسائل کے حل کی سرگرمیوں کے دوران ذہنی خاکے بنانے پر غور کیا جانا چاہیے۔
- 30 تصوراتی خاکہ بنانا سیکھنے کے عمل میں بڑی اہمیت رکھتا ہے۔
- 31 کسی بھی مسئلے کو حل کرنے کے لیے ذہنی منصوبہ بندی یا مفروضہ ضروری نہیں ہے۔
- 32 فیصلہ سازی کی مہارت کو بڑھانے کے لیے دماغ کی نقشہ سازی کی مشقیں ضروری ہیں۔
- 33 ذہنی خاکوں کی نشوونما سیکھنے کے دوران خیالات اور آراء کو ترتیب دینے میں مددگار ہے۔
- مسلسل سیکھنے والا رویہ
- 34 پیشہ ورانہ ترقی کے لیے سیکھنے کے عمل کے دوران ذاتی جوش و جذبہ ضروری ہے۔
- 35 ضروری نہیں کہ زندگی کے تمام مراحل میں نئی چیزیں سیکھیں۔
- 36 کامیاب ہونے کے لیے لوگوں میں سیکھنے کی مستقل خواہش ہونی چاہیے۔
- 37 ایسے افراد جن کے کیریئر میں ترقی ہوتی ہے انہیں پیشہ ورانہ ترقی کی سرگرمیوں میں حصہ لینے کی ضرورت نہیں ہے۔
- 38 افراد کو اپنی پیشہ ورانہ ترقی کے لیے منصوبہ بندی کرنی چاہیے۔
- 39 نیا مضمون سیکھنے میں ساتھیوں کے ساتھ معلومات کا تبادلہ کامیابی میں اضافہ کرتا ہے۔
- 40 افراد کو اپنے کیریئر کے میدان میں معلومات کی مسلسل تبدیلی کی فکر ہونی چاہیے۔
- 41 پیشہ ورانہ ترقی کی سرگرمیوں میں افراد کی شرکت پیشہ ورانہ تخلیقی صلاحیتوں میں اضافہ کرتی ہے۔
- 42 افراد کی اپنے کیریئر کے شعبے میں علم کی کمی کو نظر انداز کیا جانا چاہیے۔
- 43 ایک نیا مضمون سیکھنے میں ساتھیوں کے ساتھ معلومات کا تبادلہ کامیابی کے امکانات کو بڑھاتا ہے۔

**REQUEST FOR PERMISSION TO CONDUCT SURVEY**

Tariq Hussain Khan  
House No. 462, Street No.14, Sector B  
Askari-14, Rawalpindi Cantonment  
Personal File / 1 / A / Miscellaneous  
Email: tariqkhan54@yahoo.com  
Mobile: +923215362249  
21 June 2022

To: Inspector General of Islamabad Police  
Police Line Headquarters  
H-11, Islamabad

**Subject: Request for Questionnaire Assessment**

Honourable Sir,

My name is Tariq Hussain Khan. As a student of PhD (HRM) at National University of Modern Languages (NUML), Islamabad, I am collecting data for my research work. The title of my research thesis is as under:

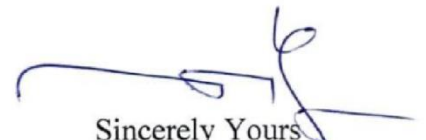
**‘Learning and Development Factors Affecting Career Success Using Artificial Intelligence: The Evidence from Professionals of Law Enforcement Agencies.’**

I therefore, request you to kindly allow all of your relevant under command staff to fill in the Questionnaire and provide their valuable input/ feedback that would not only help me in achieving my research objectives but will also go in a long way in raising the standards of learning and development in Law Enforcement Agencies in Pakistan.

I assure you that data will be strictly kept confidential and will only be used for academic purposes. To ensure anonymity, individuals are not required to write their names or name of the organization anywhere in the questionnaire.

Your cooperation in this regards will be highly appreciated.

Acknowledge, please.



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Mobile: +923215362249

24  
June 2022

To: Inspector General of Punjab Police  
Police Head Office  
Anarkali Bazaar Civil Lines, Lahore

**Subject: Request for Questionnaire Assessment**

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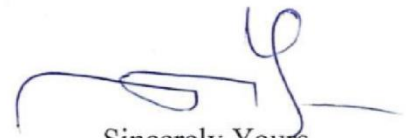
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Personal File / 3 / A / Miscellaneous  
Email: tariqkhan54@yahoo.com  
Mobile: +923215362249

June 2022

26

To: Inspector General of Baluchistan Police  
Quetta Shah Rah-e-Gulistan Road, Quetta

**Subject: Request for Questionnaire Assessment**

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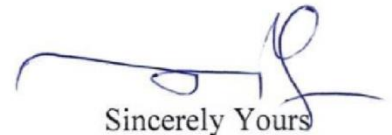
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Personal File / 4 / A / Miscellaneous  
Email: tariqkhan54@yahoo.com  
Mobile: +923215362249

24

June 2022

To: Inspector General of Sind Police  
Central Police Office, II  
Chundrigar Road, Karachi

**Subject: Request for Questionnaire Assessment**

Honourable Sir,

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24

June 2022

To: Inspector General Frontier Corps Khyber Pakhtunkhwa  
Frontier Corps Headquarters  
Bala Hisar Fort Peshawar, Khyber Pakhtunkhwa

**Subject: Request for Questionnaire Assessment**

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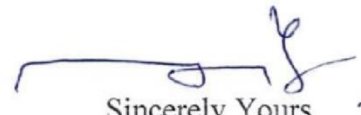
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Personal File / 8 / A / Miscellaneous  
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30  
June 2022

To: Inspector General Frontier Corps Baluchistan  
Frontier Corps Headquarters  
Quetta

**Subject: Request for Questionnaire Assessment**

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Mobile: +923215362249

27

June 2022

To: Director General Sind Rangers  
HQ Pakistan Rangers Sindh  
Muslim Jinnah Courts Karachi No. 4  
Doctor Ziauddin Ahmed Road, Civil Lines, Karachi

**Subject: Request for Questionnaire Assessment**

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Personal File / 6 / A / Miscellaneous  
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Mobile: +923215362249

29  
June 2022

To: Director General Punjab Rangers  
Airport Access Road Near MCB Center  
Opposite Cantonment, Lahore

**Subject: Request for Questionnaire Assessment**

Honourable Sir,

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28

June 2022

To: Inspector General of Khyber Pakhtunkhwa Police  
Khyber Pakhtunkhwa Central Police Office  
Peshawar

**Subject: Request for Questionnaire Assessment**

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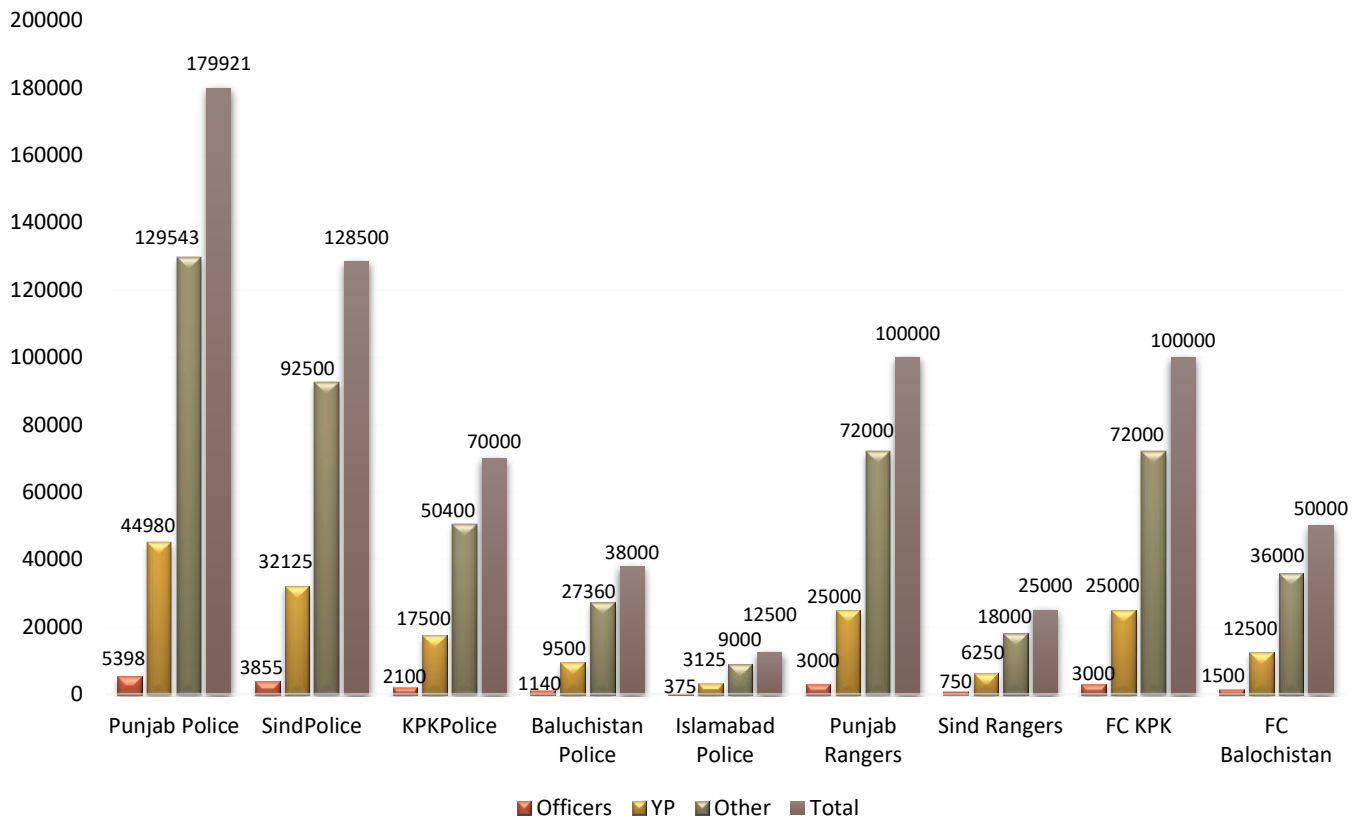


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**GRAPH SHOWING RESEARCH POPULATION**

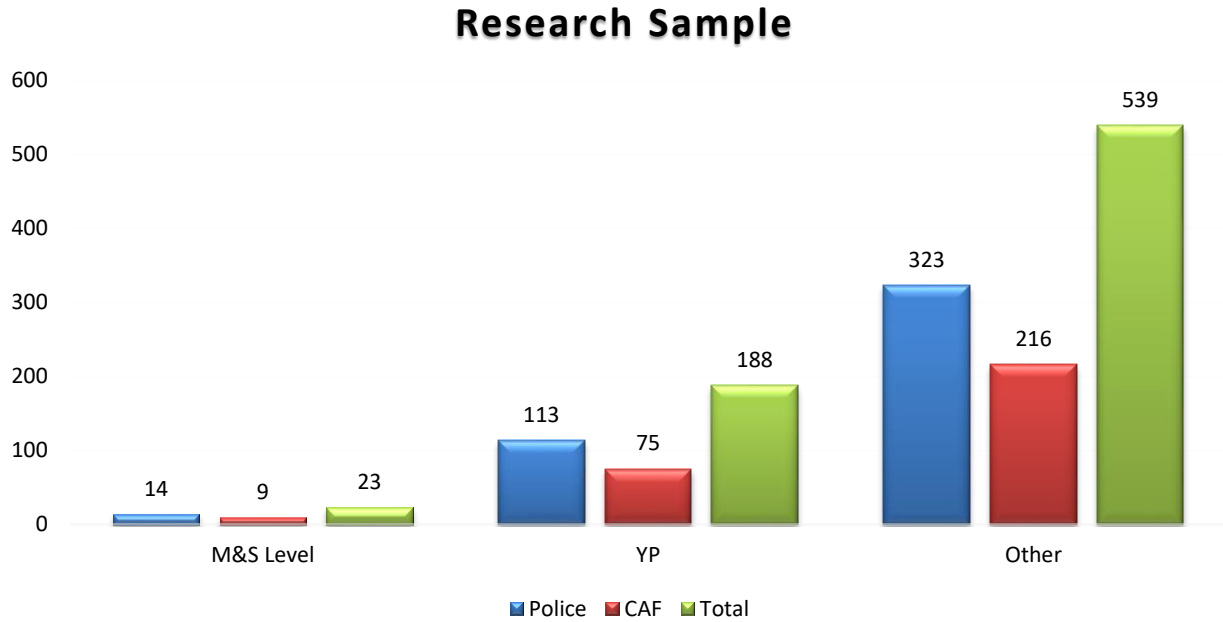
**(MANPOWER STRENGTH OF LAW ENFORCEMENT AGENCIES OF PAKISTAN)**

**Manpower Strength of LEAs**

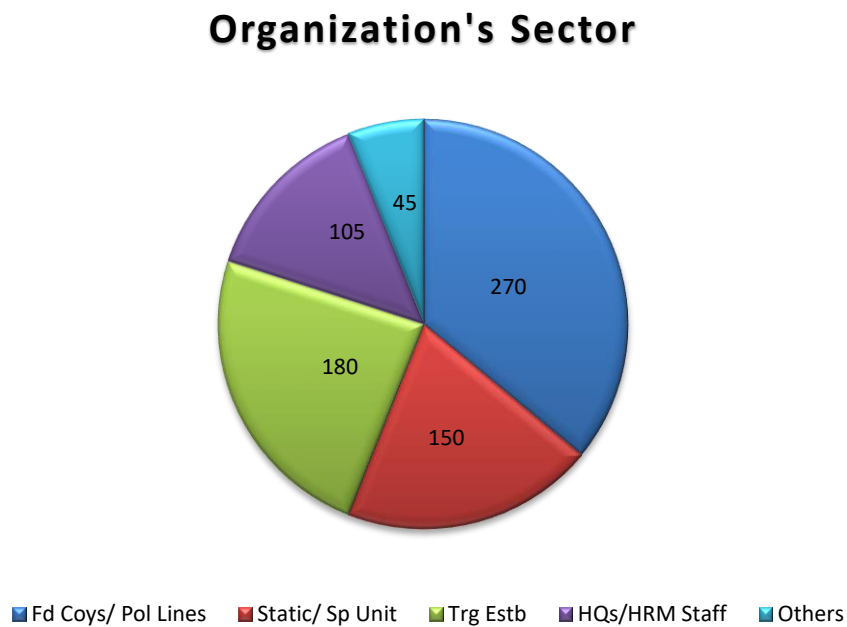


**GRAPH SHOWING ORGANIZATIONAL CHARACTERISTICS EVALUATION OF SAMPLE**

**1. The Research Sample**

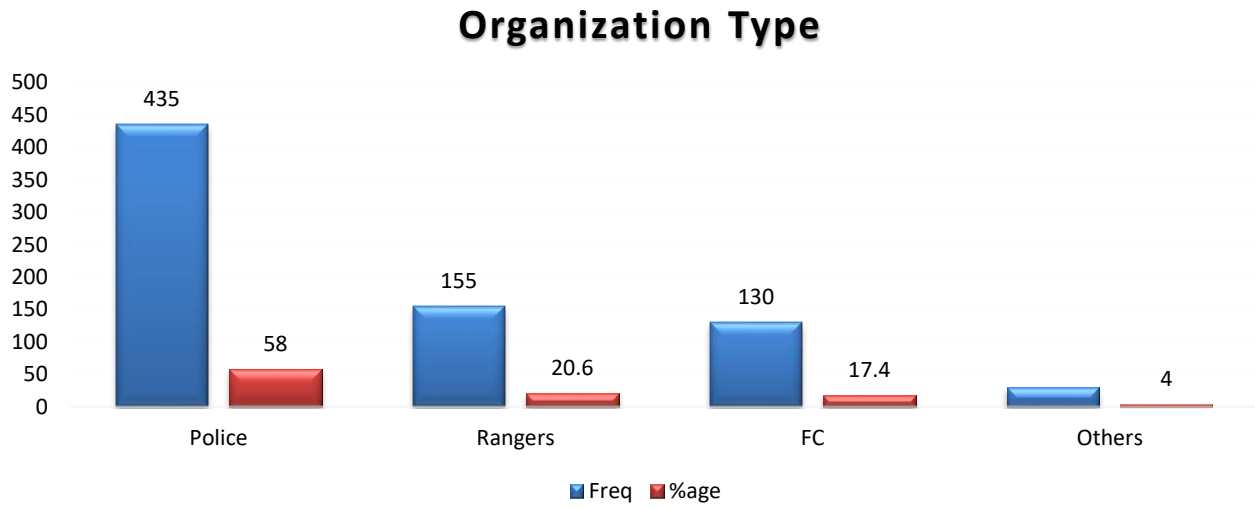


**2. Sample Characteristics According to Organizations' Sector**





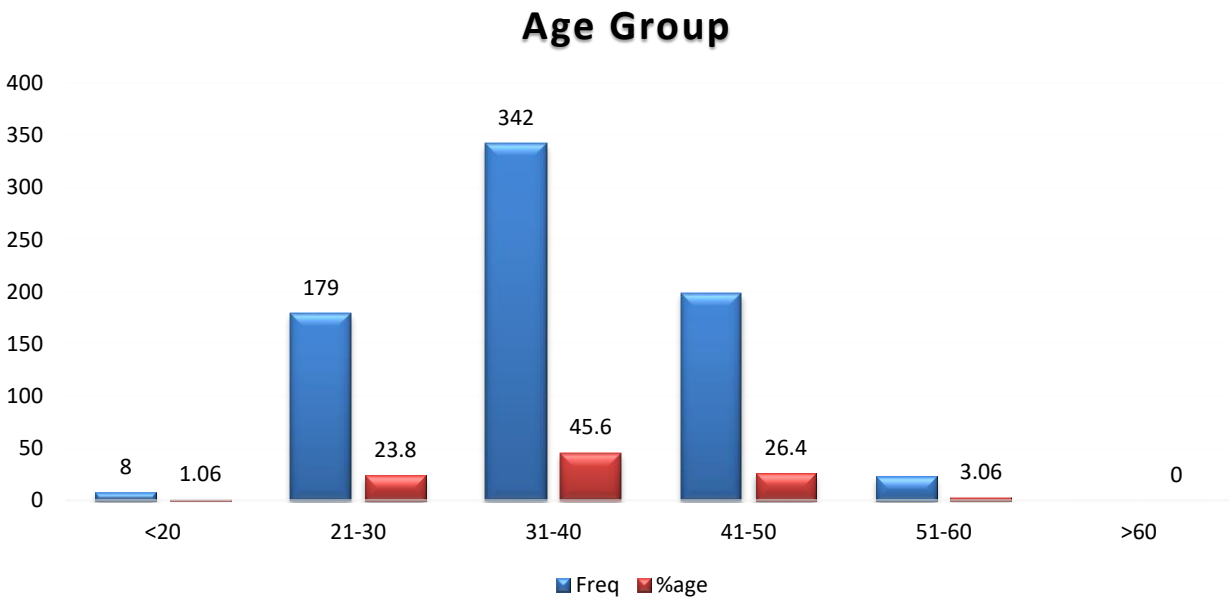
3. Sample Characteristics According to the Organization Type



Appendix III

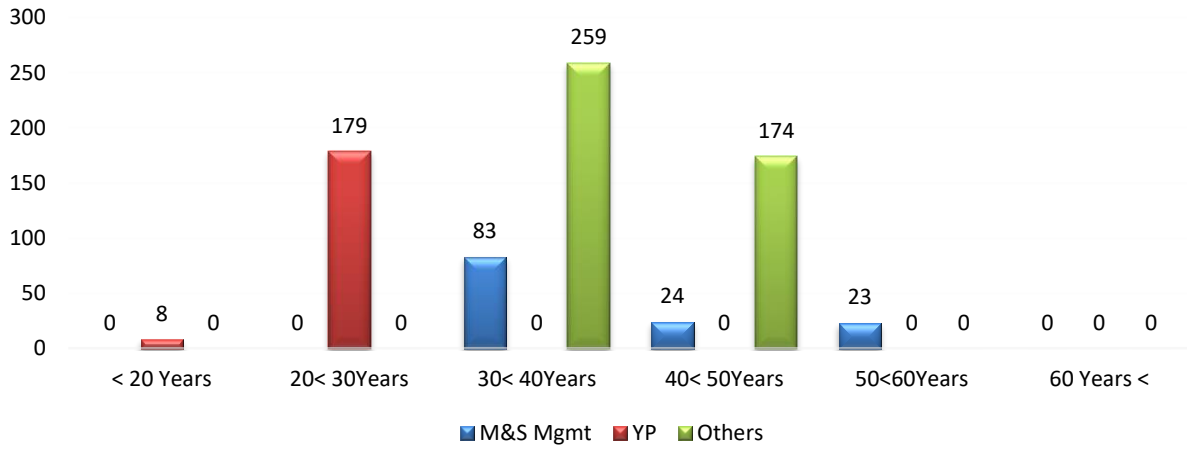
**GRAPH SHOWING PERSONAL CHARACTERISTICS EVALUATION OF SAMPLE**

1. Sample Characteristics According to Age Group



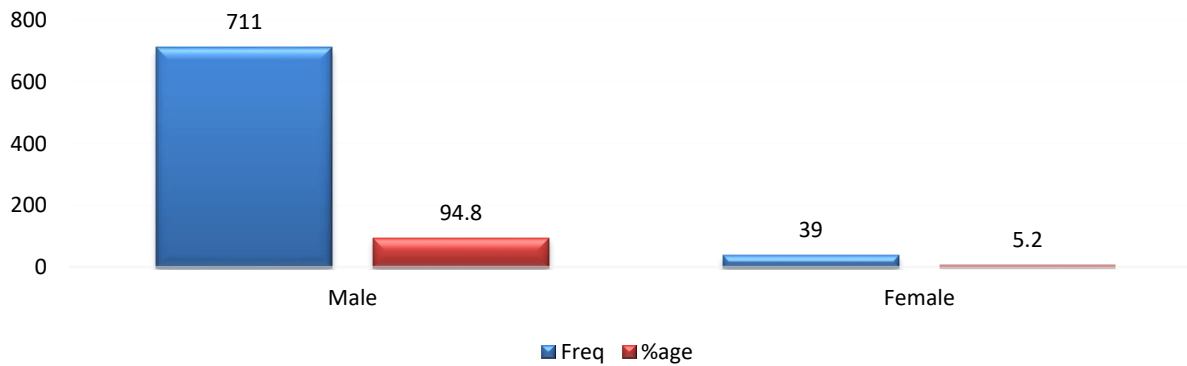
2. Summary of Sample Characteristics According to Age Group

**Summary of Age Group of Respondents**



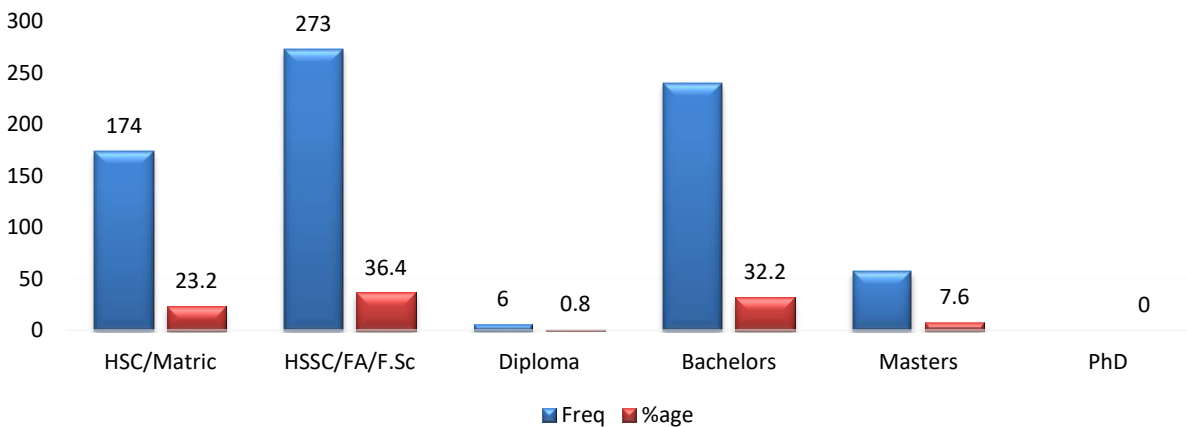
3. Distribution of Sample According to Sex

**Distribution of Sample According to Sex**



4. Distribution of Sample According to Education

**Distribution of Sample According to Education**

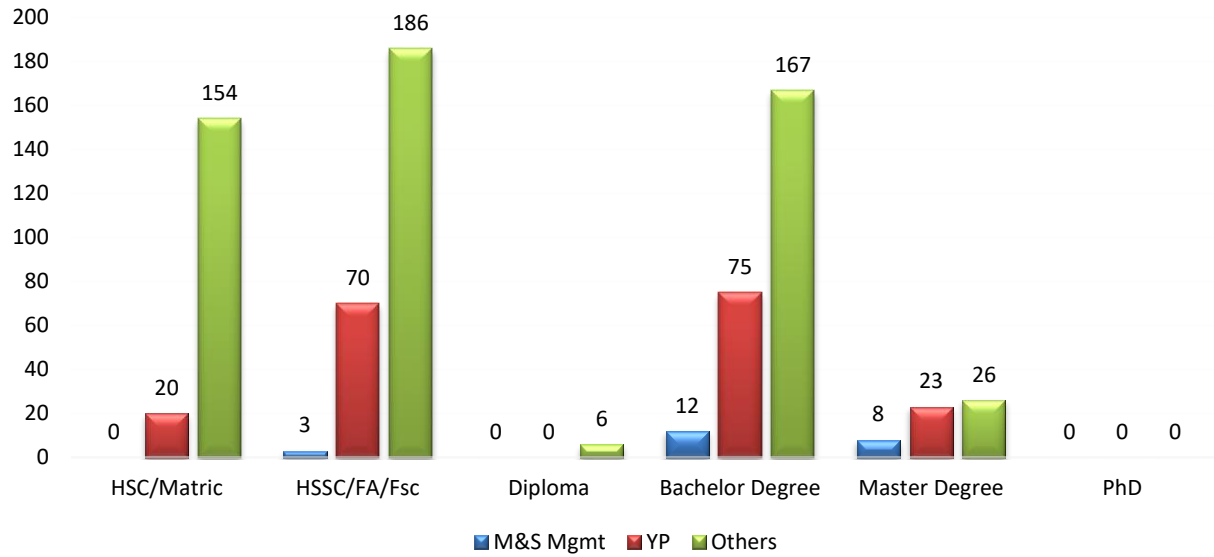


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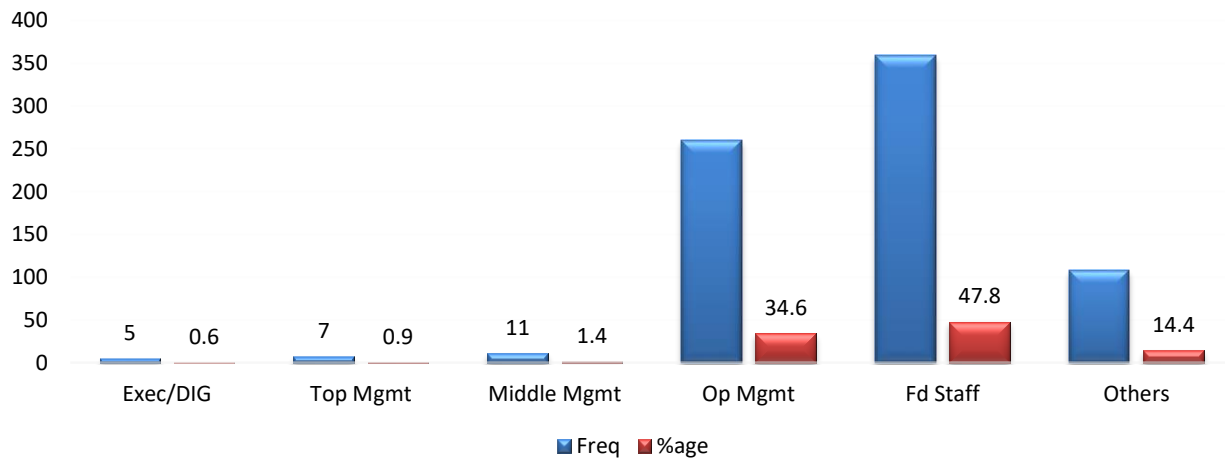
5. Summary of Sample Characteristics According to Qualification

**Summary of Qualification of Respondents**



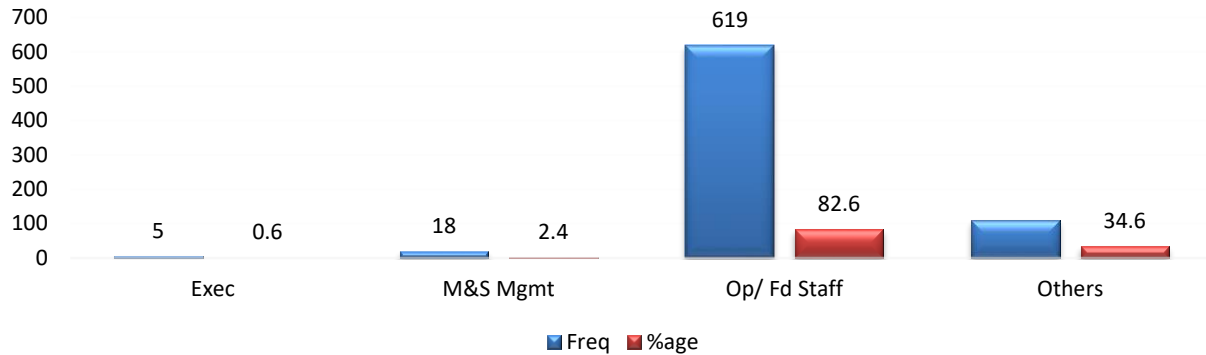
6. Distribution of Sample According to Job Title

**Distribution of Sample according to Job Title**



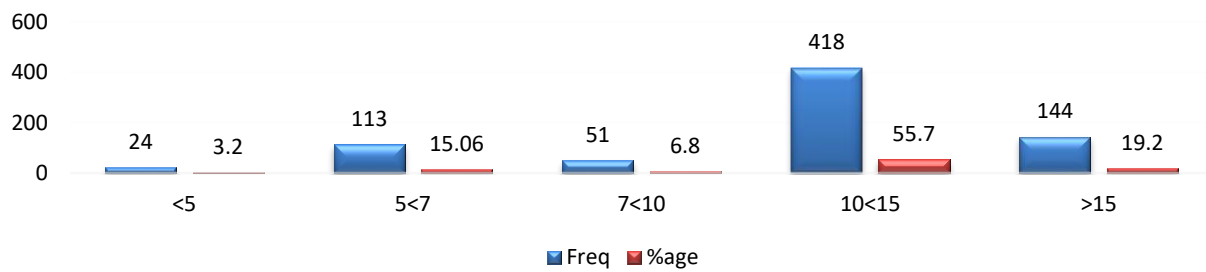
7. Summary of Sample Characteristics According to Job Titles

**Summary of Respondent's Job Titles**



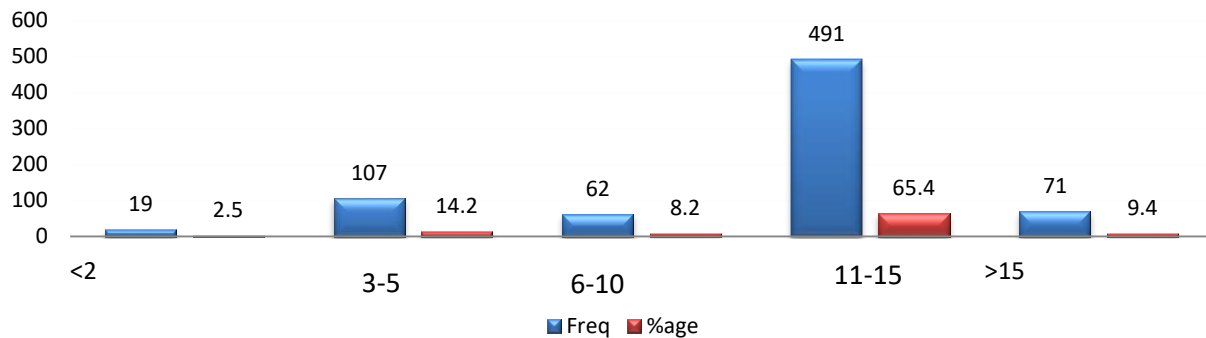
8. Distribution of Sample According to Years of Experience

**Distribution of Sample According to Years of Experience**



9. Distribution of Sample According to Years of Service in the Organization

**Distribution of Sample according to Years of Experience**



## 10. Summary of Sample Characteristics According to Length of Service

### Summary of Length of Service of Respondents

