

Assessing the Quality of Supervision Experiences in the Different Research Stages at Postgraduate Level

Tooba Saleem

Allama Iqbal Open University, Pakistan
tooba.saleem@aiou.edu.pk

Nasir Mehmood

Allama Iqbal Open University, Pakistan
nasir.mahmood@aiou.edu.pk

Abstract

The nature of supervisory relationship is dynamic that changes over the course of candidacy. Subsequently, the supervision demands of supervisees also change to help them in performing certain tasks at specific research stages. In this context, this research is proposed to investigate the supervision experiences of supervisees in four different research stages (i.e. Stage 1: developing synopsis, Stage 2: collecting data, Stage 3: writing thesis and Stage 4: submitted thesis). In the light of six supervision aspects (i.e. Project management, Intellectual support, pertinent research skills, Inter-personal communication skills, Workload management and Supportive skills) the quality of supervision was assessed from supervisees' perspective. Cross-sectional survey design was used to assess the supervision experiences of (N=422) supervisees in four distinct stages of research supervision. The data were collected from 12 public and private universities of the Punjab. For this study, a multi-sectioned, self-constructed Supervisor-Supervisee Relationship Questionnaire (Saleem, 2014) was used. The findings of the study highlighted the need to train the supervisors to manage their time not just in terms of teaching and supervision of research students, but also keeping the stages of their research in mind. By addressing the stage specific needs of supervisees the quality of supervision could be improved.

Keywords: quality of supervision, research stages, supervision dynamics, supervision experiences

Introduction

The supervisory relationship of a student with supervisor involves a number of different stages. More meaningfully, the nature of supervisory relationship is dynamic, and it changes over the course of the candidacy right from the beginning to the completion of the research. The fact is obvious due to the nature of tasks and activities the students are supposed to perform in order to complete their research. Previously, the dynamic nature of supervision process has been acknowledged by Gurr (2001), who proposed a supervisor-student alignment model, emphasizing the need for a dynamic alignment of supervisory style for responding to inevitable changes and to develop a student into a competent researcher. Further, extending the concept of dynamic nature of research supervision process, Gatfield (2005) developed a dynamic model of supervisory management styles and examined the process dynamics of supervisory management styles that changes over time during different phases termed as transition points. However, the distinct features or transition points were not made cleared in Gatfield's model. Recently, Boehe (2016) also acknowledged the contingent nature of PhD supervision process by identifying the appropriate supervisory styles under different circumstances. Stubb, Pyhältö, and Lonka (2014) investigated the conceptions of doctoral students perceived in terms of how product-oriented versus process-oriented and person-centered versus community-centered they were in the different phases of their research journey. However, the context and purpose of these researched were different and only splitting the process into stages or phases might not be adequate in the true sense unless the differences are not clearly defined between the two transition points. Moreover, considering the dynamic supervision needs of supervisees and to go through the supervision process successfully, demands a dynamic set of skills addressing the changing needs of supervisees across the different stages of research. Moses (1992) identified that at each stage of the research progress, students are likely to need different forms of guidance and supervision. They need particular guidance on when to stop data collection and analysis, when to start drafting the thesis and how to structure it. Subsequently, the supervision demands of supervisees also change so as to help them in performing certain stage-specific tasks during the research journey. Consequently, the quality of supervision becomes a matter of supervisory relationship in different stages of supervision, right from the beginning to completion of the research work.

PhD research project is usually a three year task, which can be better carried out if divided in stages or monitoring points. The ongoing evaluation strategies are embedded in programs at universities in Australia and the United Kingdom. However, the changing landscape of the postgraduate level program necessitates new perspectives of understanding and studying the research supervision experiences. Studying the supervisory problems in particular stages of research can place important implications to highlight the potential issues of supervisees and to minimize their unproductive efforts. It can possibly extract the sensitive stage-wise directions for supervisors and supervisee to complete each stage as well as the whole research successfully.

Literature Review

Supervisor-supervisee relationship is the most important factor that contributes towards the completion of a PhD research project (Mainhard, Rijst, & Tartwijt, 2009; Wellington, 2010). Baptista, Huet, and Jenkins (2011) state that supervisor-supervisee relationship and practices are the central elements to determine the quality, success and effectiveness of the doctoral process and research. High failure rates for doctoral studies in the social sciences have been partly attributed to supervisees' dissatisfaction with supervision and poor supervisor-supervisee relationship (Armstrong, 2004; Eley & Jennings, 2005). Hence, supervisor-supervisee relationship can be considered one of the most rewarding aspects of academic life for both. However, there is no single right way or set prescription to supervise a PhD, but supervision quality is affected by the needs of the students (Kam, 1999).

In addition to this, the supervisory relationship usually changes over time as the needs of the supervisee change (Lynch, 2008). However, there are some hallmarks of most successful supervision relationships including; good communication, agreed standards, professionalism, consideration of the needs of the other party and ethical behavior. Lessing and Schulze (2002) described the supervisory role as a balancing act between various factors; expertise in the area of research, support for the student, critique and creativity for research supervision. Pearson and Kayrooz (2004) proposed that supervision can be perceived as a series of tasks and responsibilities that can be clustered and operationalized (expert coaching, facilitating, mentoring and reflective practice) thereby, providing a rich array of the multifarious factors that are associated with effective supervision. It is

evident that supervisory relationships and the quality of supervision are significant determinants that contribute to the success of the doctoral journey (Ives & Rowley, 2005; Saleem & Mahmood, 2017; Sambrook, Stewart, & Roberts, 2008; Styles & Radloff, 2001; Zhao, Golde, & McCormick, 2007).

Highlighting the dynamic nature of supervisory relationship, Piccinin (2000) described the relationship between the student and supervisor starting from selecting a research topic, planning the research, identifying and acquiring the necessary resources, managing the project, actively conducting the research, carrying out the literature review, analyzing and interpreting the data, writing the thesis, defending it and possibly publishing it.

This leads to the conclusion that the relationship between a supervisor and its candidate is not a static one, but it changes over the course of the candidacy. As the nature of tasks vary across the different research stages, the supervision needs of guidance and support also change to accomplish the different tasks successfully. Salmon (1992) elaborated the change in research stages with a dynamic need for supervisors to be flexible in meeting the specific needs of students.

McAlpine and McKinnon (2012) determined the supervisory relationships from the perspective of students' experiences with their supervisors over time using a longitudinal approach. The supervisees at different points in their progress were asked to fill up the weekly activity logs and were interviewed about their supervisory relationship. The findings revealed that individuals in their early and late phases of doctoral studies wanted more help of their supervisors than the individuals in the middle way, but the sample of the study was too small and the research stages were not clearly defined to make rigorous generalizations. Taylor and Beasley (2005) second this notion and explained that usually at the initial stage, the candidates are heavily dependent upon the supervisors and gradually as they mature, they become researchers in their own right.

Similarly, Ismail, Majid, and Ismail (2013) examined the role of supervision from the perspective of supervisees. They found the tensions that arose between the research students and their supervisors when faced by troublesome knowledge at different stages of their journey, lack of positive communication and lack of necessary expertise to give support and power conflicts. However, no clear distinctions have

been made stage-wise across these issues. As the needs of the student change over time, the ground rules of the relationship may need to be renegotiated periodically and it is most important to set up guidelines for every phase so that the students know what to do and how to work. The two aims of the study were:

1. To investigate the quality of supervisees' supervision experiences (SSE) in different stages of research through the lens of six different aspects of supervision
2. To explore the relative contribution of these aspects in determining the quality of supervision across the four different stages of supervision process.

Research Questions

This research addressed the following three main research questions:

1. What are the supervision experiences of supervisees during the different research stages?
2. To what extent do the supervisors' management and support related supervision experiences of supervisees change during different stages of research?
3. Is there a significant difference among the supervision experiences of supervisees during the different stages of research?

Methodology

Cross-sectional survey design was used to investigate the supervision experiences of the supervisees across the four stages of research supervision i.e. Stage 1: developing synopsis (S1), Stage 2: collecting data (S2), Stage 3: writing thesis (S3) and Stage 4: submitted thesis (S4) of research supervision, right from the beginning to completion of the research work. The proposed cross-sectional survey design is considered appropriate when different cohorts of a population are to be studied at one time to gather their experiences about a current problem (Lodico, Spaulding, & Voegtler, 2010).

Using this design, the four cohorts of supervisees: cohort 1 (N= 94, supervisees developing synopsis), cohort 2 (N= 112, supervisees collecting data),

cohort 3 (N=127, supervisees writing the thesis) and cohort 4 (N = 84, supervisees have submitted thesis) were taken as sample. Supervisees in the different stages of their research work explicitly approached once during this research. A sample of N=422 supervisees was included from 12 public and private sector universities of the Punjab province. The background characteristics of supervisees who were included in the sample and their demographic profile-wise distribution is given in Table 1.

Table 1

Demographic Characteristics of Respondents (supervisees) Included in Sample

Sr.	Demographic characteristics	(N)=422	Number of non-responsive cases
1.	<i>University Sector</i>		
	Public	330 (78%)	
	Private	88 (21%)	
			4 (1%)
2.	<i>Study Discipline</i>		
	Life Sciences	120 (28%)	
	Education	96 (23%)	
	Social Sciences	86 (20%)	
	Physical Sciences	68 (16%)	
	Management Sciences	31 (7%)	
	Arts and Humanities	11 (3%)	
			10 (3%)
3.	<i>Research Stages</i>		
	Developing synopsis	94 (22%)	
	Collecting data	112 (27%)	
	Writing up thesis	127 (30%)	
	Have submitted thesis	84 (20%)	
			5 (1%)
4.	<i>Gender</i>		
	Female	291 (69%)	
	Male	128 (30%)	
			3 (1%)

Instrument

Moses (1992) identified that at each stage of the research progress, students are likely to need different forms of guidance. Keeping the changing needs of supervisees across the different stages of research in mind and considering those diverse needs, a self-constructed Supervisor-Supervisee Relationship Questionnaire (Saleem, 2014; Saleem & Mahmood, 2017) (SSRQ, 65 items) was used. The survey questionnaire has five sections. These sections were based on the four

Table 2

Research Activities across the Different Stages and Aspects of Research Supervision

Supervision Aspects	Supervisees' Supervision Experiences (SSE)			
	Stage 1 (S1)	Stage 2 (S2)	Stage 3 (S3)	Stage 4 (S4)
1. Project Management (PM)	Developing synopsis: Planning and	Collecting data/ Performing experiment: Locating the	Writing thesis: writing-up introduction,	Evaluation/ Thesis Submission: Administrative
2. Intellectual Support (IS)	research, formulating	data sources,	research	processing,
3. Pertinent Research Skills (PRS)	the objectives, reviewing the	collecting data, experimentation,	methodology, interpreting the	getting evaluation
4. Interpersonal Communication Skills (IPCS)	literature, developing instrument, list out the potential sources of data, formulating	coding and entering data, and data analysis.	data, writing the findings, discussion and conclusion.	report/s, incorporating observations, preparing
5. Supportive Skills (SS)	appropriate data analysis techniques, assessing the	feasibility of research		submitting thesis.
6. Workload Management (WM)	in terms of available resources.			

Validity and Reliability of SSRQ. Content validity of the instrument was ensured by eight Subject Matter Experts (SMEs). The items with value of CVR below .75 (Shultz & Whitney, 2005) were removed from the instrument. After tool validation process, pilot testing was done. Subscale wise, reliability of the instrument was determined using Cronbach alpha (α). Total 17 items were removed. Further details are given in Table 3:

Table 3
Values of Cronbach's alpha (α) in Final SSRQ

Subscale	No. of Items	Cronbach's alpha (α)	Example Item
Project management(PM)	14	0.872	1. My supervision sessions are/were held according to schedule.
Intellectual support (IS)	16	0.943	29. My supervisor's comments on my work helps/helped me to improve my drafts.
Pertinent research skills(PRS)	10	0.908	53. My supervisor explains/explained me the relevant methods to carry out my research.
Interpersonal communication skills(IPCS)	7	0.845	35. I feel/felt hesitant to ask questions to my supervisor about my research.
Workload management (WM)	7	0.780	48. My supervisor is/was unable to attend his/her supervisees due to other academic/administrative responsibilities.
Supportive skills (SS)	11	0.924	61. My supervisor helps/helped me to fix technical problems.

Analysis Weights. The average supervisees' supervision experiences (SSE) sub-scales values in the range of 1 (strongly disagree) to 3 (slightly disagree than agree) were interpreted as negative supervisees' experiences with their supervisors and average sub-scales' values in the range of 4 (slightly agree than disagree) to 6 (strongly agree) were interpreted as positive supervisees' experiences with their supervisors.

Procedure of the Study

The survey questionnaire was distributed among 600 postgraduate research students who were working on or had completed their thesis. These students belonged to 12 different public and private universities of the Punjab province. The doctoral program committee coordinators were approached in each selected university and they were requested to provide the list of students working on their research. 422 research students showed their willingness to participate in the study were approached by the researchers. The students were personally contacted and

requested to fill the instrument. The students were ensured that their information would remain confidential.

Findings

Descriptive statistics to explore the extent of SSE with respect to six supervision aspects in four different research stages and per item mean score of the SSE subscales was calculated. For examining the relative contribution of the supervision aspects in determining the overall quality of the supervision across the different stages of research, Multivariate Analysis of Variance (MANOVA) was performed.

Quality of Research Supervision across Four Stages of the Research

Descriptive statistics were calculated to describe the supervision quality across the six aspects of supervision i.e. Project management (PM), Intellectual support (IS), Pertinent research skills (PRS) Inter-personal communication skills (IPCS), Workload management (WM) and Supportive skills (SS), across the four different stages i.e. Stage 1: developing synopsis (S1), Stage 2: collecting data (S2), Stage 3: writing thesis (S3) and Stage 4: submitted thesis (S4) of research supervision.

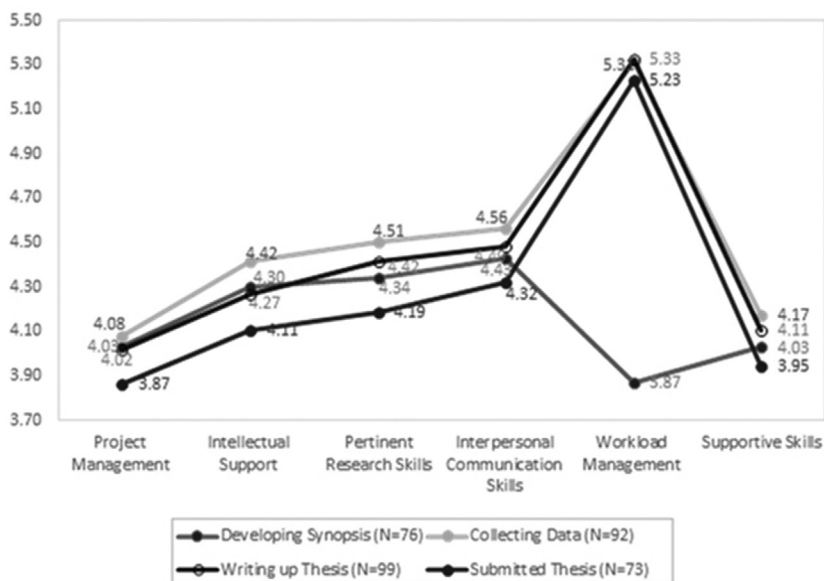


Figure 1. Quality of supervision across the four different stages of research

Stage-wise supervision experiences of supervisees. The Figure shows the supervisees' supervision related experiences in four different research stages regarding the six supervision aspects. It can be well determined from the data points mentioned in Figure 1 that the extent of supervisees' responses ranged from slightly disagree to agree across the four stages of research. It reveals the absence of overall extremely worst or perfect experiences as reported by supervisees with their supervisors. Whereas particular cases might have extreme experiences.

The mean score values for supervision experiences of supervisees indicate positive experiences related to the subscale of PM (M=4.08) IS (M=4.42), PRS (M=4.51), IPCS (M=4.56), as compared to the experiences of supervisees developing synopsis (S1), writing thesis (S3) and have submitted thesis (S4).

Secondly, it is interesting to note that overall supervision related experiences of supervisees who submitted their thesis presented the lowest mean score values. Specifically the mean score values for PM (M=3.87) and SS (M=3.95) indicate a slightly negative experience with their supervisors.

In addition, it is noteworthy that in figure 1 the mean score values for supervisees' experiences regarding PM (S1=4.03, S3=4.02), IS (S1=4.30, S3=4.27), Pertinent Research Skills (S1=4.34, S3=4.42), IPCS (S1=4.43, S3=4.49), and SS (S1=4.03, S3=4.02), overlap at stage 1 and 3 with minor (mean) differences. It shows that supervisees have some similar kind of supervision experiences at both of these stages. However, on the subscale of Workload Management, supervisees experiences at stage 1 (M=3.87) are considerably different from the mean score (M=5.33) value of supervision experiences of supervisees at thesis writing stage.

Furthermore, there can be noticed a high degree of parallelism among supervisee's per item mean scores on the supervision aspects (PM, IS, PRS, IPCS and SS) across the four different stages of research that per item mean score of supervisee's experiences is high for a supervision aspect at stage 1 then it is likely to be high in all other aspects for the same supervision aspects cross-wise all stages of research. Similarly, if supervisees' experiences (per item mean score) in one supervision aspect is low then it is likely to be low in all other supervision aspects. Except WM skills of the supervisors, which present remarkably lower mean scores of the supervisees' experiences who were in the synopsis development stage of

their research as compared to the rest of supervisees' experiences at the different stages of research in general and at the write-up stage in particular.

In explaining the supervisees' experiences who have submitted thesis (per item mean score on 'Project Management'= 3.87), WM (stage 'Developing Synopsis'= 3.87) and SS (stage 'Submitted Thesis'= 3.95) suggest slightly negative experiences with their supervisors in general. The rest of the supervisees' experiences regarding IS, PRS and IPCS with their supervisors reflect an overall positive experiences as calculated per item mean scores for these subscales is above 4 (on the six point scale) presenting absence of negative experiences.

Interpreting the overall experiences of supervisees across the different stages of research it is notable that generally supervisees' experiences are better with their supervisors at stage 2 as compared to the other stages of research. Mean scores of supervisees' experiences at this stage is generally positive.

Subscale-wise supervisee's experiences. The subscale-wise overall mean score comparison of supervisees' experiences with the supervisors pointed the lowest level of 'Project Management' skills of supervisors as compared to the other supervision aspects (PM= 4.00, SS= 4.07, IS= 4.28, PRS= 4.37, IPCS= 4.47 & WM 4.98). The lowest level of PM skills of supervisors highlights the minimum concern of supervisors or their inability towards managing time, tasks/ activities, resources and monitoring of supervisees' research projects within the boundaries of proposed time limits during the research supervision process.

Further, explaining the supervisees' experiences regarding 'Project Management' (per item mean score on stage 'Submitted Thesis'= 3.87), WM (stage 'Developing Synopsis'= 3.87) and SS (stage 'Submitted Thesis'= 3.95) suggest the slightly negative experiences with their supervisors in general. Whereas the rest of the overall supervisees' experiences regarding (IS), PRS and IPCS with their supervisors reflect an overall positive experience as calculated per item mean scores for these subscales is above 4 (on the six point scale) indicating absence of negative experiences reported by supervisees.

Table 4

Descriptive Analysis of Supervision Quality across the Four Stages of Research

Supervision Subscales Dependent variable	Supervisees' extent of experiences across four research Stages							
	Stage 1 N=(76)		Stage 2 N=(92)		Stage 3 N=(99)		Stage 4 N=(73)	
	M	SD	M	SD	M	SD	M	SD
1. Project Management	4.03	.952	4.08	.793	4.02	.919	3.87	1.059
2. Intellectual Support	4.30	.937	4.42	.799	4.27	.951	4.11	1.103
3. Pertinent Research Skills	4.34	.922	4.51	.787	4.42	.931	4.19	1.058
4. Inter-personal Communication Skills	4.43	.892	4.56	.832	4.49	.950	4.32	1.071
5. Workload Management	3.87	.950	5.31	.738	5.33	.701	5.23	.763
6. Supportive Skills	4.03	.894	4.17	.834	4.11	1.003	3.95	1.20

Note. Stage 1 = developing synopsis, Stage 2=collecting data, Stage 3=writing up thesis, Stage 4= submitted thesis

Mean score comparison of SSE across four stages of research

Table 5

Analysis of Variance for SSEs across the Four Research Stages

Independent Variable	Multivariate Statistics				
	Wilk's Lambda	F	Hypothesis df	p	
Stages of Research	.124	45.889	18	.000	
Dependent Variable	Univariate Statistics				
Supervision Aspects	F	df	R ²	p	η ²
Project management (PM)	313.624	3	.010	.124	
Intellectual support (IS)	181.360	3	.002	.591	
Pertinent research skills (PRS)	368.245	3	.029	.011	.040
Inter-personal communication skills (IPCS)	36.095	3	.002	.594	
Workload management (WM)	1739.103	3	.370	.000	.377
Supportive skills (SS)	8615.702	3	.558	.000	.563

Note. * Mean difference is significant at the .05 level

One-way Between-groups Multivariate Analysis of Variance was performed to investigate the stage-wise differences of supervisees’ supervision experiences. Six inter-related dependent variables (Project management, Intellectual support, Pertinent research skills, Inter-personal communication skills, Workload management & Supportive skills) were used and independent variable was the research stages of research (with four discrete categories i.e. S1, S2, S3, S4). The multivariate test statistics in table 6 show that there is a statistically significant difference ($p = .000$) among the SSE across four stages of research on combined dependent variables ($F=45.889$, Wilks’ Lambda $.124$). The significant multivariate test statistics suggest the need to explore the subsequent differences of supervisees supervision experiences in four different research stages on six dependent variables explained by the independent variable.

Furthermore, when results for the dependent variables (PM, IS, PRS, IPCS, WM and SS) were considered separately using univariate test statistics, a significant difference was found among the supervisees’ supervision experiences on the dependent variable “Pertinent research skills” ($p = .011$) with small effect size ($\eta^2 = .040$). However, the supervisees’ supervision experiences related to their supervisors’ skills in managing their teaching and administrative responsibilities besides supervising them ($p = .000$, $\eta^2 = .377$) and “Supportive skills” ($p = .000$, $\eta^2 = .563$) and R^2 represent 37.7% and 56.3% variance on these variables due to the independent variable i.e. research stages.

Table 6
Post-hoc Test of Difference of SSE for Different Research Stages

Dependent Variable	Stage of Research (a)	Stage of Research (b)	Mean Difference (a-b)	p
Pertinent Research Skills	Developing synopsis	Writing up thesis	-5.22(*)	.002
		Have submitted thesis	-3.54(*)	.050
Workload Management	Collecting data	Writing up thesis	-3.57(*)	.026
		Developing synopsis	-10.19(*)	.000
		Writing up thesis	-10.16(*)	.000
Supportive Skills	Developing synopsis	Have submitted thesis	-10.24(*)	.000
		Collecting data	-9.04(*)	.000
		Writing up thesis	-12.36(*)	.000
Supportive Skills	Collecting data	Have submitted thesis	-28.73(*)	.000
		Writing up thesis	-3.33(*)	.017
	Writing up thesis	Have submitted thesis	-19.70(*)	.000
		Have submitted thesis	-16.37(*)	.000

Note. * Mean difference is significant at the .05 level

Furthermore, post-hoc test (LSD) was applied to report the particular research stages which were significantly different in the supervision subscales i.e. Pertinent Research Skills, Workload Management and Supportive Skills.

Discussion

While determining the supervisees' supervision experiences across the four stages of research, it was found that in a particular stage of the research, the supervisees' experiences vary regarding the supervision aspects, that is, PM, IS, PRS, IPCS, WM and SS.

Distribution of Supervision Time

The first objective of the research was to determine the supervision experiences of supervisees across the four different research stages. A major finding related to this objective was that overall supervision experiences of supervisees with their supervisors change across discrete stages of research. These variations can be attributed to the change in the research related tasks that they have to perform at different research stages. If we observe these changes in the reported supervision experiences of supervisees regarding the different supervision aspects of supervisors, it can be found that the supervisees reported least satisfactory supervision experiences about monitoring the work progress, timelines and providing support to accomplish their stage specific tasks. This usually happens because supervisors sometimes are unable to respond to contingent supervisees' needs in terms of time commitment they demand or technical, administrative and academic support they require at a specific stage of the research to perform specific activities.

More specifically, supervisees at synopsis developing and thesis writing stages reported almost similar kind of supervision experiences with their supervisors. More meaningfully, the similarities in the supervision experiences at these two stages is possibly due to the nature of activities, for example, one can find the reflection of tentative plan of activities in synopsis with the actually performed activities reported in the writing of thesis. Similar is the case with the supervision experiences at these two stages. In developing synopsis, they reported what they were supposed to do and at thesis writing stage they reported what actually had

been done in the light of their approved synopsis. The only supervision aspect on which the supervisees at both stages reported significantly different supervision experiences was about the supervisors' ability and willingness to provide sufficient time in supervision sessions. Regarding this aspect, supervisees at synopsis development stage reported non-satisfactory supervision experiences as compared to the experiences of supervisees who were at thesis writing stage. Taylor and Beasley (2005) second this notion and explain that usually at the initial stage, the candidates are heavily dependent upon the supervisors and gradually as they mature, they become researchers in their own right.

One possible reason of such dis-satisfaction might be the least attention of the supervisors for the supervisees at the beginning of their journey as compared to the supervisees in the later stages of their research. However, in some cases it could be the first experience of the students taking degrees with research at postgraduate level. The supervisees need and expect more time and attention of their supervisors for developing their understanding about research. On the other hand, it is perceived that students have already taken advanced research methods courses, so they understand the research process and can develop their synopsis. Nonetheless, the skills required to develop the research design need more proficiency while developing one's own research independently. Moreover, in the absence of any training of supervisors, the perceived understanding about the appropriate nature of support and time allocated for research supervision at specific stages of research at times disappoints the supervisees.

As such, the supervisees at synopsis development stage expect more time of their supervisors to discuss their research related ideas, specifically while refining their research topic, designing the methodology and appropriate analysis techniques for their research. This argument is supported by the findings of a research conducted by McAlpine and McKinnon (2012). They explored the supervisory relationships from the perspective of students' experiences with their supervisors over time and reported that individuals in their early and late phases of doctorate required more help of their supervisors than the middle stage. However, the sample of the study was too small and the research stages were not clearly defined to make strong generalizations. It can be pointed out that supervisors can improve the supervision experiences by examining the nature of help and adequate time to respond the supervisees' issues across the different stages of the research.

Supervision Support and Record System

The mean score difference of supervisees who have completed the process of research supervision, reported least positive supervision experiences as compared to the supervisees at other stages of supervision. These unsatisfactory experiences can be considered as these supervisees they have gone through the whole process of thesis and the element of fear to report negative supervision experiences have been reduced. Secondly, the supervisees who have completed the theses are in a better position to reflect on the research supervision as a product and to compare their supervision experiences within the provided timeliness to accomplish the tasks at a specific stage of research.

In addition to the above, the current practices of supervision support the fact that the guidance during research in our local context is not structured and rigorous in terms of its frequency and any written evidence of supervision meetings, such as minutes or any other evidence. In the context of Pakistan, there are no formal guidelines for supervisors or supervisees in managing the research projects (Saleem, 2017), due to which no formal regulations can be observed for providing the meeting schedules, deadlines for submission of drafts, assessing the feasibility of available or accessible resources in designing, conducting and reporting the research by supervisors. This creates a gap as well as a conflict between the expected ways of supervision practices of supervisors and their self-assumed roles and responsibilities to supervise at different research stages with continuously changing needs of the supervisees.

These irregularities ultimately result in late thesis submission and sometimes drop out. The stage specific variations in the supervision experiences of supervisees regarding the different supervision aspects of supervisors indicate the need to understand the dynamic kind of support and the time management required. Salmon (1992) elaborates the change in research stages with a dynamic need for supervisors to be flexible in meeting the specific needs of students. A contingent supervision support system is required at each specific research stage to improve the progress and quality of supervision in different stages of research. Moreover, the mismanagement during the process creates a denunciation between supervisors and supervisees.

The Dynamics of PhD Research and Supervision

At the beginning of the research, students need more time and support of supervisors to understand the research needs and to develop the skills and capacity to conduct a research. Initially, supervisees may not have good mutual understanding with their supervisors, which may lead to dissatisfaction. This notion is evident from the supervisee's reported experiences at the synopsis development stage, which were least positive as compared to the supervision experiences of supervisees at the other stages of their research. This point is also evident from the low mean score values of supervisee's experiences related to IPCS with their supervisors. Ismail, Majid and Ismail (2013) conducted a study, in which postgraduate research students were interviewed. They expressed their frustration at the lack of positive communication by their supervisors, especially at the beginning of their PhD journey. It is meaningful to discuss that supervisees at the thesis submission stage have undergone a complete range of experiences about all aspects of supervision. It can thus be inferred that they can more accurately visualize the effectiveness of supervision experiences with their supervisors.

Positive supervisees' experiences related to the personal support may be helpful in resolving personal, technical administrative and employability related issues. Generally, supervisees have difficulties in publishing their research and in meeting other criteria for thesis evaluation and have reported negative experiences regarding supervision support mechanism.

The incongruence between the expected needs and support for supervision leads to dis-satisfaction with supervision. The dissatisfaction with the required supervisory support can be explained by the reported negative supervision experiences in the different supervision aspects at the different stages of the research. In addition to this, another factor is negligence towards addressing the contingent needs of supervisees starting from selecting a research topic, planning the research, identifying and acquiring the necessary resources, managing the project and many others (Piccinin, 2000). The least satisfactory experiences of supervisees, who had submitted their theses can be concluded as some kind of disappointment that they had faced during the supervision process.

Conclusion and Recommendations

It appears that at the beginning of the research candidacy, it was taken for granted that students had already taken advanced research methods course, and they knew how to develop their ideas into researchable topics and would be able to conduct their research in a manageable way. However, the management of research project does not only require the orientation about the content knowledge of research methods, but also the constant support from supervisors to deal with research related problems. The candidates should undergo orientation training to understand the complexities of process at different research stages and to ensure that they have a realistic understanding of the targets, activities and their responsibilities. At the supervision level, the concrete record of supervision meetings or minutes can be used as indicators to track the progress, quality of supervision and the obstacles across the research journey. Considering the research supervision as static entity results in late submissions, or drop out from the economically and intellectually highly invested degree programs.

References

- Armstrong, S. J. (2004). The impact of supervisors' cognitive styles on the quality of research supervision in management education. *British Journal of Educational Psychology*, 74(4), 18.
- Baptista, A. V., Hue, I., Costa, N., & Jenkins, A. (2011). Enhancing the scholarship of teaching, learning and supervision through undergraduate research projects. In *The London Scholarship of Teaching and Learning 8th International Conference*.
- Boehe, D. M. (2016). Supervisory styles: A contingency framework. *Studies in Higher Education*, 41(3), 399-414.
- Eley, A., & Jennings, R. (2005). *Effective postgraduate supervision: Improving the student/supervisor relationship*. London: McGraw-Hill International.
- Gatfield, T. (2005). An investigation into PhD supervisory management styles: Development of a dynamic conceptual model and its managerial implications. *Journal of Higher Education Policy and Management*, 27(3), 311-325.
- Gurr, G. (2001). Negotiating the 'rickety bridge': A dynamic model for aligning supervisory style with research student development. *Higher Education Research and Development*, 20(1), 81-92.
- Ismail, H. M., Majid, F. A., & Ismail, I. S. (2013). "It's complicated" relationship: Research students' perspective on doctoral supervision. *Procedia-Social and Behavioral*

- Sciences*, 90, 165-170.
- Ives, G., & Rowley, G. (2005). Supervisor selection or allocation and continuity of supervision: Ph.D students' progress and outcomes. *Studies in Higher Education*, 30(5), 535-555.
- Lessing, A. C., & Schulze, S. (2002). Graduate supervision and academic support: Students' perceptions. *South African Journal of Higher Education*, 16(2), 139-149.
- Lodico, M. G., Spaulding, D., & Voegtle, K. H. (2010). *Methods in educational research: From theory to practice*. San Francisco: John Wiley & Sons.
- Kam, B. H. (1997). Style and quality in research supervision. *Higher Education*, 34(1), 81-103.
- Lynch, S. (2008). *Happy days: Why PhD students need a helping hand from their supervisors*. Retrieved from <http://www.independent.co.uk/news/education/higher/happy-days-why-phd-students-need-a-helping-hand-from-their-supervisors-781842.html>
- Mainhard, T., Rijst, R.V. D., Tartwijk, J. V., & Wubbles, T. (2009). A model for the supervisor-doctoral student relationship. *High Education*, 58, 359-373.
- McAlpine, L., & McKinnon, M. (2013). Supervision—the most variable of variables: Student perspectives. *Studies in Continuing Education*, 35(3), 265-280.
- Moses, I. (1992). Good supervisory practice. In Holdaway, E., (Eds.) (1995). Supervision of graduate students. *The Canadian Journal of Higher Education*, 25(3), 1-29.
- Pearson, M., & Kayrooz, C. (2004). Enabling critical reflection on research supervisory practice. *International Journal for Academic Development*, 9(1), 99-116.
- Piccinin, S. J. (2000). *Graduate student supervision: Resources for supervisors and students*. Triannual Newsletter, Centre for Development of Teaching and Learning (CDTL). CDTLink: University of Ottawa, Canada.
- Saleem, T. (2014). *Impact of supervisor-supervisee relationship on the quality of supervision at postgraduate level*. Unpublished MPhil thesis, submitted at the Institute of Education and Research, University of the Punjab, Lahore.
- Saleem, T., & Mahmood, N. (2017). Influence of the supervision related background variables on the supervisees' supervision experiences at postgraduate level. *Pakistan Journal of Education*, 34(2), 73-99.
- Salmon, P. (1992). *Achieving a PhD: Ten student's experience*. Staffordshire: Trentham Books Limited.
- Sambrook, S., Stewart, J., & Roberts, C. (2008). Doctoral supervision: A view from above, below and the middle. *Journal of Further and Higher Education*, 32(1), 71-84.
- Shultz, S.K., & Whitney, D.J. (2005). *Measurement theory in action*. London: Sage Publication.

- Stubb, J., Pyhältö, K., & Lonka, K. (2014). Conceptions of research: The doctoral student experience in three domains. *Studies in Higher Education, 39*(2), 251-264.
- Styles, I., & Radloff, A. (2001). The synergistic thesis: Student and supervisor perspectives. *Journal of Further & Higher Education, 25*(1), 97-106.
- Taylor, S., and Beasley, N. (2005). *A handbook for doctoral supervisors*. New York: Routledge.
- Wellington, J. J. (2010). *Making supervision work for you: A student's guide*. New York: Sage.
- Zhao, C. M., Golde, C. M., & McCormick, A. C. (2007). More than a signature: How advisor choice and advisor behaviour affect doctoral student satisfaction. *Journal of Further and Higher Education, 31*(3), 263-281.