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Perceptions of Research Scholars towards Research Supervision and Supervisory Practices at Doctorate Level

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Abstract

The current paper was about the investigation of perceptions of research scholars towards research supervision and its impact on academic satisfaction and research skills. The main objectives were to investigate the satisfaction of research scholars, explore the perceptions of research scholars about their supervisors' expertise and supervisors' supervisory practices in M. Phil degree. Data were collected with self-developed instrument named Doctoral Students' Satisfaction and Research Skills Survey (DSSRSS). The statistical tests frequency distribution and t-test were applied. The result revealed that research scholars were dissatisfied with the supervisory practices of the supervisors (Mean = 2.56, SD = .754) and research expertise of the supervisors (Mean = 2.87, SD = .698). Female students were found to be more dissatisfied than those of male students in both supervisory practices and research expertise of the supervisors. The process of research supervision should be improved to get the fruitful results both quantitatively and qualitatively.

Keywords: research supervision, supervisory practices, research expertise

Introduction

The increasing quantity of professional doctorates completed now a day make the literature strong about impact and design of those disciplines (Bourner et al., 2001; Kot and Hendel, 2011). The Professional degrees differ on the basis of institution, discipline, location, and nature of work. Some are solely work-based projects supervised by senior faculty, many have coursework accompanied by dissertation. The effectiveness and feedback of such programs, especially, their impact, have been measured in the form of scholars' competence for the benefit of organization (Halse & Mowbray, 2011; Lester & Costley, 2010).

The impact of professional doctorates' education has focused on the benefits, outcomes, and returns but is not limited to economic revenues (Halse & Mowbray, 2011). It is relevant to the placement, employability, publications, patents, and innovations of doctoral programs with students' personal growth and knowledge (Halse & Mowbray, 2011). Impact of doctoral candidates measured in the form of the research activities take place in academic institutions (Lester &Costley, 2010). Research conducted by professionals in organizations and universities have high impact (Lee et al., 2000). It connects the findings in the real world and is aimed at improving practice. Doctoral candidates are considered to have increased confidence, expertise, responsibility, followed by innovative research skills in workplace (Costley& Stephenson, 2008; Lester & Costley, 2010; Nixon et al., 2008; Rhodes & Shiel, 2007). There is an increased motivation and professionalism with employees' participation in professional organizations (Lester & Costley, 2010). It is apparent that quality of doctoral education impacts the future career of doctoral students (Ehrenberg et al., 2008). Halse and Mowbray(2011) declared that doctoral degree is conceptualized as process and a product leads to diversity in various disciplines. The knowledge and skills attained in doctoral education is not always measurable because it generates knowledge (Tennant, 2004).

The increased proportion of doctoral students completing PhD degree is the top priority of nations who are developing their higher education systems (OECD, 2008; Om,2011; University of the South Pacifc, 2013) with demographic changes (Mafenya, 2014). The most advanced countries with advanced educational system have controversy debate about the quantity or quality preferences with a broader and deeper research skill (DIISR, 2011).The pressure to complete successful doctoral degree timely is pervasive because of utmost demands. The Research Training Scheme started in Australia (September, 2000) has changed the higher education system due to growing pressure of degree completion (Green, 2003). The both doctoral candidates and research supervisors are under pressure to timely completion of their research projects within maximum four years full-time equivalent.

The university funding largely depends on timely completion of doctoral degrees (Green, & Bowden, 2012). In Australia, the double supervision of PhD scholars is under practice or has shifted a panel of supervisors with different expertise about doctoral work. The candidate need different skills at different times and that one individual cannot fulfill all needs. No onesupervisor has all expertise needed for supervision.

The effective supervision has significant element that is responsible for timely and successful completion. According to supervision is a prime indicator in doctoral progress (Murphy et al., 2007). According to Lee (2008), the supervisor can make or break doctoral scholar. The role of supervisor is crucial that utilizes the outcomes of doctoral journey. This paper looks at supervisory practice and extends an earlier model for research supervisory practice (RIP: Relationality, Intellectualism, Physicality) (Green, 2003) to now become RIPE to encompass issues of emotionality more explicitly. The notion of mindfulness (Langer, 2009; Langer & Moldoveanu, 2000) is suggested as a key element in the quest to produce a “completion context” in which timely, successful completion is the main goal.

Review of Related Literature

There are no universal, explicit and precise criteria for completion of doctoral degree successfully. Many researchers and practitioners have pointed the difficulty and complexity of supervision of research scholars (Erichsen, Bolliger, & Halupa, 2014; Johnson, 2005).The current process of supervision of research scholar shave deficient, emotional and psychological problems among supervisees and supervisors. There is a lack of knowledge, skills and attitude that effect of late completion and low retention rates (Buttery, Richter, & Filho, 2005).According to Cullen et al. (1994),the supervisor effectiveness has four major areas. The importance of academic competence of supervisors was identified by (Moses, 1994; Skerritt, 1994; ESRC, 2001; Zhao, 2003).

1. Supervisory style and directions of supervisors like allocation of regular time and meetings, help in generation of original ideas, and close interaction with academics.
2. Supervisor competence and awareness about academic literature.
3. Supervisor attitude, approachability, friendliness and support.
4. Supervisor academic and intellectual ability as thinker and consistent involvement.

The scope, purpose, and function of doctoral education are widely debated (Baker & Lattuca 2010). The development and learning process of research scholars require support, interaction, and socialization play positive role in doctoral students’ completion of degree (Baker & Lattuca 2010; Hall & Burns 2009; Taylor, 2007). Many studies have highlighted the mentoringin doctoral students’ socialization (Parker, 2009; Watts, 2010). Manathunga and Goozée (2007) showed the apprentice relationship with their supervisors’ knowledge. The process of mentoring relationship with supervisor affect the quality of the doctoral degree (Boud & Lee 2009; Golde 2005; Green

1991; Paglis, Green, & Bauer 2006; Tenenbaum, Crosby, & Gliner 2001). According to Ives and Rowley (2005), the communication between the scholar and supervisor is an important component in scholars' academic development.

Research Supervision

Doctoral supervision has developed academic, interpersonal, and pedagogical skills needed for successful relationship (Cornforth & Claiborne 2008; Eley & Jennings 2005; Engebretson et al., 2008; Lee, 2008; Manathunga & Goozée, 2007; Sarja & Janhonen, 2009; Reidy & Green, 2005). There is a positive relationship between supervision satisfaction and degree completion(Ferrer de Valero, 2001; Haksever & Mainsali, 2000). In the view points of Heath (2002) and Manathunga (2005), continuous meetings and feedback has positive role in completion of scholars' degree and academic satisfaction. These findings are also proved by (Heath, 2002; James & Baldwin, 1999; Reidy & Green, 2005).Positive academic relationship between supervisor and supervisee leads to improved scholars' success and satisfaction (Boucher & Smyth, 2004; Malfroy, 2005; Wisker, Robinson, & Shacham, 2007).

Doctoral students in the USA self-finance their education either funded by employers, apprenticeships, and part-time work with weekend classes. However they utilize much of the time to complete their degree, 8.3 years (Golde & Walker, 2006). The doctoral degree with e-learning education has gained popularity in recent years (Power & Vaughan, 2010).

Objectives of the study

It was the purpose of the study to investigate PhD students' perceptions about supervision. The following research questions were designed for the study:

1. To investigate the satisfaction of research scholars in PhD degree.
2. To explore the perceptions of research scholars about their supervisors' expertise in PhD degree.
3. To find out the perceptions of research scholars about their supervisors supervisory practices in PhD degree.
4. To trace out the difference between the perceptions of male and female researchers.

Research Questions

The research questions were as under:

1. How satisfied are PhD students with their supervisors?
2. How do research scholars perceive their supervisors' role about research expertise?
3. To what extent research scholars are satisfied with supervisors' supervisory practices?
4. To what extent research scholars perceptions differ gender wise?

Methodology

The survey method was used for data collection through questionnaires. The random sampling technique was used. It was considered that maximum variation of sampling of participants made up for the sample (Patton, 2002). Participation of males and females was made appropriate representation.

Population and Sample

The population consisted of 250 PhD scholars. Students were requested to participate via email with instructions on how to access the online questionnaire. Those who showed their willingness to get printed questionnaire were delivered to them and collected personally. The PhD scholars were selected randomly from different public sector universities.

Data collection and analysis

Data were collected in 2018 utilizing an online survey and personally delivered questionnaire named, Doctoral Students' Satisfaction and Research Skills Survey (DSSRSS) developed by the researcher. The data were analyzed by using SPSS version 24. Frequency analysis and t-test were applied.

Supervisor's Supervisory Practices

1. How satisfied are PhD students with their supervisors?

2. How do research scholars perceive their supervisors' role about research expertise?

Table 1. Mean Scores and Standard Deviations for Supervisor's Supervisory Practices (N = 250)

S#	Statements	Mean	SD
1	My supervisor is always available for my research help.	2.50	1.40
2	My supervisor encourages and supports me in publishing my research work.	2.68	1.28
3	My supervisor considers my expectations regarding supervision.	2.68	1.31
4	My supervisor is familiar about the evaluation process of thesis.	2.30	1.18
5	My research supervisor has clear cut schedule to enhance the progress of my research work.	2.30	1.19
6	My research supervisor helps me in getting external funding for my research work.	2.51	1.25
7	My supervisor checks and returns my work promptly.	2.53	1.37
8	My research skills went in vain in the hands of unskillful supervisor.	3.00	1.26
9	My research supervisor is the sole responsible for my poor research skills in MPhil degree.	2.93	1.30
10	Sometimes I feel that my supervisor treats me as a laborer to enhance his own research work.	3.30	1.32
11	I get emotional support and encouragement from my supervisor.	2.70	1.20
12	I often experience lack of feedback from my supervisor to make progress in my research work.	3.36	1.02
13	My supervisor accommodates my personal problems I face during research.	2.68	1.46
	Overall indicator	2.56	.754

Table 1 showed that the scholars disagreed that their supervisors are always available for their research help. The scholars disagreed that supervisors encourage and support them in publishing their research work and expectations. The scholars disagreed that supervisor is familiar about the evaluation process of thesis. Most of the supervisors did not have clear cut schedule to enhance the progress of their research work.

The research scholars disagreed that research supervisor helps in getting external funding and checks and returns their work promptly. The research scholars were disagreed that their supervisor is sole responsible for their poor research skills. The scholars disagreed that they get emotional support from their supervisor. They agreed that they get lack of feedback from their supervisor to make progress in research work. They disagreed that their supervisor accommodates their personal problems they face during research.

The overall mean of the indicator showed that students were dissatisfied with the supervisory practices of the supervisors (Mean = 2.56, SD = .754).

3. To what extent research scholars are satisfied with supervisors' supervisory practices?

Table 2. Mean Scores and Standard Deviations for Supervisor's Research Expertise (N = 250)

S#	**Statements**	**Mean**	**SD**
14	I warmly recommend my research supervisor to my juniors.	3.16	1.13
15	I get technical expertise from my supervisor.	3.10	1.33
16	My supervisor spends much of time in discussion with me regarding his research expertise.	2.98	1.35
17	The competence in research work is due to my supervisor's effort.	2.95	1.12
18	My supervisor guides me about digital resources and sites.	3.18	1.17
19	My supervisor has total command on his research skills.	3.59	1.56
20	My supervisor guides about the clarity of research concepts.	3.13	1.36
21	My supervisor helps me to understand all dimensions of research work.	3.90	1.22
22	My supervisor's research expertise always improves my research work.	3.37	1.44
23	My supervisor helps me in selection and refining of the research topic.	4.12	1.17
24	My supervisor is friendly and accommodating.	3.28	1.15
	Over all Indicator	2.87	.698

Majority of scholars told that their supervisor was friendly and accommodating. They also strongly agreed that their supervisor helps them in selection and refining of the research topic. Most of the scholars told that their research expertise are improved by their research supervisor. They agreed that supervisor helps them to understand all dimensions of research work, clarity of research concepts, Guide about digital sites and command on his research skills. They disagreed that competence in research work is due to their supervisor's effort. They also disagreed that supervisor spends much of time in discussion with them regarding his research expertise. Majority of respondents agreed that they would warmly recommend their research supervisor to juniors and get technical expertise from their supervisor.

The overall mean of the indicator showed that students were dissatisfied with the research expertise of the supervisors (Mean = 2.87, sd = .698).

4. To what extent research scholars perceptions differ gender wise?

The research hypothesis from the above research question was framed as follows.

Ho1: Is there any significant difference between male and female scholars' perceptions about the supervisors' supervisory practices?

Table 3. Comparison of Male and Female Scholars' Perceptions about the Supervisors' Supervisory Practices

Gender	**N**	**Mean**	**Std. Deviation**	**t**	**p**	**Eta square**
Males	116	2.40	.770	-3.177	.002**	.03
Females	134	2.70	.715			

**p<0.01

According to table 3, t-test was applied to explore the difference among gender of students regarding the perceptions about the supervisors' supervisory practices. It revealed that there exists a statistically significant difference between male and female scholars on the basis of their responses about the supervisors' supervisory practices. The overall mean achievement score of male students (M = 2.40, SD = .770) and female students (M = 2.70, SD = .715, t(248) =-3.177, p<0.01). Female students were found to be more dissatisfied than that of male students in the sampled data. So the research question that is there any significant difference between male and female scholars' perceptions about the supervisors' supervisory practices answered in positive? The next step was to investigate the magnitude of the difference by gender. The Effect size statistics provide an indication of the magnitude of the differences between groups (not just whether the difference could have occurred by chance). There are a number of different effect size statistics, the most commonly used being eta squared and Cohen's d. Eta squared can range from 0 to 1 and represents the proportion of variance in the dependent variable that is explained by the independent (group) variable. The procedure for calculating eta squared is provided by the formula for eta squared is (Pallant, 2010: 243) as follows:

Eta squared = $t^2/t^2 + (N1+N2-2)=$

Inserting the values in the formula mentioned…

Eta squared = $(-3.177)^2/(-3.177)^2 + (116 + 134 – 2)=10.09/10.09+248=0.03$

Eta squared = 0.03 (small effect). (Cohen 1988)

For the current sample, the effect size of 0.03 is small. It means that 3% of the variance regarding the supervisors' supervisory practices was explained by the sex.

Is there any significant difference between male and female scholars' perceptions about the supervisors' research expertise?

Table 4. Comparison of Male and Female Scholars' Perceptions about the Supervisors' Research Expertise

Gender	N	Mean	Std. Deviation	t	p	Eta square
Males	116	2.75	.736	-2.584	.010*	0.02
Females	134	2.97	.649			

*p<0.05

According to table 4, t-test was applied to explore the difference among gender of students regarding the perceptions of research scholars' about the supervisors' research expertise. It revealed that there exists a statistically significant difference between male and female scholars on the basis of their responses about the supervisors' research expertise. The overall mean achievement score of male students (M = 2.75, SD = .736) and female students (M = 2.97, SD = .649, t(248) =-2.584, p<0.05). Female students were found to be more dissatisfied than that of male students. So the research question that is there any significant difference between male and female scholars' perceptions about the supervisors' research expertise answered in positive? The eta square formula is as follows:

Eta squared = $t^2/t^2 + (N1+N2-2)=$

Eta squared = $(-2.584)^2/(-2.584)^2 + (116 + 134 – 2)=6.68/6.68+248=0.02$ (small effect)

Results and Discussion

Table 1 showed that the scholars disagreed that their supervisors are always available for their research help. The scholars disagreed that supervisors encourage and support them in publishing their research work and expectations. The scholars disagreed that supervisor is familiar about the evaluation process of thesis. Most of the supervisors did not have clear cut schedule to enhance the progress of their research work.

The research scholars disagreed that research supervisor helps in getting external funding and checks and returns their work promptly. The research scholars were agreed that their supervisor is sole responsible for their poor research skills. The scholars disagreed that they get emotional support from their supervisor. They agreed that they get lack of feedback from my supervisor to make progress in research work. They disagreed that their supervisor accommodates their personal problems they face during research.

The overall mean of the indicator showed that students were dissatisfied with the supervisory practices of the supervisors (Mean = 2.56, sd = .754).

Majority of scholars told that their supervisor was friendly and accommodating. They also strongly agreed that their supervisor helps them in selection and refining of the research topic. Most of the scholars told that their research expertise is improved by their research supervisor. They agreed that supervisor helps them to understand all dimensions of research work, clarity of research concepts, Guide about digital sites and command on his research skills. They disagreed that competence in research work is due to their supervisor's effort. They also disagreed that supervisor spends much of time in discussion with them regarding his research expertise. Majority of respondents agreed that they would warmly recommend their research supervisor to juniors and get technical expertise from their supervisor.

The overall mean of the indicator showed that students were dissatisfied with the research expertise of the supervisors (Mean = 2.87, sd = .698).

It revealed that there exists a statistically significant difference between male and female scholars on the basis of their responses about the supervisors' supervisory practices. Female students were found to be more dissatisfied than that of male students in the sampled data.

There exists a statistically significant difference between male and female scholars on the basis of their responses about the supervisors' research expertise Female students were found to be more dissatisfied than that of male students.

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