Influence of Developing Professional Communication on the Success of Postgraduate Research Supervisory

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Abstract: - This paper focuses on the evaluation of graduate supervision and highlights the problem areas presently documented as significant areas of concern for both graduate students and their supervisors. It aims to understand supervision as pedagogy where effective communication between the student and supervisor would encourage the successful completion of the research project. Current literature on supervisory feedback emphasis what types of feedback is given rather than how it is given and perceived and how students feel about and react to feedback. This research tries to attend to psychological theories to understand how much a feedback from a supervisor may affect the graduate student attitude and motivation to achieve his study goals.

Key-Words: postgraduate study, supervision, feedback, communication, feedback psychology, feedback quality

1 Introduction

Postgraduate supervision is a corner stone of an academic career. Research in this area pointed out the critical importance of this role and describes it as probably the most responsible task undertaken by an academic [1] [2]. Further, Armstrong [1] described the context in which a successful supervision relationship between supervisors and students can exist as "successful supervision depends to a significant extent on relationships that are founded in trust, warmth and honest collaboration". However, the supervision process could become problematic and significantly affects the completion of postgraduate studies. Recent studies such as the 'Analysis of Baseline Program Data' from the Ph.D. Completion Project (University of Georgia in the US) which examined both private and public institutions in the US, reported that the completion rate ten years after students begin their doctoral program remains low at 56.6% [3]. As other researchers suggested this low completion rate raises concerns about the waste of limited resources and the shortage of "domestic talent pool" [4]. Grasso et al. [3] explained their view on the completion of doctoral students in that "Whether or not a student graduates, each and every doctoral student represents a substantial investment in terms of time, intellectual resources and public and private dollars". This is because doctoral student demands long time of face-to- face supervision from experts and lot of funds to support the postgraduate programs. Lovitts [5] confirmed this view and argued that "low Ph.D. production rates ... put the existence of doctoral programs (and the faculty

who teach them) at risk". Moreover, Lovitts [5] elaborated that PhD graduates can occupy professional positions that justify the costs afford by students and their families during their study and provide professional work to the society, thus, failure to complete their study represents a loss to the society and may leave them with psychological and family unrest. It is clear that this widespread problem of non-completion not only impacts student but also faculty, administration, and society and makes it necessary to conceive the reasons and find out proper ways to overcome it. This paper focuses on the quality of postgraduate supervision, particularly the effect of feedback exchange between supervisors and supervisees on the achievement and performance of supervisees. The research draws on psychology to understand why and how the nature of the feedback may affect the student response and behaviour when exposed to different kinds of feedback.

This paper is organised as follows, Section2 presents the quality factors of supervision, Section3 discusses the quality of feedback, Section4 defines feedback in the context of higher education, Section5 discusses the types of feedback from the point of view of psychology, Section6 discusses strategies for giving feedback, Section7 concludes the paper.

2 Quality Factors of Supervision

Numerous factors have been identified in the literature as significant to the success or failure of the postgraduate student research and study. In evaluating the relationship between postgraduate students and their supervisors, much research has been done with a focus on the factors that may influence the quality of the relationship, as it is a key that determines the success and timely completion of student's research. In a survey for the Swedish National Agency for Higher Education [6] which presented a comparative review of postgraduate student's attitudes in four European countries: Sweden, Finland, Catalonia, and Ireland. The results of the survey showed the critical issues that students view as problematic includes supervisor interest in their studies, levels of constructive criticism, degree to which their supervisor engaged the student in discussions of methodological, theoretical, and general subject area issues. Others [7] confirmed these results and add more issues as communication and disagreements about the research project, conflicting perspectives within the supervisory role, and limited knowledge and expertise of the supervisor in the field of research. The study of [3] substantiated the fact that good communication between supervisor and doctoral students facilitates positive relationships and stated the importance of "open, regular, timely, respectful, and professional communication." The study also found communication in the form of supervisor-student feedback is crucial for ongoing success in the relationship during which both parties could openly communicate information and concerns.

3 Quality of Feedback

In the study of Bernard and Goodyear [8] about supervision experiences, they indicated that supervisees most often note the quality and quantity of feedback they received. More discussion by Wadesango Machingambi [7] on the issues postgraduate students perceived as problematic in their study, the authors pointed out supervisor's feedback as one of the most important. During the interviews the researchers have conducted with a group of 40 participants (Master and PhD students), 40% of the participants complained of receiving too little feedback from their supervisors, 25% raised the concern that supervisors tend to give feedback which conflicts with previous feedback. The results of the study indicated that consistency in providing feedback to the student is an important matter. In addition, students reported that delayed and infrequent feedback had large effect on the completion of their study at the proposed time as well as the quality of the research. This is compatible with the finding of [9] that postgraduate students view the ideal supervisor as not only the one who provides prompt feedback but also constructive criticism of the research. Taylor [10] claimed that feedback has high impact on post graduate students' study, research behavior and performance. In the context of performance appraisals, feedback also informs supervisees how well they performed a task relative to a goal or standard level of performance [11]. Therefore, the

quality of feedback from supervisors is critical to the success of students in research.

4 Feedback... What is it?

Research in the field of postgraduate supervisory has widely acknowledged feedback as an important part of the communication between students and their supervisors in the environment of higher education [12] [2]. Feedback to research students is a vital aspect with multifaceted functions in postgraduate research supervision. However, Knowles argued that "providing feedback which combines thoroughness and sensitivity, and which is necessarily critical, analytical and evaluative, is a difficult balancing act" [13]. Literature offered a number of definitions of the term "Feedback" particularly written feedback, Ramaprasad [14] stated that, 'Feedback is information about the gap between the actual level and the reference level of a system parameter which is used to alter the gap in some way' [14]. As [2] suggested, feedback needs to provide information specifically relating to the task or process of learning that fills a gap between what is understood and what is aimed to be understood. Sadler [15] stresses that 'information about the gap between actual and reference levels is considered as feedback only when it is used to alter the gap', i.e. the comment must be usable by the student. Walker [16] argued that, to be usable by the student, a tutor's comment must do more than simply point a gap out, it must help the student to reduce or close the gap. Feedback has been conceptualized in a number of different ways, and the following section examines a few of the approaches to identifying types of feedback.

5 Positive Vs. Negative Feedback in Psychology

Literature of different types of feedbacks illustrated that Perceived feedback given by a professor is one of the crucial mechanisms that help students to achieve goals, and professor's feedback provides students with information about their performance which cannot probably received from others. Also, this feedback mechanism may predict a student's subsequent task performance [17]. Bandura[18] stated that information regarding performance outcomes is an important source of perceived efficacy, which can be defined as a major determinant of motivation. Positive feedback is defined as feedback on accomplishments, strengths, and correct responses, and negative feedback as feedback on lack of accomplishments, weaknesses, and incorrect responses performance [17].

5.1 Positive feedback and motivation increment

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5.2 Negative feedback and motivation increment

Research on the effect of negative feedback explained that it is often harmful and can undermine motivation by lowering the person's expectations of success. This happens after failing to pursue a goal, individuals concluded they were (at least temporarily) less able to succeed on a goal and, consequently, they disengage [18]. Other theories (Self- Regulation), assume that the negative feedback promotes goal-directed behaviour more than positive or no feedback. It explains that, negative feedback can stimulate individuals to achieve their goals when they perceive the difference between the current state and the end goal they wish to achieve [19]. The findings of the research of Carver and Scheier [19] suggest that people will work harder toward a goal when they receive negative feedback that makes them feel bad about their goal. In line with that, Arkes and Ayton [20] argue that negative feedback should increase persistence, because people need to justify their prior failed efforts by persisting with a course of actions that pursues the same failed goal, as a result of not getting positive feedback on making sufficient progress on the goal. This means that negative feedback can motivate individuals by signalling their progress is insufficient.

From the above discussion it can be concluded that no one type of feedback is proved to be more motivating. However, it shows how each type can influence the motivation of individuals. Feedback can be both positive and negative. While giving positive feedback is relatively easy, being a supervisor can involve occasions when it is important to give negative feedback on research or progress in general.

6. How to give feedback?

To optimize the effect of feedback, attention should be paid to the psychology of giving and receiving feedback [21]. Positive feedback tells the student what he/she doing is right, which stimulates the student to do more of it. But it is also true that student won't improve as much

if he/she only gets positive feedback. Student need to know what isn't working or could be done more effectively [22]. Ackerman [22] argues that a balance of positive and negative feedback is a good strategy, but that balance should reflect the overall quality of the student's performance or research. If the work was mostly not very good, the feedback should reflect that. But very few things the author thinks are completely wrong or without anything worthy of a positive comment. Providing feedback that promotes learning is a time-consuming and intellectually challenging task. But it doesn't have to be only negative if students are to improve. Negative feedback, when balanced with positive feedback, can be delivered without injury to self-esteem. It is obvious that the balance of feedback needs to respond to what the supervisor knows of the learning needs of the student. Does he need an alert or need encouragement?

Students vary in their attitude to receiving feedback and the degree of self-esteem; therefore, it is important to notice the effect of feedback on them. In an empirical study conducted by [23], the author hypothesized that, individuals differ in the degree to which they take negative feedback personally, with such feedback leading some people to feel much worse about themselves than others. Brown [23] tried to investigate the relationship between self-esteem and emotional reactions to positive and negative events. The findings have shown that highself-esteem people report less emotional distress when they encounter negative feedback than do low-selfesteem people. These findings have its implications in the context of postgraduate supervisory as to guide supervisors on how and when to give a negative feedback which might discourage a student, engender anger, and not produce the desired results. Studies in the nature of the relationship between supervisor and student [24] affirm the importance of constructive feedback that helps to develop the current student's performance. With positive comments that are presented objectively and the supervisor focus on the problem not the student, he/she will feel more confident in openly discussing research, issues, and challenges with the supervisor and help break down barriers and encourage productivity. When students perceive feedback as not personal, they will tend more to accept it and being able to integrate it into future work which is a powerful skill that would be of great benefit to the student in the future career life.

7. Conclusion

Postgraduate supervision is a critical role in the learning process in higher education. Studies in this area indicated that the relationship between graduate students and their supervisors could contribute either to the success of student towards achieving the degree on time or a delay and may be non-completion the study. Doctoral non-completion has an expensive implications not only for society and institutions, but also for individuals. Research

on how to overcome this problem has pointed to the importance of effective communication between supervisors and students. One important aspect of this relationship is the provision of guidance and feedback during the graduate study. Feedback enhances student achievement by highlighting progress rather than deficiency. With progress feedback, a student will be able to successfully self-monitor, have higher aspirations for further achievement, greater self-satisfaction, and higher performance. By taking the time to discuss with a student and offer constructive criticism and suggestions, supervisor can positively impact student learning. The successful supervisor would always be keen on encouraging learning through self-reflection and being diplomatic yet supportive when offering criticism. However issues of control and guiding the student to be independent should not be overlooked. The more a student relies on their supervisor to provide feedback, and the more the supervisor is inclined to give this, a dependent relationship is created. Research also pointed to the importance of considering the psychological factors involved in the feedback process and the students' emotional responses to feedback. For example, how students respond to positive and negative feedback, and found that students with higher self-esteem held a positive attitude to being assessed and receiving criticism, while students with lower self-esteem would tend to perceive comments intended to be positive as negative. This paper suggests to draw on related disciplines like psychology and cognition to find out more explanation and support on what works well, why it does work well, and how to improve the effectiveness of the communication in the supervisor-student relationship. It is also useful to know more about the other types of feedback and models of supervision. Also it would be interesting to investigate the effect of personality characteristics on receiving and accepting a feedback.

References:

- [1] S. Armstrong, The impact of supervisor's cognitive styles on the quality of research supervision in management education, *British Journal of educational Psychology*, Vol 74, 2004, pp. 599-616.
- [2] J. Hattie, H. Timperley, The Power of Feedback. *Review of Educational Research*, Vol 77, 2007, pp.81-112.
- [3] M. Grasso, M. Barry, T. Valentine, A Data-Driven Approach to Improving Doctoral Completion. Washington, DC: Council of Graduate,2009.

- [4] S. Smallwood, Doctor dropout. The Chronicle of Higher Education 2004. Retrieved from http://chronicle.com.
- [5] B. Lovitts, Leaving the ivory tower: The causes and consequences of departure from doctoral study. Lanham, MD: Rowman and Littlefield, 2001.
- [6] Högskoleverket, International Postgraduate Students Mirror, Report 2006:29 R, 2006.
- [7] N. Wadesango, S. Machingambi, Post Graduate Students' Experiences with Research Supervisors. *Journal of Sociology and Social Anthropology*, Volume 2, No.1, pp.31-37.
- [8] J.M Bernard, R.K Goodyear, *Fundamentals of clinical supervision* (4th ed.). Upper Saddle River, NJ: Pearson Education, 2009.
- [9] J. Mouton, Reflection of the current throughput challenges in South African Higher Education. Address Delivered to the Postgraduate Research Indaba at the University of South Africa 20-22 February 2007.
- [10] J. Taylor, Changes in teaching and learning in the period to 2005: The case of postgraduate education in the UK. *Journal of Higher Education*, Vol24, No.1, 2002, pp 53-73.
- [11] C.D. Claiborn, R. K. Goodyear, P. A. Horner, Feedback. *Psychotherapy: Theory, Research, Practice, Training*, Vol 38, 2001, pp 401-405.
- [12] R. Devenish, S. Dyer, T. Jefferson, L. Lord, S. Leeuwen, V. Fazakerley, Peer to peer support: The disappearing work in the doctoral student experience. *Higher Education Research & Development*, Vol 28. No.1, 2009.
- [13] S. Knowles, Feedback on writing in postgraduate supervision: Echoes in response context, continuity and resonance. In A. Holbrook & S. Johnson (Eds.), Supervision of postgraduate research education, 1999, pp.113–128.
- [14] A. Ramaprasad, On the definition of feedback. *Behavioural Science*, Vol28, 1983, pp 4-13.
- [15] D. R. Sadler, Formative assessment and the design of instructional systems. *Instructional Science*, Vol 18,1989, pp 119-144.
- [16] M. Walker, An investigation into written comments on assignments: do students find

- them usable? Assessment and Evaluation in Higher Education, Vol 34, No.1, 2009, pp 67–78.
- [17] E. Vigoda-Gadot, L. Angert, Goal setting theory, job feedback, and OCB: Lessons from a longitudinal study, *Basic and Applied Social Psychology*, Vol 29, No. 2, 2007, pp119-128.
- [18] A. Bandura, Self-efficacy: The exercise of control. New York: Freeman, 1997.
- [19] C. S. Carver, M. F. Scheier, On the self-regulation of behavior. New York: Cambridge University Press, 1998.
- [20] H. R. Arkes, P. Ayton, The sunk cost and concorde effects: Are humans less rational than lower animals? *Psychological Bulletin*, Vol 125, 1999, pp591-600.
- [21] A. Rae, D. Cochrane, Listening to students: How to make written assessment feedback useful. *Active Learning in higher Education*, Vol 9, 2008, pp 217-230.
- [22] D. S. Ackerman, B. L. Gross, Instructor feedback: How much to students really want? *Journal of Marketing Education*, Vol 32, No. 2, 2010, pp172-181.
- [23] J. D. Brown, High self-esteem buffers negative feedback: Once more with feeling, *Cognition And Emotion*, Vol 24, No. 8,2010, pp 1389-1404
- [24] P. Sutton, Towards dialogic Feedback, *Critical and Reflective Practice in Education*, Vol 1,2009, pp 1-10.