Effective Strategies for University Adult Research Students in Managing Their Research Projects in South Africa

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Abstract: **This qualitative research paper reflects on the challenges facing university adult research students in doing their research projects of their degree programs, and thus suggests effective management strategies. According to this study, challenges seem to come from five major different factors based on supervisors, students, supervisor-student relationship, institutional procedures, and research methods, and thus effective strategies have been suggested.**

Keywords: **Effective strategies, university adult research students, managing, and research projects.**

1.   INTRODUCTION

The work of Ross-Gordon (2011) indicates that adult students in an institution for higher learning need to employ certain strategies to achieve what they exist for due to complex kind of life they find themselves in, as they relate to their responsibilities and accountabilities. According to Selco (2016) there is a need for adult students to use strategies, as special skills, as they face many things that affect their assignments, time, text understanding, and stress reduction as they face daily course work, dilemma on finding library and research materials, and many other reading tasks. Since research is part of inquiry learning, it is recommended that they use effective strategies for successful academic engagement (Karge, Phillips, Jesse, and McCabe: 2011). It is in this context that the author, here in, advocates that there is need for university adult research students to employ some strategies with intent to manage their academic research projects within a given time period and institutional expectation.

In general, management is the process of "utilizing available resources in the best possible manner and also for achieving well defined objectives", and that it is the best way to use resources as in men, money, materials, machines, methods, and markets (Kalyan City Life Blog, 2016). In harmony with the definitions found in many sources, it should be understood that management of research project is the process that involves planning, people involvement, directing and controlling so that the research project may successfully be done.

The historical background of this research problem dates back to 2002 when the author of this article observed that other adult research students took quite a longer time than others at the University of North West that was based in Mafikeng of the North West Province of South Africa. The problem was magnified by the fact that some of the students who were being sponsored by work forces could not complete their research projects faster than their counterparts who were solely on self-sponsorship. From this observation, the researcher here in saw it necessary to put up an article that focuses on effective strategies for university adult research students in managing their research projects. Apart from intention to help universities and academic research supervisors, the motivation behind this paper is that university adult research students who have a challenge in managing their research projects may find some strategies, through this paper, for managing their research projects successfully.

Problem statement:

It is a big problem to both the university (as service provider) and a university adult research student (as service consumer) when university adult research student deregisters, postpones graduation, and/or forfeits graduation due to research to some difficulties related to the research processes. According to de Gruchy and Holness (2007:v) there is a connotation that managing research projects is a crucial matter for the universities, and that strategies need to be developed for, and by, a client of research project so that the outcome should be as expected. Failing to graduate has a negative impact on the credibility of the university because it is not meeting the expectation of the National Research Foundation (NRF) which makes that university not receive the benefits of achieving institutions (NRF, 2016); and that the research output is also a measuring rode on how the university may have share in the Block Grant Budget Calculations (Ministerial statement on university funding: 2015/16 and 2016/17, 2014: 6). As it may be deduced from the introduction's background information, above, some university adult research students may need management strategies to do their research projects successfully. This perceived solution to the challenge will work well if all stake holders (supervisors, supervisees, and universities) of research projects may establish the idea that managing research projects requires strategies for good through put.

Study objectives:

1. To identify factors that adversely affect the performance of university adult research students in managing a research project.

2. To identify constructive strategies for managing university adult research students' research projects.

Conceptual frame-work:

Considering the contribution of knowledge economies, as projected by the South African universities, this paper connotes that managing academic research in the institutions for higher learning can solve a lot of human development-related challenges. It is in this context that the Eight task team reports, edited by Webbstock and Simpson (2016: 208-209), have been cited as founding this conceptual frame work of this research paper, as follows:

The NRF subsequently developed a number of initiatives to support knowledge production, post-graduate development, and research and innovation at universities. The setting up of a single grant-making agency created a national asset that has provided systematic funding for higher education researchers and their postgraduate students. … . The concept of a knowledge economy is thus understood to have two aspects: the complete essentiality of the development or recruitment of skills and knowledge; and the application of information to improve productivity and to seek competitive advantage through innovation. .. . The university is an integral part of both conceptions.

Managing university academic research projects is one of the South African goals, thus this research paper is expected to contribute to the available knowledge economies that will lead to developmental adjustment in the universities so as to increase research through put in the concerned universities where managing research projects has been identified as a factor that has an impact on through put. This study has identified challenging factors and strategies for university adult research students in managing their research projects.

2. LITERATURE REVIEW

This research paper on strategies for university adult research students in managing their research projects draws its literature sources from both directly and indirectly related subject contents because enough direct related literature available to this effect was not sufficient. In an attempt to help researchers do their research projects well, O'Leary (2014: 1-2) denotes the fact that doing research requires some research management skills, thus researchers have to recognize that doing research has both challenging factors and strategies so that the process may be easier with the passing of time. While management revolves around the planning, organizing, people involvement, directing, and controlling as reflected by Follett (2016), this paper has five areas in which that management has to take place in order for that research to be successful; and these five major areas are based on research-based-factors related to supervisor, student (supervisee), supervisor-supervisee relationship, institutional procedures, and research methods. This connotes that for a university adult research student to do research very well, there is need for that student to be fully aware of the support systems required during the management stages (planning, organizing, people involvement, directing, and controlling) with an intention to complete the degree program required.

Challenging factors that adversely affect adult research students:

This section deals with challenging factors that affect research students in universities. Different people see different things that affect the research students in the universities in different ways. In line with the view posed by Mouton, Louw, and Strydom (2013), there is a need to address challenges that affect the tertiary learning institutions in South Africa, hence the statement: "In this regard, the tertiary higher education system in South Africa is faced with many multi-dimensional challenges that need to be addressed." This tertiary higher education system connotes the inclusivity of research projects in the universities of South Africa. Factors that affect the performance of university students include student age, student gender, student's race, student's financial status, university academic conditions, and many more (Murray, 2014). Yet all these can be classified into five major challenging factors based on supervisors, students, supervisor-supervisee relationship, institutional procedures, and research methods.

Supervisor-based challenging factors:

Meyers (2014) advances a notion that supervisors should be flexible and adaptive to their research students' needs as they play a role of mentoring, exposing students to sources of sponsorship, progressing the research process facilitation, and coaching. Meyers (2014) adds that supervisors of research students should be enthusiastic, passionate, sensitive, respectful, unselfish, individual differences appreciating, and keep balance between the way they direct students and the way they direct themselves; and that there is need for supervisors to have good approaches and skills for good supervision. This translates into the idea that supervisors ought to have certain qualities for them to successfully supervise their research students, and that supervisors' lack of the enthusiasm, passion, sensitivity, respect, unselfishness, skills for appreciating research students, and direction will automatically have a negative impact on the university research student which may make a research student fail to perform as expected.

McNamara (2016) considers supervisors, regardless of who they are, to be coaches, mentors, organizational advocates, and employee advocates. Thus there is a need for supervisors to critically view their way of supervising and be able to develop strategies to be good supervisors because there is a possibility that supervisors may be able to slow down the progress of students should they not have good strategies for supervision.

Student-based challenging factors:

Cheesman, Simpson, and Wint (2006) argue that university students have factors that affect their learning, and they mention gender, student ability, motivation, secondary school quality background, historical background, environmental background, funding, enrolment status reflected by being full-time or part-time. These can be very challenging when they are in the negative form. In this research paper, university learning cover research as part of the package in the higher institution of learning; therefore, whatever affects other students in the university may as well affect the research students as they are in the same learning environment.

Supervisor-supervisee-based relationship challenges:

Nkoane (2013) argues that the relationship between the supervisor and supervisee has an effect on the progress of the research project, especially when it comes to power and authority struggle. This implies that if power and authority are not well placed, they can be abused and prove retrogressive to the supervision process; as they have the capacity to erode trust between supervisor and supervisee. Meyers (2014) advances an idea that supervisors have to take note of a challenge posed by facilitation-related functions which include monitoring progress, periodically reviewing, supervision climate, negotiating availability, initiating contact, and devoting sufficient time to the student. Dealing with challenges that come as a result of relationship between the supervisor and supervisee may help a research student complete the research project within the expected time.

Institutional procedures-based challenging factors:

According to Meyers (2014), institutions have the capacity to affect the progress of research students especially when it comes to issues revolving around the processes, procedures, and policies of the learning institution of learning. This can be understood in the context of the institution which has the way of locating supervisors to students and be able to have mechanisms in place to monitor progress of the how supervision is carried out. This implies that institutions for higher learning, where research is part of the requirements for graduation, should take interest in finding out challenges that may negatively affect the progress of their students due to institutional procedures.

Research methods-based challenges:

In the interest of student development, some universities, like State University of New York (2009) develop documents that are research–based with intent to help their students to do research in a user-friendly manner. Ignoring the research methods-based challenges will make the students not be able to complete their research projects within the expected time, thus this challenge needs to be noticed as a potential challenge area.

Strategies for university adult students in managing research projects:

With special reference to PhD Thesis development, Davis (2001) indicates that there are a number of strategies such as choosing the right topic, attending research seminars, journal reading for information, talking to others about the researcher's research areas, and to keep on being focused on things that helps the researcher to succeed. Developing strategies for university adult students in managing research projects requires understanding the challenges affecting the research process (Spiers &Paul, Jennings, Merritt, &Weaver, 2012). In the light of general projects, research projects should be managed as other projects as project management has been defined as "the discipline of organizing and discipline of organizing and managing resources in such managing resources in such a way that the project is a way that the project is completed within defined completed within defined scope, quality, time, and scope, quality, time, and cost constraint" (Scribd, 2016).

In this context, the strategies have been included as derivatives of the challenging factors above, but the details of this section is included in the discussion section of this research article under the sub-headings as those in challenging factors above.

3. RESEARCH DESIGN AND METHODOLOGY

The study involved 75 working university adult research students which made up of both the population [of twenty-four (24) males and fifty-one (51) females] and the sample because the nature of the study accommodated everyone in the population. The population was equal to the sample. The working status of research subjects implies that they were mature adults who were responsible for their own economic lives, thus their views on why they had to privately consult while they had university located research supervisors were taken serious. This data was collected over a period of ten (10) years (2006 to 2016) of time while observing certain trends in the research phenomenon of university adult research students, and this kind of research has been termed by Ployhart and Vandevberg (2010) as longitudinal due to the following of certain character traits that contribute to a certain phenomenon. The observations and informal interviews, as tools for data collection (Maree, 2014:83-89), were engaged into in a research consultancy where university adult research students attended a private research consultancy as a top-up to their university normally allocated supervisors. Data was collected and captured as part of student biographical data as consultations continued; and each research student was asked to explain why he/she visited a consultancy for research assistance; and this formed part of the data collected. Seventy-five (75) students were engaged in this research study.

The research subjects, or rather respondents, came from the South African universities of Cape Town, Wits, UNISA, Potchefstroom, and Johannesburg. Among these universities, North West University's Mafikeng campus contributed more subjects than any other; and the researcher's observation has it that there were where some students who left the university for retirement without getting their degrees due to their inabilities to have their research done before retirement. Another observation was made on some students who took more than three (3) years doing Masters by research, when the universities expected to have them do their Masters' research project in two years' time period. One student simply stopped going to the university, without deregistering or even applying for concession for being away from the university for a certain time, and went on retirement to set up an early learning institution in Montshioa location of Mahikeng City. On being asked the reasons for taking a longer time than expected, and otherwise, most of research students pointed to mismanagement of the process, most of which was pointing to the supervisors' inability to promote the research process of adult research student, which translated into a challenge in supervisor-supervisee challenging factor.

This kind of observation made the researcher, here in, to pick on management of the research process as a research project worthy being undertaken, and be shared with the academic world.

4. RESULTS AND DISCUSSIONS

Due to the observations made by the researcher in this study, the following aspects of managing research may help improve research performance in a South African Universities, some other African Universities, and any other out-of-Africa university, as South Africa is collaborating with other countries on the African continent as noted by Boshoff (2009).

The following Table 1, below, reflects the views of respondents (research subjects) on one most challenging factor that was considered a deciding one, among the five classes mentioned as affecting university adult research student in managing research project.

Table 1: Distribution of the one most challenging factor in research and its frequency

Challenging factors	Frequency	Percentage distribution (%)
Supervisor-based	4	5.33
Student-based	7	9.33
Supervisor-supervisee relationship	30	40.00
Institutional procedures-based	0	0.00
Research methods-based	34	45.34
Total	**75**	**100.00**

On being asked which one factor seems to affect a university adult research student, the most affecting challenging factor was research methods-based (45.34%) kind of. Some of the students indicated that research methods were confusing when it came to separating research methods as a module in the university and research methods as a tool a researcher uses to work on both the research proposal and report. Connoting this dilemma researchers find themselves, with special reference to research methods-based challenges, Bergold and Thomas (2016) indicate that research methods-based challenges can create some difficulties for researchers; and this is reflected in this study (Table 1 above). This implies that universities should be checking if a research student has thoroughly been taught how to do research as a project, or he/she may need a few sessions of assessment to find out if the research student is really ready to start the research project. Exposure to research methods is a very preparatory strategy for university research student to successfully do their research project in the future as connoted by Andalon (2012). Not knowing how to do a research project can be very frustrating to the research student, and can lead to failing to complete the project, as reflected in the Table 1 above. So, on setting strategies for university research adult students in managing their research projects, there is need for the learning institution of higher learning to be finding out the prior knowledge relating to the ability to actually do a research project.

Observations on the research subjects revealed that they (research students) were challenged by research methods-based factor in the following areas:

- Mapping and structuring the whole research project before starting the research project which starts with research proposal, and ends with research report. Students showed some difficulties in this aspect.

- Ability to link the research methods module to the research project undertaken as a study. Some students could not make a link between research methods course and the thereafter research project that required the research proposal, implementation of research the proposal in the field and report.

- Making the difference between research proposal and chapter one on the research report. Some students believed that a research proposal was actually a chapter one of the research project.

When put on scale to reflect the most affecting and challenging factors for research students to successfully undertake research project and graduate successfully, Table1 (above) shows that the second most affecting set of factors falls under that one of supervisor-supervisee relationship (40%). This tells us that if there are strategies that should be developed to help students to do their research projects well, the powers-that-be need to pay attention, in a positive sense, to promoting the relationship between the supervisor and supervisee for productivity's sake (Hartley, 2015). On entry and pre-consultation interviews, most students felt that they would appreciate it if supervisors would take a proactive and positive offensive role in their supervision function so that the students would take supervisors as partners in the research projects, instead of interrogators. The research subjects' views on supervisor-supervisee relationship agree with the views of

Nkoane (2013) and Meyers (2014) thus strategies for good supervision should consider putting emphasis on the supervisor-supervisee relationship factor with intent to promote good research productivity. In this case, it is believed that finding ways to promote a good supervisor-supervisee relationship will help both the university and research students to perform well in the research projects.

The supervisor-supervisee relationship was reflected by the following:

- The first meetings to map out the strategy for the whole project reflected a challenge. This translated into supervisor assuming that a student knew what to do as there was an assumption that the pre-requisite to do research project was based on the exposure to research methods course (module).

- The ability of supervisor and supervisee to meet during the appointed time, which was pelleted with the breaking of appointments, with little, and sometimes no apologies, especially if the source of failure was the supervisor.

- Ethical way to deal with conflicts between the supervisor and supervisee was identified as another thorny area during the research process. Ethical issues covered language use as relating to verbal, body, voice tone, or any other combinations thereof.

Among other factors that were classified as terminal to research are factors of student-based (9.33%) and supervisor-based (5.33%). At times, a student would not be committed to pursuing the research project due to other reasons such as family and work related commitments. These, and others not disclosed in this study were found to be affecting the university adult research students. One student deregistered from the university because she was overloaded with work related responsibilities. At times, family related challenges, such as pregnancy for women, would not allow women to continue doing their research projects; and this sometimes made it difficult for them to complete their studies within the expected time period. In this light, strategies for helping university adult research students should take into cognizance the challenges posed by student and supervisor environmental conditions.

Supervisor-based challenging factors were assessed to be made up of the following: Some supervisors had a background of children teachers' influence, thus their approach to teaching adults would be quite offensive to the adults; for they used more of the pedagogical approaches than andragogical. This influenced some university adult research students to get discouraged and hoped to get a new supervisor who would place perceived correct value for them to feel they are treated as adults who deserved respect though as students as advocated by McKee and Billman (2011). Thus strategies for university adult research students should consider to train supervisors so that they become good representatives of the university and pursue the university mandate as expected.

Student-based challenging factor was identified in issues like the inability of student to keep the expected deadlines, research background, and some others. Other students had to be advised on where to find research books in the library, otherwise they thought one book on research was enough for them to do research project. Thus one of the strategies to be considered that needs attention is that which is student-based (focused) as advocated by Barraket (2005).

On average, the descending order, in terms of challenging factors that have a great impact of university adult research students can be presented as: Research methods-based, supervisor-supervisee relationship, student-based, and supervisor-based. This implies that more emphasis of strategy development for university adult research achievement should be placed on the top two challenging factors of research methods-based and supervisor-supervisee relationship based.

Table 2: Distribution of combinations of challenging factors as viewed influential to research project achievement

Challenging Factors	Frequency of influence	Percentage Distribution (%)
Supervisor-based	55	23.40
Student-based	38	16.17
Supervisor-supervisee relationship	63	26.81
Institutional procedures-based	8	3.41
Research methods-based	71	30.21
Total	**235**	**100.00**

When research students were asked to mention more than one challenging factors that were adversely affecting them before they went for consultancy, they listed what is in the Table 2, above, hence the total opinion count went to 235 counts in favor of one of the five major classes of the research doing challenging factors.

In Table 2 above, there seems consistency in that factors revolving around research methods-based scored the highest; followed by supervisor-supervisee-relationship; then supervisor-based; followed by student-based; and finally followed by institution-based. This has been consistent on both one-challenging factor and more than-one-challenging factors scales.

Comparing the results of Tables1 and 2, above, indicates that a very special attention need to be paid towards factors that are classified as research methods-based and supervisor-supervisee-based relationship as crucial to research project management in a university. Setting up strategies aligned to the micro aspects of the major classified challenging factors may prove productive to a university where research project is a mode of learning to earn a classified degree.

In another development, it seems that challenging factors that are classified as supervisor-based and supervisee-based (student-based) score a bit on the lower side of the scale. While the two (2) contribute to the performance, this research has established that they do not outweigh the research methods-based and supervisor-supervisee-relationship-based challenging factors.

Due to the experience revealed by research students, the consultancy changed the approach of supervision, and amended what seems detrimental to the university adult research students, and the results summary have been put in Table 3 below.

Table3: Post-consultancy distribution

Achievement status	Frequency	Percentage distribution (%)
Passed	39	52
Deregistered	6	8
Not disclosed	18	24
Still in pipeline	12	16
Total	**75**	**100**

The statistics displayed in Table 3, above, indicates that the distribution of students after attending the consultancy due to the challenges they had before visiting the consultancy, had actually changed for better due to the employment of strategies that helped research students to unleash their potential and able to graduate. Making adjustments in the factors that affected the students, there was a noted success of 52% of the 75 expected graduations due to the consultancy program. This implies that strategies for helping university adult research students need to be derivatives of factors that seem to be adversely affecting the research students.

This study was not able to account for the terminal end of the 24% of the research subjects, as some of them came from other countries like Botswana, and could not be in touch with the consultancy due to limitations in communications and follow ups.

At the time of this research report, 16% of research subjects were recorded not yet completed, thus declared pipeline students. None the less, these could not easily be reached so as to inform the results of this research study in an additional way.

Deregistration were observed to had taken 8% of the total number of the research subjects who visited the consultancy. During the consultancy, one student, who finally deregistered from North West University had come with a comment from the supervisor that said that her English was so poorly written that even a Grade Nine learner in a Secondary School would not write such language construction. This is an example of a supervisor-based kind of challenging factor that affected the psychological id of the university adult research student to such an extent that visiting the consultancy was not even helpful. This implies that supervisors need to pay attention to their use of language such that the integrity of an adult research student may be preserved.

5. CONCLUSION AND RECOMMENDATIONS

From the data displayed in this study and discussions, it is noted that there is need for the universities to find ways to develop and implement strategies to help both supervisors and university adult research students to work out the research supervision and student research management to a successful level of expectations.

This research study has helped to identify factors that affect the performance of university adult research students in managing their research projects, and also it has suggested constructive strategies for managing university adult research students' research projects.

It is therefore recommended in this study that in managing research projects, the parties involved should find working strategies that revolve around research methods, supervisor-supervisee relationships, supervisors, research students, and institutional research procedures.

Due to limitations emanating from diverse research-process-affecting factors, it is recommended that those interested in the development of strategies for university adult research students should be engaged in carrying out another research to confirm and verify the findings of this research study, and suggest some extra constructive strategies to deal with research challenges faced by university adult research students.

Universities should do all they can to develop research supervisors so as to help them become good supervisors who may produce what the universities employed them to do. This will help research students to be more effective than ever.

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