

## **Investigating the link between Self-Concept and Job Performance of Agricultural Science Teachers in selected Secondary Schools in Namibia's Zambezi Region**

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**Citation:** Mashebe Percy Mashebe and Africa Zulu (2022) Investigating the link between Self-Concept and Job Performance of Agricultural Science Teachers in selected Secondary Schools in Namibia's Zambezi Region, *International Journal of Education, Learning and Development*, Vol. 10, No.5, pp.33-43

**ABSTRACT:** *A teacher's job performance is impacted by diverse components including, among others, the individual self-concept in teaching a particular school subject. The teacher's self-concept is the perception or belief that he/she has about his/her psychological well-being and occupational satisfaction. The study investigated the job performance self-concept of Agricultural Science teachers in selected secondary schools in Zambezi Region of Namibia. A qualitative research design involving an individual face-to-face interview was used to collect data on teachers' job performance self-concept from a sample of 12 participants. The study used purposive sampling to select the 12 participants made up of 6 male and 6 female Agricultural science teachers currently teaching in the study area. The results of the study revealed that the majority of the participants were proficient in both theory and practical skills, while a handful further indicated that they could identify the needs of the syllabus and that of the learners. These components were considered essential in nurturing learners' achievement in Agricultural Science. The study further revealed that gender plays no significant role concerning teacher's competencies in teaching Agricultural Science in the Zambezi region. However, it was found that the participants who had more years of Agricultural Science teaching experience were better equipped with subject content knowledge than their less experienced counterparts.*

**KEYWORDS:** agricultural science, job performance, self-concept, gender, competencies, experience

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### **INTRODUCTION**

Apart from learners' performance records, Smalley and Rank (2019) opined that Agricultural Science teacher's quality of teaching could be assessed based on their job performance self-concept and conduct, which are largely centred on the teacher's competence in order to acclimatise to current classroom circumstances. Agricultural Science teachers in secondary schools perform different functions within and outside the school context. Their essential functions and responsibilities, as highlighted by Smalley and Rank (2019), include among

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others, planning and developing the curriculum, planning and preparing lesson presentations, presenting lessons, carrying out assessment and evaluation of learners' academic progress, providing career guidance to learners, supervising and monitoring learners' practical activities and providing life skill related experiences to learners. Besides, Smalley and Rank (2019) held that Agricultural Science teachers are persistently assuming additional obligations with their teaching positions. Very well qualified Agricultural Science teachers are central to superior quality education in schools and beyond (Zlatkovic, Stojiljkovic, Djigic, & Tdorovic, 2012).

Self-concept and appreciation of oneself are fundamental to the triumph of the progression of an Agricultural Science teacher's value of faultlessness, which entails that they symbolise substantial dynamics that are fundamental to their professionalism in teaching (Ghazvini, 2012). In other words, Agricultural Science teachers who appreciate their professional competencies and are charismatic are better adjusted to countless circumstances and are more self-possessed in teaching Agricultural Science content than those who are deficient in these abilities (Sadeghi, Azizi, & Poor, 2015). These attributes further contribute significantly to the job performance and contentment of an Agricultural Science teacher. Understanding of oneself is arguably the fountain of the idea of self-concept, which could be described as a building block of assertiveness one has towards oneself (Ghazvini, 2012). According to Afuwape (2011:191), "self-concept is the cognitive or thinking aspect of self that is self-image related. It is also the totality of a complex, organized and dynamic system of learned beliefs, attitudes and opinions that a person holds to be true about his/her existence". In this context, job performance self-concept is one component of self-concept because it narrates how well a teacher performs on his/her job and the degree of professionalism expressed inside and outside the classroom context (Afuwape, 2011).

In the context of this study, the job performance self-concept of an Agricultural Science teacher is primarily the image a teacher has of oneself (Yara, 2010). In other words, job performance self-concept is the way an Agricultural Science teacher contemplates, comprehends, portrays, treasure and is able to gauge themselves concerning their job performance in Agricultural Science teaching. Several studies have concluded that self-concept is a robust catalyst of job performance and that a progressive or damaging shift in self-concept is likely to generate an appropriate switch in the job performance of teachers (Yara, 2010; Ayodele, 2011; Ghazvini, 2012). Agricultural Science teachers' job performance self-concept develops on a series of components such as beliefs, attitudes, and self-accomplishment in teaching (Villa & Calvete, 2001). Agricultural Science teachers would frequently wonder who they are, what they are like, what their value and self-worth are as teachers. According to Shastri (2015), teachers' self-concept is the component that defines their character as well as actions inside and outside a classroom. The job performance self-concept of Agricultural Science teachers, like any other teachers in different fields, could be based on many measurements (Maksimovic & Osmanovic, 2019). According to Maksimovic and Osmanovic, 2019:106) these include:

- (i) *The social self-concept* - which is related to an individual teacher's accepted wisdom of public's awareness of that individual teacher;

- (ii) *The teacher's efficiency*- which entails the teacher's professionalism;
- (iii) *The teacher's ability to resolve academic dilemmas* - which entails decision making and leadership;
- (iv) *The abilities of the teacher to show self-confidence*, which reflects the teacher's convictions, and believing that he/she is competent enough in teaching the specific subject content.

As noted by Asmaa (2016), job performance self-concept is one of the most important components that would create a clear understanding of a teacher in realising his/her professional success. In light of this, Maksimovic and Osmanovic (2019:106), maintains "the person who knows his or her abilities and talents can easily develop a positive attitude towards themselves and he or she believes in their success, is the person who can improve and succeed". In their report, Shavelson, Hubner, and Stanton (1976) viewed job performance self-concept as the centre of character reference. They explain that self-concept is the awareness that a person has about him/herself concerning the job performed at his or her disposal, moulded from challenges as well as interactions with the job performance circumstances (Ghazvini, 2012). Thus, "self-concept, as a component of human personality development, has its nature and peculiarity" (Ghazvini, 2012:1035). Identifying one own self, one's competencies, potentials, characteristics, subject content knowledge and skills as well as circumstances surrounding the likely setbacks are, without doubt, the key components to the Agricultural Science teachers' achievements in teaching (Maksimovic & Osmanovic, 2019). Therefore, the main aim of the study was to investigate the job performance self-concept of Agricultural Science teachers in selected secondary schools in Namibia.

## RESEARCH METHODOLOGY

The study employed the qualitative research design, which according to Leedy and Ormrod (2001), allows for the total description of an occurrence being investigated and scans a circumstance as its stands. "Qualitative research design is more holistic and often involves a rich collection of data from various sources to gain a deeper understanding of individual participants, including their opinions, perspectives, and attitudes" (Nassaji, 2015:129).

The target population of this study consist of all the secondary school Agricultural Science teachers (150 teachers in total) teaching grades 8, 9, 10, 11 and 12 in 65 schools in the Zambezi region. Purposive sampling was used to select 12 teachers (6 males and 6 females) to participate in face-to-face interviews in which the researchers probed teachers' job performance self-concept in Agricultural Science.

### Research Ethical Consideration

A formal application to carry out the study in secondary schools in the Zambezi Region was submitted to the Regional Director of Education in the Zambezi region and approval was granted. Thereafter, permission was sought and secured from the schools' principals before meeting the study participants. The purpose of the study was clearly explained to the participants and issues raised were clarified to their satisfaction. Participants were informed that their participation in the study was voluntary and did not attract any monetary incentives. Participants were assured of their privacy and their identities remained confidential. They

were also assured of their right to withdraw from the study at any time should they feel uncomfortable continuing with the study without any consequence.

### **Data Analysis**

Content analysis was used to analyse the qualitative data. According to Erlingsson and Brysiewicz (2017), a universal initial point of departure for the content analysis of qualitative data is often to transcribe the interview transcripts. Qualitative data content analysis is defined by Hsieh and Shannon (2005:1278) as “a research method for the subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns”. Thus, the data from the interviews were analysed thematically and presented according to the themes that emerged based on the research aim.

## **RESULTS AND DISCUSSIONS**

### **Perceived Competencies and Experience**

A competent Agricultural Science teacher is more consistently sincere and affectionate; and performs what is required for the desired teaching and learning outcomes. What follows are the findings that emanated from the interview questions related to the perceived competencies and experience of the participants (Agricultural science teachers).

### **Nurturing Learner Achievements**

Teachers and teaching practices play an important role in nurturing learners' achievement and outcomes at schools. In this study, the participants were asked to explain what the more experienced Agricultural Science teachers do more effectively in nurturing learners' achievement than the less experienced Agricultural Science teachers do in similar teaching contexts. The majority of the participants interviewed mentioned that the more experienced Agricultural Science teachers have a deeper knowledge of both theory and practical, while only a handful indicated that the more experienced Agricultural Science teachers can identify the needs of the syllabus and that of the learners that are essential in nurturing learners' achievement in Agricultural Science. Some respondents explained the importance of having subject knowledge, both theoretically and practically. According to the respondents:

*Yes, you would find that the more experienced Agricultural Science teachers know the content, not only theoretically but also practically because, in Agriculture, we believe that learners learn more if they see, hear and touch things by themselves and feel them. If they do not touch the soil and do not plant crops, there is no way they will be able to learn Agriculture effectively. The less experienced Agricultural Science teachers would just go on teaching the syllabus and the textbook; just in the classroom situation, but when it comes to outside situation, they do not do anything (Respondent 4).*

*The experienced Agricultural Science teachers always try to impart more knowledge and teach practical activities more effectively. This is because*

*Agricultural Science should not only be taught in a classroom; rather it should be done both in the classroom and through field excursions. Therefore, experienced Agricultural Science teachers can relate theory to practice during the teaching and learning process. While inexperienced Agricultural Science teachers fail to articulate the theory and practice effectively because they lack the necessary experience to do that in the classroom setting (Respondent 5).*

Some respondents expressed an explicit connection between the ability to identify the needs of the syllabus and nurturing learners' achievements. Examples of such responses were:

*What I have realized so far is that an experienced Agricultural Science teacher can condense the syllabus and the inexperienced Agricultural Science teacher might be wondering what the magic was; the inexperienced teacher might be touching here and there without knowing exactly what are the needs of the syllabus. In the case of an experienced Agricultural Science teacher, you will find that by heart, he/she can even outline what are the needs of the syllabus, the basic competencies and everything (Respondent 3).*

*An experienced teacher is familiar with the syllabus itself... unlike a teacher who is not experienced and doesn't know what are the expectations of the examination as well as what are the expectation of the learners (Respondent 11).*

What is evident from the above responses from the participants is the fact that for a teacher to be able to nurture learners' achievement meaningfully, he/she must have the subject knowledge and should have the ability to interpret the curriculum effectively.

### **How gender affects Teacher competency and self concept**

The participants were asked to share their views about the often-public perception, especially in the study area that male Agricultural Science teachers are more competent than their female counterparts are. The following are the excerpt of the responses from the participants:

*That might be true or untrue at the time ... but the reality on the ground of what I know is that the performance of both male and female Agricultural Science teachers is just the same (Respondent 3).*

*For me, I do not see any difference between the teaching competencies between male and female Agricultural Science teachers (Respondent 5).*

The above perceptions suggest that there is little or no difference in gender competency and self-concept among Agricultural Science teachers in the Zambezi region. This could mean that Agricultural Science teachers in the Zambezi region are likely to have undergone similar training that would have prepared them to be competent in teaching the subject effectively

regardless of their gender. However, the participants who indicated that there is a difference in gender competency had these to say:

*Yes, this is true; you find that when it comes to practical, unlike now when we were laying pipelines for the school garden and community hostel, you would find that the female teacher do not understand how to do the basic pipe connections. It is only the male teachers who did all the different pipe connections that were made in Agricultural Science practice activities. This was because male Agricultural Science teachers had prior understanding, they were more hard-working and they were able to learn and do the connections by themselves (Respondent 6).*

*Their level of competency is more or less the same but you will notice that Agricultural Science is a school subject that has both theory and practical. So, with the male yes; they can do both, while the female teachers can do well in the theory and fall short when it comes to practical activities. By nature of this categorization, male teachers are likely to outperform female teachers when it comes to practical activities. This could be because female teachers cannot do hard and laborious work as compared to the male teachers (Respondent 8).*

The above responses suggest that there might be some practical aspects of Agricultural Science where female teachers find difficult do well, for example, practical activities related to the handling of heavy materials and the handling of animals like cattle. Such activities demand the physical abilities of the teacher and have little to do with the competency to teach the subject. However, in a study on the teaching competency of secondary school teachers, Das and Nalinilatha (2017) concluded, “There is no significant difference between the teaching competencies among secondary school teachers concerning gender”. Literature also revealed that Agricultural Science is believed to be a masculine discipline, and in a country such as Nigeria, previous research report indicates that there is the low enrolment of females in the Agriculture courses across secondary to tertiary institutions” (Moda & Ahmed, 2017:131). Some traditional practices and societal procedures have steered the perception that females teachers cannot carry out certain tasks, as do their male counterparts in subjects such as Agricultural Science (Mushi, 1996). This is in line with the views expressed by the participants as they held that female teachers are more challenged when it comes to the practical component of teaching Agricultural Science.

Respondent 7 averred that:

*I do not think so; I can see that the female Agricultural Science teachers are more competent. Even though Agriculture Science is considered more gender-oriented, male teachers are better in the practical component of Agricultural Science. My understanding is that when it comes to teaching the subject matter in the classroom, female Agricultural Science teachers are more competent than the male teacher that is what I have seen during my teaching career, especially in Agricultural Science.*

*My take on this issue is that I disagree with that notion that male Agricultural Science teachers are more competent than female teachers. My opinion is that those female teachers are better because when they are in class, they act like mothers (Respondent 10).*

These latter responses suggest a divided opinion among the participants concerning the competencies of Agricultural Science teachers by gender.

### ***Effects of Teaching Experience on Performance***

The effects of teaching experience on performance have a large bearing on the abilities of Agricultural Science teachers in managing the delivery of the subject knowledge to learners in the classroom more effectively (Irvine, 2018). According to Irvine (2018), these include, for example, aspects such as syllabus interpretation, developing the scheme of work, planning the lesson in line with the prescribed basic competencies and learning objectives, as well as classroom management and assessments. The participants' responses concerning Agricultural Science teachers' performance regarding teaching experience revealed that experienced teachers are more knowledgeable and equipped with the subject content than the less experienced teachers. As explained by the participants,

*If you spend many years teaching a subject, you will become knowledgeable and more equipped to teach the subject content (Respondent 1).*

*I noticed that when I first started teaching, there were some challenges that I faced along the way but as time went by, teaching the same topics or the same grade becomes a lot easier for me because I developed some effective teaching strategies, which I could implement in my teaching. I managed to put into practice some strategies that would help me to tackle certain specific challenges that I previously encountered to effectively teach Agricultural Science to my learners in a better way (Respondent 9).*

*Yes, teachers do better when they gain experience. For example in my case, the very first time when I came to this school; I was right from a combined school with no teaching experience at senior secondary school. However, the Agricultural Science teacher I met who had the necessary experience of teaching at a secondary school helped me to settle down and provided me with the training necessary so that I could teach the topics at this level. At the present moment, I would say that I have gained the necessary teaching experience that I was lacking when I first came to this school., Therefore, currently, I believe I am much better than the time I was teaching from grade 8 to 10 respectively (Respondent 10).*

From the responses of the participants above, it is evident that teaching experience influences how the Agricultural Science teacher will perform. This suggests that the more years of

teaching experience a teacher has, the better the teacher will be able to teach the subject more effectively in the classroom. The responses of the participants are supported by the views expressed by Irvine (2018) in the study on “the relationship between teaching experience and teacher effectiveness: implications for policy decisions”. The author revealed that as the teachers become more experienced, their subject knowledge becomes consistent and they become better in their teaching (Boyd, Lankford, Loeb, & Wyckoff, 2010).

### ***Agricultural Science Training***

Regarding the views and perceptions of the participants about Agricultural Science training, the majority of the participants felt that Agricultural Science subject content and practical knowledge is important for effective teaching of the subject inside and outside the classroom. The following are excerpts from the responses:

*The training I underwent covered everything that I am facing now in the workplace; both the theory and content knowledge. These are what I am using now to teach my learners (Respondent 1).*

*I believe at the Polytechnic of Namibia, the course I did in Agricultural Science, much of the subject content was fully covered. Therefore, I can confidently say that both theoretically and practically, I am above average (Respondent 8).*

*Although, the training I took, the subject content component was greatly covered and constituted about 40% of credit points; however, 60% was more on practical activities. At some time, during my final year of the programme, I was exposed to school-based studies where I was attached to a particular school for a period of a full semester. During this particular period, I was expected to practically teach in a classroom. When it comes to crop production, I had my garden as a member of the young farmer association where I used to grow crops and sell whatever I produced. Therefore, such things helped me very much to become the better Agricultural Science teachers that I am today (Respondent 9).*

The above responses from the participants related to Agricultural Science training are supported by the views of Kunzman (2003) and Mokhtar (2010) in their studies “from teacher to student: the value of teacher education for experienced teachers” and “formal and informal learning opportunities in government organisations: experiences of public sector employees from six Asian nations” respectively. The authors opined that quality teacher training is more essential for effective teaching in a classroom.

### ***Qualities of a Competent Agricultural Science Teacher***

Participants were asked: In your view, what are the qualities of a competent teacher in the assessment of learners in Agricultural Science as a school subject? The responses obtained from the participants included the ability of a teacher to combine theory and practical



teaching, classroom leadership and having detailed subject knowledge. The following excerpts were obtained from the responses of the participants:

*The Agricultural Science teacher should understand the subject content... (Respondent 12).*

*Yes, when it comes to qualities, I may say Agricultural Science is a practical subject. So, being a practical subject, the first thing that an Agricultural Science teacher should know is that he/she should be able to combine theory and practice so that at least, learners do not only learn the subject content theoretically, but learners should be able to put what they have learnt into practice (Respondent 3).*

Given the above responses from the participants, quality teacher training is of paramount importance, as certain qualities that are required to be a teacher would be achieved. Qualities such as lesson planning, lesson execution, learner learning monitoring, maintaining of learner behaviour or attitude, application of a variety of teaching methods and the ability to maintain rapport with learners will be effectively enhanced (Roberts, Dooley, Harlin, & Murphrey, 2007). A competent Agricultural Science teacher would allow learners to appreciate and know that the teacher is concerned about their academic achievement, maximizing the available teaching and learning time, involving learners through the teaching and learning process and giving them the necessary learning direction (Roberts & Dyer, 2004).

## **CONCLUSION**

The purpose of the present paper was to interrogate the job performance self-concept of Agricultural Science teachers in secondary schools in the Zambezi region. The findings of the study revealed that to effectively nurture learners' achievements in Agricultural Science, teachers must have an enhanced degree of self-concept which should translate into the ability to integrate both theory and practical knowledge of the subject effectively during teaching. The study further revealed that gender does not affect the teachers' competencies for effective teaching of Agricultural Science in secondary schools in the study area. Therefore, it is conceivable to say that there are not any significant differences between male and female Agricultural Science teachers regarding job performance. However, teaching experience influences how an Agricultural Science teacher will gain the necessary subject knowledge for effective teaching of the subject. The participants indicated that the more years of teaching experience a teacher possess, the better the teacher will be able to teach the subject more effectively in the classroom. Equipped with these attributes, a teacher's self-concept is enhanced and resultantly translates into enhanced performance.

### **Conflict of interest**

The authors declare that no form of conflict of interests.

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