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1 Factors Influencing the Choice of Subject Specialisation by 2 Students at Teacher Training Institutions in Eswatini

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6 **Abstract**

7 Existing literature is incomprehensive on the factors influencing the choice of subject
8 specialisation by students at teacher training institutions in Eswatini. Thus, there was a need
9 to investigate factors influencing the choice of subject specialisation by students enrolled for
10 Primary Teachers' Diploma (PTD) in Eswatini. The study was a descriptive survey research
11 triangulating a desk review, modified Delphi technique and a survey questionnaire in data
12 collection.

13

14 **Index terms**— applied sciences; languages, pure sciences, social studies, subject specialisation; and teacher
15 training, institutions.

16 **1 Introduction**

17 choosing a college major is one of the most important decisions to be made by a college student (Begs, Bentham
18 & Tyler, 2008;Burchett, 2002). Most institutions provide information to guide them in making correct decisions
19 to an area of specialisation (Begs, Bentham & Tyler, 2008;and Schuster & Costantino, 1986). The Guidelines
20 and Regulations for Colleges Affiliated to the University of Swaziland ??2002) indicate that there are three
21 teacher training public institutions offering Primary Teachers' Diploma (PTD) in Eswatini: Ngwane Teacher
22 Training College, William Pitcher Teacher Training College and Nazarene Teacher Training College (currently
23 known as Southern Africa Nazarene University). The choice of a subject specialisation is done either at the
24 end of the second year or just before the commencement of the third year in these teacher training institutions.
25 Student teachers choose from four options: Applied Sciences; Languages; Pure Sciences and Social Studies. Soria
26 and Stebleton (2013) observed that external / extrinsic motivations for selecting a major tend to be negatively
27 associated with students' satisfaction and sense of belonging while intrinsic / internal extrinsic motivations tend
28 to be positively related. Intrinsic factors were reported as the reasons for pursuing a programme of study and
29 enrolling in tertiary institutions in Swaziland ??1993). Similarly, Tsikati (2014) found that student interest,
30 attitude and impression, related exposure, and the nature of subject specialisation were the influential factors for
31 student's choice of a specialisation prior to enrolment into a teacher training institutions in Swaziland. Wilhelm
32 (2004) reported that subject instructors have significant influence on how students perceive the usefulness of a
33 particular subject. Such instructor's influence is associated with students' subject preference (Curran & Rosen,
34 2006) and instructional style ??Babad & Taybe, 2003). Similarly, Omodi (2013) found that the teachers and
35 schools were the main responsible for students' choice of Science subject in Kenya. On the other hand, in Nigeria
36 students' attitudes influenced the choice of Geography subject (Akintade, 2012). While in Eswatini, attitudes and
37 beliefs were reported having an influence on the success of the Pre-vocational programme (Mndebele & Dlamini,
38 1999; ??ational Curriculum Centre, 2010).

39 Different studies reported the following as factors influencing the choice of a specialisation in agriculture or
40 agricultural Education: curriculum (subject combination) offered for a subject specialisation (Dube & Habedi,
41 1989), job consideration (Wildman & Torres, 2001), student's interest ??Cannon & Broyles, 2002), prior
42 student exposure (Donnermeyer & Kreps, 1994), student's grade ??Whiteley & Porter, 2000), nature of subject
43 specialisation (Wildman & Torres, 2001), professionals (Jackman & Smith-Attisano, 1992), significant others
44 (Wildman & Torres, 2001), beliefs and attitudes (Sutphin & Newsom-Stewart, 1995), and background information
45 and demographic characteristics ??Begs, Banham & Tylor, 2008;Dlamini, 1993). Rampold (2015) observed

6 METHODOLOGY

46 that parents/ guardian, professionals and college or departmental factors were influence the students' choice on
47 agriculture academic major. Bathemi (2010) found that sex was influential on student choice in Home Economics.
48 Similarly, Samela (2010) reported that sex influence the enrolment of students in Physics or Physical Science.
49 Sex was also influential in the choice of Accounting major at college (Begs et al., 2008). Dalc, Arasl, Tümer
50 and Baradarami (2013) revealed that financial, employment and referent factors were the determinants of Iranian
51 students' decision to choose accounting major. Student's location, and parental education and occupation status
52 are also considered factors when choosing a subject specialisation (Begs et al., 2008;Mokalake, 2005; ??hiteley &
53 Porter, 2000).

54 Tsikati, Dlamini and Masuku (2016) revealed that students' interest, department's image, sex and professionals
55 were predictors for the choice of an Agriculture option offered by the colleges in Swaziland. Owino and Odundo
56 found that in selection of History was determined by personal interests, parental guidance, career guidance and
57 influence of lecturers. Tsikati (2019a conducted a similar study on the "Factors influencing choice of a subject
58 specialisation by prospective teachers at teacher training college in Eswatini." Tsikati (2019b) published another
59 study on the "Factors influencing the changing of subject specialisation by students at teacher training institutions
60 in Eswatini." However, the existing literature is silent on the factors influencing the choice of subject specialisation
61 by students at teacher training institutions in Eswatini. Thus, there was a need to investigate factors influencing
62 the choice of subject specialisation by students at teacher training institutions in Eswatini.

63 2 a) Theoretical and Conceptual framework

64 The study was framed by the Classification Schema model developed by Hodges and Karpova (2010). Initially,
65 this model was designed for fashion, but fit in this study as caters for the job related factors. It is an extension
66 of the Self-determination Theory which defines intrinsic and varied extrinsic sources of motivation (Deci & Ryan,
67 1985). Self-determination theory distinguishes between two different types of motivation-intrinsic and extrinsic
68 (Deci & Ryan, 1985). Thus researchers have used the theory to describe the career decision making of undecided
69 students (Gordon 2007;Guay, Mageau, & Vallerand, 2003). The Classification Schema model opines that the
70 choice of a college major rest of three variables: inter-personal, personal and environmental variables. The
71 personal factors correspond to the intrinsic factors while the interpersonal and environmental factors correspond
72 to the extrinsic factors of the Self-determination theory. The inter-personal factors refer influence from parents/
73 guardian, friends / peers, high school teachers and college instructors. The personal characteristics factors relate
74 to objective / demographic variable (e.g. sex, age, race and socio-economic status) and subjective / psychographic
75 variables (e.g. interest, aptitude, personality traits and work values). Lastly, the environmental factors entail
76 the influence college related (e.g. class size, quality of instruction and reputation of programme / department)
77 and occupational variables (e.g. employment opportunities, earnings potential, and occupation dynamics. Thus,
78 Figure 1 presents the conceptual framework of the study adapted from the Classification schema model and the
79 self-determination Theory.

80 3 b) Purpose and objectives of the study

81 The purpose of the study was to identify factors influencing the choice of subject specialisation by students at
82 the teacher training institutions in Eswatini. The specific objectives of the study were to: 1. Describe student
83 teachers enrolled in a Primary Teachers' Diploma programme by subject specialisation.

84 4 Describe student teachers enrolled in a Primary

85 Teachers' Diploma programme by factors influencing the choice of a subject specialisation.

86 5 Describe student teachers enrolled in a Primary

87 Teacher Diploma programme by their background and demographic characteristics. 4. Compare the choice of a
88 subject specialisation by selected background and demographic variables.
89 II.

90 6 Methodology

91 The study was a descriptive survey research. A triangulation of desk review, modified Delphi technique and a
92 survey questionnaire were used for data collection. The outcomes from the desk review and modified Delphi
93 technique were used to develop the survey questionnaire. The questionnaire was used for data collection to
94 determine factors for the choice of subject specialisation by PTD student teachers.

95 The College. An up-to-date population frame was obtained from the administrative offices of the three teacher
96 training institutions to control frame error. Selection error was controlled by thoroughly checking of the register
97 of students to avoid duplication of names. The instrument was validated by educators involved in the teaching
98 of the PTD who were used during the Delphi process. The overall reliability coefficient of the study was found
99 to be .83 which effectively means the instrument was 83% reliable. Self-administered questionnaires were used to
100 collect data. Non-response error was controlled by comparing the means of early and late respondents (Miller &
101 Smith, 1983). The data were analysed using descriptive statistics (such as means, standard deviations, frequencies

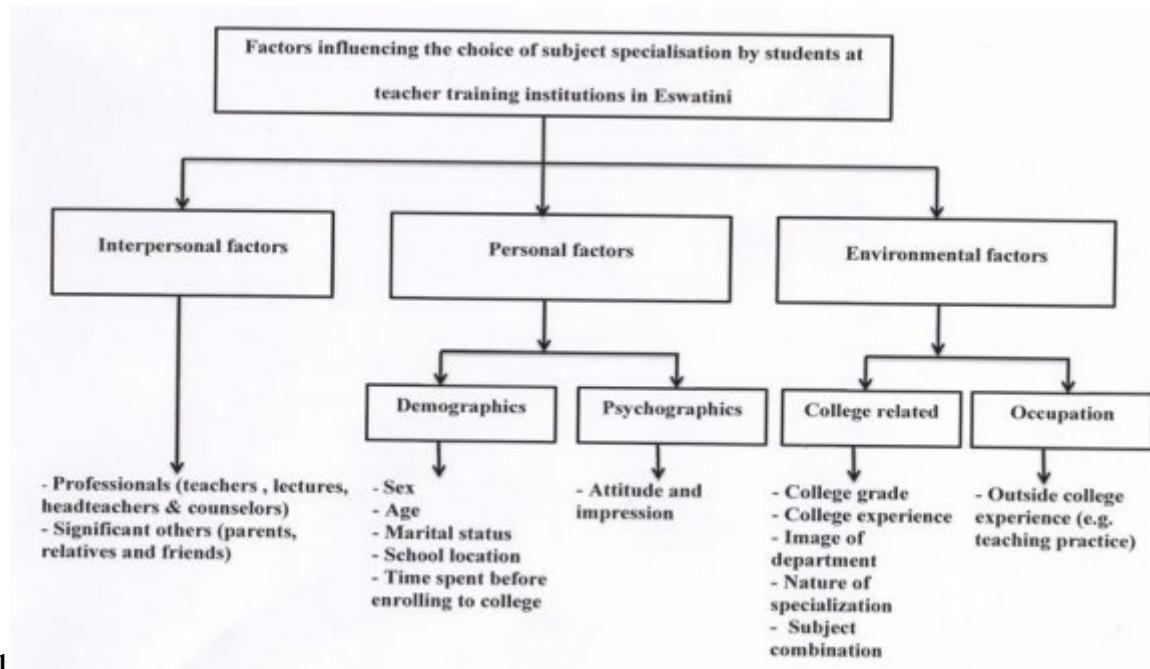
102 and percentages) and nonparametric statistics such as chi-square. 2 indicates that student interest ($\chi^2 = 4.51$, $p = .81$) was the major factor for the choice of subject specialisation for final year PTD students at the teacher 103 training institutions. These findings on interest affirmed numerous studies on the choice of subject specialisation. 104 Houser and Yoder (1992) concluded that interest was important in the selection of a specialisation in a college or 105 university. Stokes (2007) studying factors influencing the decisions of university students to choose a specialisation 106 to teach at high school found that interest was the main factor. Most students claimed that interest on a 107 specialisation was aroused by many a factor amongst which was an interesting job. Interest was of course, very 108 personal, and two people may be interested in the same activity for quite different reasons (Sutphin & Newsom- 109 Stewart, 1995). Dlamini (1993) believed that opportunities for further training aroused student interest towards 110 a specialisation. Interest as a factor for the choice of subject specialisation was reported by Tsikati (2019a) 111 Attitudes and impressions ($\chi^2 = 3.62$, $p = 1.48$) held by the respondents towards lecturers and the specialisation 112 was another variable influential on the choice of a subject specialisation by PTD students at teacher training 113 institutions. Mndebele and Dlamini (1999) reported that parent's attitude could either enhance or discourage the 114 choice of a specialisation in a Pre-vocational programme in Swaziland. The findings on the influence of attitude 115 on the choice of a specialisation was also reported by Akintade (2012) when studying factors the determinants of 116 selecting Geography in Nigeria. 3 presents the background and demographic variables of the respondents. About 117 two thirds ($n=219$ or 64.0%) of the respondents were females. Most of the respondents were aged between 20-25 118 years ($n=166$, 48.5%). Similarly, a majority of the student teachers (56.1%) spent less than four year before 119 they enrolled into the teacher training institutions. A majority of the respondents (84.5%) were not married and 120 80.4% were living in rural areas. Few respondents (17.5%) had done short term teaching contract before enrolling 121 into the teacher training institutions. A majority of the student teachers (66.7%) were influenced by the subject 122 combination in choosing a specialisation at the teacher training institution. Similar, findings that a majority 123 of student teachers female, single and had not done teaching practice were reported by Tsikati, Dlamini and 124 Masuku (2016). Student teachers' interest and attitudes and impressions were the main factors influencing their 125 choice of subject specialisation at the teacher training institution in Eswatini. Another conclusion drawn was 126 that choice of a subject specialisation differed in terms of student's sex and number of years between completing 127 high school (Grade 12) and teacher training institution. The findings of the study provide support for using the 128 classification schema developed by Hodges and Karpova (2010) to summarize and systematize the various factors 129 influencing the choice of a subject specialisation at teacher training institutions in Eswatini. Therefore, study 130 recommended that administration at the teacher training institutions should always put student interest first in 131 choosing a specialisation. Also, the subject combination making-up a subject specialisation should be reviewed 132 to cate for the interest of the student teachers.

134 **7 III.**

135 **8 Results and Discussion**

136 **9 a) Distribution of respondents by subject specialisation**

137 **10 Literature Cited**



1

Figure 1: Figure 1 :

1

| Subject Specialisation | NTTC | | SANU | | WPC | | Total | |
|------------------------|-------|------|-------|------|-----|------|-------|------|
| | N=149 | f | N=135 | F | f | % | f | % |
| Applied Sciences | 36 | 24.2 | 48 | 35.6 | 17 | 29.3 | 101 | 29.5 |
| Languages | 39 | 26.2 | 27 | 20.0 | 9 | 15.5 | 75 | 21.9 |
| Pure Sciences | 39 | 26.2 | 36 | 26.7 | 16 | 27.6 | 91 | 26.6 |
| Social studies | 35 | 23.5 | 24 | 17.8 | 16 | 27.6 | 75 | 21.9 |

b) Factors influencing choice of subject specialisation

Table

Figure 2: Table 1 :

2

| Factors | ? | ? |
|----------------------------|------|------|
| Student interest | 4.51 | .81 |
| Student grades | 3.31 | 1.28 |
| Outside college experience | 3.95 | 1.19 |
| Nature of specialisation | 3.51 | 0.92 |
| Professionals | 2.80 | 1.26 |
| Significant others | 2.31 | 1.22 |
| Attitude and impressions | 4.29 | 1.27 |

Note: 1 = No influence; 2 = Low influence; 3 = Slightly low influence; 4 = High influence; 5 = Slightly high influence; 6 = Very high influence.

c) Respondents' background information
demographic characteristics

Table

Figure 3: Table 2 :

3

| Variables | Institutions | | | | | | Total (N=342) | |
|-------------------------------------|--------------|------|--------------|------|------------|------|---------------|------|
| | NTTC (N=149) | | SANU (N=135) | | WPC (N=58) | | | |
| | f | % | f | % | f | % | f | % |
| Sex | | | | | | | | |
| Female | 93 | 62.4 | 92 | 68.1 | 34 | 58.6 | 219 | 64.0 |
| Male | 56 | 37.6 | 43 | 31.9 | 24 | 41.4 | 123 | 36.0 |
| Age | | | | | | | | |
| 20 -25 | 78 | 52.3 | 65 | 48.1 | 23 | 29.7 | 166 | 48.5 |
| 26 -30 | 51 | 34.2 | 57 | 42.2 | 31 | 53.7 | 139 | 40.6 |
| 31 -35 | 17 | 11.4 | 12 | 8.9 | 3 | 5.2 | 32 | 9.4 |
| 36 -40 | 3 | 2.0 | 1 | 0.7 | 1 | 1.7 | 5 | 1.5 |
| Range | 17 | | 18 | | 20 | | 20 | |
| Mean | 26.0 | | 26.4 | | 26.4 | | 26.2 | |
| SD | 3.39 | | 3.30 | | 3.36 | | 3.35 | |
| Marital status | | | | | | | | |
| Single | 132 | 88.6 | 109 | 80.7 | 48 | 82.8 | 289 | 84.5 |
| Married | 17 | 11.4 | 26 | 19.3 | 10 | 17.2 | 53 | 15.5 |
| Home location | | | | | | | | |
| Urban | 27 | 18.1 | 30 | 22.2 | 10 | 17.2 | 67 | 19.6 |
| Rural | 122 | 81.9 | 105 | 77.8 | 48 | 82.8 | 275 | 80.4 |
| Father's highest level of education | | | | | | | | |
| Uneducated | 41 | 27.5 | 29 | 21.5 | 14 | 24.1 | 84 | 24.6 |
| Primary | 16 | 10.7 | 15 | 11.1 | 7 | 12.1 | 38 | 11.1 |
| Secondary | 19 | 12.8 | 23 | 17.0 | 11 | 19.0 | 53 | 15.5 |
| Certificate | 25 | 16.8 | 25 | 18.5 | 8 | 13.8 | 58 | 17.0 |
| Diploma | 26 | 17.4 | 27 | 20.0 | 8 | 13.8 | 61 | 17.8 |
| First Degree | 17 | 11.4 | 8 | 5.9 | 8 | 13.8 | 33 | 9.6 |

Figure 4: Table 3 :

4

| Variables | X 2 | df | p |
|---------------------------------------|-------|----|-----|
| Sex | 21.39 | 3 | .00 |
| Age | 3.29 | 9 | .95 |
| Marital status | 3.65 | 3 | .30 |
| Home location | 7.76 | 6 | .25 |
| Institution | 2.64 | 3 | .45 |
| Father's education | 36.02 | 21 | .02 |
| Mother's education | 34.66 | 21 | .03 |
| Father's occupation | 14.52 | 9 | .11 |
| Mother's occupation | 10.02 | 9 | .35 |
| Subject combination | 3.77 | 3 | .29 |
| Short-term teaching contract | 4.42 | 3 | .22 |
| Interval between Grade 12 and college | 7.67 | 3 | .05 |
| p?.05 | | | |

IV. Conclusions and Recommendations

Figure 5: Table 4 :

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