# Teacher Trainees' Attitudes toward the Untrained Teachers Diploma in Basic Education Program in Ghana

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## Abstract

The purpose of the study was to examine teacher trainees' attitudes toward the Untrained Teachers Diploma in Basic Education Program (UTDBE) in Ghana. Participants were a purposive sample of 284 TTs (139 female; 145 male) enrolled in the residential session of the UTDBE program in two colleges of education. A 21-item 5-point Likert-type questionnaire served as the data source. The predictor variables were year in program, sex, marital status, grade level, and age. Attitude served as the response variable for the study. Overall, only 38.38% of the TTs reported positive attitudes toward the UTDBE. Logit model analyses indicated year in program and grade level were significant predictors of attitude, while sex, marital status and age were not. TTs in their second year were less likely than those in the first year to report positive attitudes toward the UTDBE. Similarly, TTs teaching primary classes were less likely to report positive attitudes toward the program than their colleagues in kindergarten classrooms.

Keywords: Attitudes, teacher education, Ghana, untrained teachers.

# 1. Introduction

The United Nations ([UN], 2016) Sustainable Development (SDG) Goal 4 seeks to attain quality education for all and to promote lifelong learning opportunities for all. One target for the SDG 4 is to increase the supply of qualified teachers in developing countries by the year 2030. According to Palmer (2005), the provision of adequate number of trained teachers for primary schools would not only be critical for the achievement of universal primary education in Ghana, but also crucial for poverty reduction in the country. Teacher trainees' attitudes toward their teacher education program is one variable that could affect their recruitment and retention in the programs.

Attitudes are important in explaining individual differences in performance (Nicolaidou &. Philippou, 2003). They are responses to a situation or object, and are positive or negative. According to Philipp (2007), attitudes are an individual's disposition or opinion and reflections of how that individual acts, feels or thinks. Ajzen (1991) defines attitudes as "the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question" (p. 188). This cognitive approach to attitude formation views attitudes as resulting from the beliefs people have about the object or behavior in question (Fishbein & Ajzen, 1975). Behavior is influenced by intentions to carry out the behavior; intentions in turn are influenced by one's attitude toward the behavior (Ajzen, 1991). As Rokeach (1968) noted, attitudes influence behavior, even though the relationship is not well understood. Furthermore, attitudes toward a behavior are influenced by five key factors. Four of the factors are external: teacher characteristics, teaching characteristics, classroom characteristics, and assessments and achievement. The fifth, considered as an internal factor, is the individual's perceptions and characteristics (Goodykoonz, 2008).

In education, research indicates that student attitudes toward a subject lead to academic success (Popham, 2005). Thus, educators can use the control they have over some of the external factors like teaching and classroom characteristics to affect the internal perceptions and student attitudes (Goodykoonz, 2008). For example, providing TTs with choices about what to do and how to do things allow volition and promote intrinsic motivation (Bao & Lam, 2008).

Schools in deprived areas in developing countries have a perpetual inaccessibility to quality basic education and availability of and retention of quality teachers in many deprived areas (UNESCO, 2014). Due to their unique geographical locations and economic and socio-cultural characteristics, rural areas in Ghana experience limited access to equal opportunities as their urban counterparts (Miller, 2015). That is, the lack of social amenities and personal development opportunities serve as disincentives for qualified teachers to accept postings to rural areas. Consequently, there is a tendency for less qualified teachers to be employed in the rural communities (Hedges, 2002) causing many rural schools to suffer from an acute teacher shortage (CARE International, 2003).

To address the perennial teacher shortage, especially in rural areas in Ghana, a nation-wide implementation of the Untrained Teachers Diploma in Basic Education (UTDBE) program took effect in 2005, after a pilot phase in areas considered to be the most deprived in the country (Ghana Education Service [GES], 2003). The primary

goal of the four-year program is to provide untrained teachers with the skill they need for the delivery of quality instruction (Associates for Change [AFC], 2016; GES, 2011). The UTDBE is aimed at offering teacher training opportunities to already serving untrained teachers, improving the quality of teaching and learning, and increasing the number of trained teachers through the training of untrained teachers (AFC, 2016; GES, 2003). The program is offered through a combination of: distance learning modules, school-based professional development, and periodic residential sessions on the campus of TTs' respective colleges of education (AFC, 2016). The UTDBE had the potential to impact the Government's strategic plan that by the year 2015, 95% of teachers in primary schools should be trained teachers (Government of Ghana, 2010). By 2011, the program had produced 16,439 graduates with diplomas and 6,464 graduates with Certificate 'A' (GES, 2011). As a distance learning in-service program, the untrained TTs are often non-traditional students.

Ghana did not meet the target of 95% trained teachers in primary schools by 2015 (Invictus Institute, 2017; Ministry of Education [MOE], 2016). The MOE (2016), for example, reported the percentages of trained teachers in public kindergartens and primary schools in Ghana for the 2015/2016 academic year to be 66% and 78% respectively. However, the corresponding percentages of trained teachers in deprived districts of the country were 52% and 61% respectively. These figures demonstrate the difficulty in "attracting trained teachers in some schools, or in reaching the final few with . . . the Untrained Teacher Diploma in Basic Education" (MOE, 2013: 47).

Research on the UTDBE in Ghana is scarce. Untrained teacher TTs and their lecturers in one study indicated the program offered them [TTs] the opportunity to train as professional teachers (Sofo, Thompson, & Kanton, 2015). In addition, the TTs suggested they should be free to express their views in class without any repercussions. However, participants in the study identified cost and pedagogical issues as constraints to achieving program goals. The TTs indicated it was challenging for them to pay the exorbitant fees charged for the program. It was a "double challenge" for TTs who had to pay their own fees and those of their children in tertiary and pre-tertiary institutions. Yet still, Sofo et al. (2015) identified a third group of TTs, nursing mothers, who encountered what we term "triple challenge" because they had to pay their own fees, those of their children, and at the same time care for babies during the residential sessions of the program on the colleges of education campuses. ACE (2016) reported similar findings, citing financial challenges, marital issues, and poor academic performance as reasons for TTs dropping out of the UTDBE. A comparison of trainees in the UTDBE program with conventional TTs revealed that while the UTDBE trainees performed better in the professional field course, the conventional trainees performed better in the core subject of Integrated Science. That is, the UTDBE trainees exhibited a higher level of competence in the practical courses compared to the conventional TTs (AFC, 2016).

According to Powell (1992), non-traditional preservice teachers tend to establish their conceptions of teaching around their experiences with their own children and former work experiences. Alternatively, traditional preservice teachers' conceptions were based on their prior school experiences. Thus, it is necessary to examine TTs' attitudes toward the UTDBE, since their attitudes are influenced by their perceptions of teaching (Goodykoonz, 2008).

# 1.1 Purpose of the Study

Emotional dispositions influence an individual's behavior, as one is likely to achieve better learning outcomes in a content or practice that one enjoys or finds useful (Eshun, 2004). Thus, positive attitudes toward teacher education programs are desirable since they may influence TTs' willingness to learn and stay engaged. Therefore, the purpose of the present study was to examine Ghanaian untrained teacher trainees' attitudes toward the Untrained Teachers Diploma in Basic Education Program. An understanding of TTs' attitudes toward the UTDBE would help teacher educators be better informed as to what instructional strategies and practice would have the most impact in TTs' professional growth. An insight into their attitudes would also inform policy makers and educational administrators as to what aspects of the program need to be revised.

# 2. Method

#### 2.1 Participants

Participants were a purposive sample of 284 TTs (139 female; and 145 male) enrolled in residential sessions of the UTDBE in two colleges of education in Northern Ghana. Their ages ranged from 18 to 48 years (M = 27.19; SD - 5.11). The sample included 125 first year and 159 second year trainees.

# 2.2 Instrument

A 21-item 5-point Likert scale served as the data source. The questionnaire items elicited information on TTs' attitudes toward the UTDBE relating to: program cost, admission requirements, courses offered, instructional

strategies in their classrooms, and facilities. TTs indicated the extent to which they agreed or disagreed to each of the 21 statements about the UTDBE by indicating in the appropriate box for strongly disagree (1) to strongly agree (5). Thus, a low rating (2 or 1) reflected a negative attitude while a high rating (5 or 4) reflected a positive attitude, with a rating of "3" rating representing neutral attitude. The questionnaire required TTs to provide biographic information such as year in the program, sex, marital status, grade level and age.

The Human Subjects Committee at the authors' institution approved the study. In addition, the TTs consented to their participation in the study prior to data collection. The questionnaires were handed out to the TTs in their classrooms to be completed outside class. They returned the completed questionnaires two to three days later.

# 2.3. Data Analyses

Attitude served as the response variable for the study. The predictor variables were year in program, sex, marital status, grade level and age. Data were analyzed using descriptive and inferential statistics. Frist, we calculated the conditional percentage distribution of each predictor variable for each level of the dependent variable (Utts, 2015). Preliminary analysis used three levels (positive, neutral, and negative) of the response variable. However, frequency distribution of the response variable indicated a very low percentage for the negatives, therefore the response variable was re-categorized into two levels ("positive" and "not positive"). Table 3 shows the logit model where the log(odds) and odds ratio were estimated for each predictor variable. Table 4 displays the logit model where all the predictors were used simultaneously to estimate the log(odds) and the odds ratios. The RStudio version 0.98.1103 (RStudio Team, 2015) was used for all data analyses.

# 3. Results

#### 3.1 Year in program, sex, marital status and teacher trainee attitudes toward the UTDBE

Table 1 presents data on year in program, sex, marital status and teacher trainees' attitudes toward the UTDBE program. A higher percentage of TTs in their first year (55.96%) of training reported positive attitudes about the UTDBE than those in their second year (44.04%) of training. In addition, a higher percentage of males (53.21%) TTs than females (46.79%) had positive attitudes toward the UTDBE. Furthermore, a higher percentage of TTs who were married (52.29%) had positive attitudes toward the UTDBE than their colleagues who were single (47.71%). Overall, only 109 (38.38%) of the TTs had positive attitudes toward the UTDBE.

	Attit			
	Positive		Not Positive	
Categorical Predictors	f	%	f	%
Year in Program				
1 <sup>st</sup>	61	55.96	64	36.57
2 <sup>nd</sup>	48	44.04	111	63.43
Total	109	100.00	175	100.00
Sex				
Female	51	46.79	88	50.29
Male	58	53.21	87	49.71
Total	109	100.00	175	100.00
Marital Status				
Married	57	52.29	81	46.29
Single	52	47.71	94	53.71
Total	109	100.00	175	100.00

Table 1: Year in training, sex, marital status and teacher trainee attitudes toward the UTDBE

3.2 Grade level, age, and teacher trainee attitudes toward the UTDBE

Table 2 shows data on grade level, age and TTs' attitudes toward the UTDBE. A higher percentage of TTs teaching kindergarten (K) classrooms (26.61%) had positive attitude toward the program than in primary classrooms (P1-P6). Alternatively, the lowest percentage of TTs reporting positive attitudes were those teaching P6 (4.59%). Finally, TTs who reported positive attitudes toward the UTDBE had a slightly higher mean age (27.70) than those attitudes were not positive (26.86).

	Attitude			
	Positive		Not Positive	
Category	f	%	f	%
Grade Level				
К	29	26.61	25	14.29
P1	14	12.84	27	15.43
P2	18	16.51	40	22.86
P 3	20	18.35	31	17.71
P 4	14	12.84	33	18.86
P 5	9	8.26	13	7.43
P 6	5	4.59	6	3.42
Total	109	100	175	100
Continuous Predictor	М	SD	М	SD
Age	27.70	5.08	26.86	5.12

Table 2: Grade level, age, and teacher trainee attitudes toward the UTDBE

# 3. Predictors of teacher trainees' attitudes toward the UTDBE

Tables 3 and 4 present logit model data for each predictor variable for the present study. Data in Table 3 represent the logit model where the log(odds) and odds ratio were estimated for each predictor variable separately. First year, female, kindergarten (K), and married categories were used as the reference categories for the predictor variables year in program, sex, grade level, and marital status respectively. The data indicated that year in program and grade level were significant predictors of TTs' attitudes toward the UTDBE, while TTs' sex, marital status, and age were not. TTs in their second year were less likely to have positive attitudes toward the UTDBE than those in the first year. Similarly, TTs who taught P2 and P4 were significantly less likely to have positive attitudes towards the UTDBE compared to kindergarten teachers. However, these were not statistically significant.

Predictor	Log(Odds)	Odds Ratio	95% CI
Year in Program (1 <sup>st</sup> Year)			
2 <sup>nd</sup> Year	-0.790	0.454	(0.278, 0.737)*
Sex (Female)			
Male	0.140	1.150	(0.713, 1.860)
Marital Status (Married)			
Single	-0.241	0.786	(0.486, 1.269)
Grade Level (K)			
P1	-0.805	0.447	(0.190, 1.022)
P2	-0.947	0.388	(0.177, 0.832)*
P 3	-0.587	0.556	(0.253, 1.202)
P 4	-1.006	0.366	(0.157, 0.823)*
P 5	-0.516	0.597	(0.213, 1.615)
P 6	-0.331	0.718	(0.187, 2.663)
Age	0.032	1.033	(0.986, 1.083)

Table 3: Logit Model for individual predictors

\* Statistically significant at the 5% level

Table 4 shows the logit model where all the predictors were used simultaneously. The results were identical to those in Table 3, when the predictor variables were used individually. Year in program and grade level were significant while sex, marital status, and age were not. TTs in their second year had a significantly lower percentage with positive attitudes toward the UTDBE than their counterparts in the first year. Similarly, TTs in P2 and P4 classrooms had lower percentages with positive attitudes toward the UTDBE than those in kindergarten classrooms. In addition, those in P1 had a significantly lower percentage with positive attitudes when the predictors were analyzed simultaneously.

Predictors	Log(Odds)	Odds Ratio	95% CI
Intercept	0.655	1.924	(0.320, 11.793)
Year in Program (1 <sup>st</sup> Year)			
2 <sup>nd</sup> Year	-0.923	0.397	(0.223, 0.696)*
Grade Level(K)			
P1	-0.925	0.396	(0.160, 0.948)*
P2	-1.068	0.344	(0.146, 0.789)*
P 3	-0.861	0.423	(0.172, 1.016)
P 4	-1.150	0.316	(0.122, 0.791)*
P 5	-0.795	0.452	(0.144, 1.366)
P 6	-0.784	0.457	(0.105, 1.906)
Sex(Female)			
Male	0.771	2.161	(1.169, 4.092)
Marital Status (Married)			
Single	-0.274	0.761	(0.435, 1.324)
Age	-0.004	0.996	(0.942, 1.052)

 Table 4: Predictive Model for Positive Attitude

\* Statistically significant at the 5% level

# 4. Discussion and Conclusions

The study examined untrained TTs attitudes toward the Untrained Teachers Diploma in Basic Education program

in Ghana. The main goals of the UTDBE are to increase the number of trained teachers by training serving untrained teachers, and improving the quality of teaching and learning in basic schools (GES, 2003). It is therefore worrisome that less than 39% of the TTs in the present study had positive attitudes toward the UTDBE. For the UTDBE to produce effective teachers capable of increasing student learning outcomes, teacher educators should direct attention toward improving aspects of teaching, such as instructional practices and teacher attitudes, as they have been shown to predict student achievement (Palardy & Rumberger, 2008).

The finding that second year TTs were less likely than those in their first year to report positive attitudes toward the UTDBE has implications for retention in the program. The ACE (2016) reported an 18.9% drop-out rate for the UTDBE. In addition, the report indicated a higher drop-out rate at the end of the first year. The nature of classroom interactions influence student self-determined motivation (Black & Deci, 2000), which in turn results in persistence and positive learning outcomes (Deci & Ryan, 2008). Thus, it is crucial for teacher educators to create non-threatening environments to allow TTs develop positive attitudes toward the UTDBE to reduce the drop-out rate.

Furthermore, TTs in primary classrooms were less likely than their colleagues in kindergarten classrooms to report positive attitudes toward the UTDBE. Perhaps, TTs in kindergarten classrooms were more comfortable with the content and/or the students than those in primary classrooms. As Eshun (2004) noted, one would more likely achieve better outcomes in the content or practice that one enjoys.

In conclusion, results in the present study indicated year in program and grade level were significant predictors of TTs' attitudes toward the UTDBE, while sex, marital status and age were not. The data analyses utilized in this study did not address the interactions among the predictor variables in predicting TTs' attitudes toward the program. For example, to what extent would the interaction between year in program and sex, or the interaction between year in program and grade level determine TTs' attitude toward the UTDBE?

The present study used the mean of 21 questionnaire items to compute the overall attitude toward the UTDBE. In addition to the overall attitude toward the program, future research should organize the questionnaire items into subscales. For instance, the following categories or issues addressed by the questionnaire items may be used as subscales: program cost, admission requirements, courses offered, instructional strategies, and facilities. This would allow the assessment of TTs' attitudes toward specific aspects of the UTDBE. Thus, provide teacher educators, policy makers, and educational administrators the opportunity to identify strategies for addressing specific aspects of the program.

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