#### **DOES AGE GUARANTEE WISDOM IN TEACHING?**

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## ABSTRACT

This study determines the influence of age as direct factor, and educational qualification, teaching experience, and Scholarly or In-service Training/Profession Development as indirect factors affecting teacher's theoretical knowledge on learning. It employs the descriptive-survey method whereby data on the different teacher attributes and their theoretical knowledge application was gathered using a questionnaire prepared for the study. Path and regression analyses were automated using Pearson product moment correlation. The study generally discloses that to some extent, in-service Training/Professional Development has an influence on theoretical knowledge on learning. However, age, educational qualification, and teaching experience, have no bearing on the teacher's theoretical knowledge on learning.

Keywords: wisdom, direct and indirect factors, theoretical knowledge

#### **1.0 Introduction**

Most people believe in the familiar doctrine that "*age brings wisdom*". However, there is no empirical evidence to prove this claim, in fact, aged people is now beginning to distrust the same. Relative to the above claim, this study would like to investigate the influence of age along with other attributes on the teachers' theoretical knowledge on learning.

On the other hand, the essence in pedagogy recognizes the teacher as the prime agent of learning. In fact, *Gestalt's Theory of Configuration* mentions among others, that there are significant factors that would affect learning and one of these is the teacher's manner of teaching. There are several aspects that will influence the teacher's manner of teaching and that include theoretical knowledge of learning.

Education theorists formulated a lot of learning theories along with behaviorism, cognitivism, and constructivism points of view, but the dilemma as to how far is theoretical knowledge of learning is applied or used in teaching, receives less attention in previous studies. Such Theoretical knowledge can be acquired from preparatory courses /formal trainings, experience, or by both. One must not demean, though, the vital assertion of Vernalee that "experience is the best teacher". This study tries to investigate the manifestation or application of the teacher's theoretical knowledge in his classroom teaching in relation to age, educational qualification, teaching experience, and units of education subjects earned.

In his article "Knowledge and Teaching: Foundations of New Reform", Shulman (1997) articulated aspects of teaching which are implied in the following questions; What are the sources of knowledge used in teaching?; In what terms and conditions can those sources be conceptualized?; and, What are the process that may affect pedagogical reasoning and actions?

Comparatively, this study will contextualize such questions with these ones: 1. Is theoretical knowledge in learning a vital source of information applied in teaching? Can teachers conceptualize these theories of learning in the classroom?; and, What are the processes/attributes true to teachers that may affect the pedagogical application of such in the classroom? The last question focuses more on the attributes of the teacher as the agent of learning. Kane, et. al., (2007); Clotfelter, et.al. (2009), Renaud and Murray (1996); and Horner L.K., et. al. (1989) considered the following attributes: age, teaching experience, sex, and personality traits as teacher attributes that may affect teaching effectiveness.

Past researches claimed that to some extent the manner of teaching is affected by some attributes e.g.: age, teaching experience, sex, and personality traits. In their study, which examined the relationships among age, personality and effectiveness in teaching effectiveness of the academic psychologists of the University of Ontario, Murray and Renaud confirmed the results of the previous researches that they cited, i.e., the teaching effectiveness of teachers' declines as teacher ages.

Meanwhile, Clotfelter and Vigdor (2007) conducted a study on the effect of teaching experience on students' achievement. They have found out that teaching experience significantly affects students' achievement during the first few years, but slows down at a certain point over subsequent years. The same was reported by Kane et. al. (Education Next, Winter 2007) that few leading studies indicate that the effect of teacher experience on student achievement is greatest in the first few years.

While the aforesaid researches correlate the different teacher attributes to teaching effectiveness as rated by the students as well as student achievement, these did not determine the manifestation or application of the teachers' theoretical knowledge of learning in the classroom in relation to the same attributes. Further, the above studies utilized data which were taken from students rating. The present study uses data which are sourced out from teachers themselves using situational questions relating to the different learning theories.

#### 2.0 Conceptual Framework

Murray and Renaud (1996); and Horner L.K., et. al. (1989) considered among others, age and teaching experience (TE), as attributes that may affect teaching. The researchers included educational qualification (EQ) and Scholarly or In-Service Trainings / Professional Development in the study as they find these relevant in gaining theoretical knowledge on learning. As shown in the paradigm below, age is counted as the direct predictor of theoretical knowledge on learning while the three other variables affecting the same, but are set on separate indirect paths are educational qualification, teaching experience, and education units earned.



Figure 1. Conceptual Framework of the Study

### 3.0 Methodology

The study utilized the descriptive-survey method whereby data on the different teacher attributes and their theoretical knowledge application was gathered using a questionnaire prepared for the study. Content validation of the questionnaire was done by the experts. Thirty seven faculty members were required to answer the said questionnaire to measure their theoretical knowledge on learning. The study was conducted at Northwestern Mindanao State College of Science and Technology (NMSCST), Tangub City.

The data gathered were then analyzed with the use of statistical measures such as the mean and standard deviation. Path and Correlational analyses were done using a statistical software.

## 4.0 Results and Discussion

The table below shows the path weight for segment age to educational qualification. The figures show a positive path weight of 0.5175.

## Table 1: Path Weight for the Segment Age to Educational Qualification

```
The regression equation is EQ = 0.000 + 0.517 AGE
            Coef
                   SE Coef
                                Т
                                      Ρ
Predictor
Constant
           0.0000
                     0.1427
                               0.00
                                     1.000
AGE
           0.5175
                    0.1446
                              3.58 0.001
S = 0.8678
             R-Sq = 26.8\%
                            R-Sq(adj) = 24.7\%
```

Meanwhile the path weight for segment Educational Qualification to Teaching Experience has a value of 0.4830 as reflected in Table 2.

## Table 2. Path Weight for the Segment Educational Qualification to Teaching Experience

The regression equation is TE = -0.000 + 0.483 EQCoef SE Coef Т Р Predictor Constant -0.0000 0.1460 -0.00 1.000 Educational Qualification 0.4830 0.1480 3.26 0.002 S = 0.8880R-Sq = 23.3%R-Sq(adj) = 21.1%

Contrary to the first two segments mentioned above, Table 3 shows a negative path weight of -0.1084 for the segment Teaching Experience to Theoretical Knowledge on Learning.

# Table 3: Path Weight for the Segment Teaching Experience to TheoreticalKnowledge on Learning.

The regression equation is $TKL = 0.000 - 0.108 TE$						
Predictor	Coef	SE Coef	T	P		
Constant	0.0000	0.1657	0.00	1.000		
Teaching Experience	-0.1084	0.1680	-0.65	0.523		
S = 1.008 R-Sq = 1	.2% R-S	Sq(adj) = 0.0	)%			

The segment Age to Scholarly or In-Service Trainings / Professional Development has a path weight of 0.2432 as reflected in Table 4.

 Table 4: Path Weight for the Segment Age to Scholarly or In-Service

 Trainings / Professional Development

The regression equation is SIT/PD = -0.000 + 0.243 AGE Predictor Coef SE Coef T P Constant  $-0.0000 \quad 0.1617 \quad -0.00 \quad 1.000$ AGE  $0.2432 \quad 0.1640 \quad 1.48 \quad 0.147$ S = 0.9837 R-Sq = 5.9% R-Sq(adj) = 3.2%

The segment Scholarly or In-Service Trainings / Professional Development to Theoretical Knowledge on Learning has a path weight of 0.1585 as shown in Table 5.

## Table 5: Path Weight for the Segment Scholarly or In-Service Trainings /Professional Development to Theoretical Knowledge on Learning.

The regression equation is $TKL = 0.000 + 0.158$ SIT/PD					
Predictor Constant Scholarly or In-	Coef 0.0000	SE Coef 0.1646	T 0.00	P 1.000	
Service Trainings / Professional Dev't.	0.1585	0.1669	0.95	0.349	
S = 1.001 R-Sq = 2.5% R-Sq(adj) = 0.0%					

To clearly illustrate the above tabular results, the different path weights are plotted correspondingly in the diagram below (Figure 2). It can be noted that there are segments in each path which are having extremely different path weights.



Figure 2. Direct and Indirect Paths with the Corresponding Weight in Each Segment.

The total direct and indirect effects of the predictors under study on theoretical knowledge of learning are presented in Table 7.

Table 7: Causal Effects of Direct and	<b>Indirect Predictors on Th</b>	eoretical
Knowledge on Learning		

Path	Effect	Nature of Effect	Total
AGE > EQ > TE > TKL	.5175  x  .4830  x 108 =0270	Indirect	Total Indirect Effect = .0114
AGE > SIT/PD > TKL	.2430  x .1580 = .0384	Indirect	
AGE > TKL	=5540	Direct	Total Direct Effect =5540
Total Causal Effect		=5426	

Tabular values shows that educational qualification and teaching experience as indirect predictors have no or negative bearing (e = -.0270) on theoretical knowledge of learning and apparently its application in the classroom. This indicates that theoretical knowledge on learning is not guaranteed by the post graduate degrees a teacher has, or by his /her years of teaching. On the contrary, scholarly or in-service trainings / professional development has positive influence (e = .0384) to theoretical knowledge on learning and its application in the classroom. Attendance to upgrading seminars, earning units in education and other undertakings for professional development apparently help teachers to gain insights relative to learning and subsequently apply these in the classroom. Likewise teachers' age has no bearing on theoretical knowledge on learning.

With most of the predictors having no or negative effects on theoretical knowledge of learning, a negative total causal effect is then obtained (e = -.5426)

The above findings somehow support the assertion of Murray and Renaud (1996) who claimed negative correlation between age and educational qualification to teaching effectiveness. Moreover, in a similar study, Kane (2006) claimed that "after a couple of years in the classroom, the teacher's additional experience has no bearing on the extent of students' learning". Further, Clotfelter, et. al. added that teaching experience has positive effect on students' achievement of the first few years of teaching, but it slows down at a certain point. The foregoing might hold true with the teacher's knowledge on learning.

### **5.0** Conclusion

One salient point that can be inferred from the study is that "wisdom in teaching" does not actually depend on age, teaching experience, and educational qualification. It can, somehow, be enhanced through trainings and upgrading seminars and workshops, regardless of how young or how long one has taught, or regardless of whether one is a baccalaureate, masters, or doctor by qualification. Teaching is more of a "common sense" on what one will do in a particular learning situation, rather than relying on the aforesaid factors. With this study as basis, the strong proposition of masters or doctoral degree in higher education institution seems unreasonable.

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