

A Comparative Study on Prospective Teachers’ Disposition about Instructional Planning and Strategies in Universities of Punjab

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Abstract

The most vital skills needed for effective teaching is instructional planning and strategies (Martel, 2009). This research was aimed to study and compare prospective teachers’ disposition about instructional planning and strategies (DIPS) in universities of Punjab. Two stage random sampling technique was used to select the sample, therefore nine hundred and sixty prospective teachers from six public universities comprised the sample of the study. Quantitative approach used survey method through an adopted self-reported scale. Data was analyzed by using different statistical techniques i.e. frequency distribution, independent samples t-test, one way ANOVA, Pearson product moment correlation and linear regression applied to find out the variations in prospective teachers’ disposition about instructional planning and strategies on the basis of demographical variables. The findings of the study comprised that majority of prospective teachers had moderate magnitude of dispositions of instructional planning and strategies. In addition, the prospective teachers’ DIPS vary among different public universities of the Punjab and their gender and but it does not vary due to teaching practice.

Keywords: Prospective teachers’ dispositions of instructional planning and strategies (DIPS).

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Introduction

Globally, qualified teachers are the basic need of our students. Roth and Swail (2000) said that standards for licensing teachers, containing ten standards; each standard consists of three subdivisions of prospective teachers' knowledge, skills and disposition. Teacher-educators are responsible to train their prospective teachers (PTs) as expert of content and practical work which is helpful to them for effective teaching in future. In this manner, it is required to create dispositions that are valuable for successful teaching (McKnight, 2004).

Likewise, Dottin (2009) said now a days to train the future effective teachers are the main purpose of teacher education program and also make such person who not only have a degree but who have the knowledge, skills and dispositions that they need to become an effective teacher. Dispositions are the essential element of an effective teacher preparation program (Erickson, Hyndman & Wirtz, 2005). Voseles and Moss (2007) believed that when teacher-educators possessed positive significant dispositions then the teaching was elevated in the eyes of others.

Assessing the dispositions is important component which is desired for an effective teacher and for quality assurance of teacher education. The literature showed that in Pakistan, there are very few researches that have been conducted to examine the PTs' dispositions of instructional planning and strategies. As Sarwar and Hussain (2010) identified the difficulties and its solutions for Pakistan's teacher preparation programs. They conclude that our institutions prepare teachers without considering the requirements of the schools. They found that prospective teachers are weak in different aspects like discipline, lesson planning, classroom management, and content knowledge. They believe that the problems must be handled by more hard training in the weak aspects.

Therefore, this state of affairs compelled the researchers to conduct this study to investigate the prospective teachers' disposition about instructional planning and strategies (DIPS) and compare their DIPS among different public universities of Punjab. Consequently, the present study may be helpful to fill the gap of literature about prospective teachers' disposition about instructional planning and strategies among public universities of Punjab.

Objectives of the Study

The objectives of the study were to:

1. Investigate the magnitude of prospective teachers' disposition about instructional planning and strategies (DIPS) in public universities of Punjab.
2. Compare the prospective teachers' disposition about instructional planning and strategies (DIPS) among different public universities of Punjab.
3. Find the variation in prospective teachers' disposition about instructional planning and strategies on the basis of demographical variables (i.e. gender, teaching practice, academic achievement scores and age).

Research Hypotheses

The following research hypotheses have been formulated on the basis of objectives:

H₀₁ There is no significance difference in prospective teachers' disposition about instructional planning and strategies (DIPS) among different public universities of Punjab.

H₀₂ There is no significance difference in prospective teachers' disposition about instructional planning and strategies (DIPS) on the basis of gender.

H₀₃ There is no significance difference in prospective teachers' disposition about instructional planning and strategies (DIPS) on the basis of their teaching practice.

H₀₄ There is no significance relationship between the prospective teachers' disposition about instructional planning and strategies (DIPS) and their academic achievement scores.

H₀₅ There is no significance impact of age on prospective teachers' disposition about instructional planning and strategies (DIPS).

Delimitation

This research was delimited to only two years duration (M.A education) teacher education program that offered in public universities due to limited time and financial constraints.

Research Design

The study was descriptive in nature.

Participants

The population of the present study was comprised of all prospective teachers enrolled in Master's Program (session 2014-16) in 11 Public Universities of Punjab (Province). There are approximately 2222 prospective teachers enrolled in Master's Program (session 2014-16) in 11 Public Universities of Punjab.

Two stage sampling technique was used to select the sample. At first stage six universities were selected by using simple random sampling (lottery method i.e. sampling without replacement method). So in the second stage, the researcher was selected 50% sample randomly from enrolled prospective teachers (session 2014-16) from sampled universities. The following table 1 shows the detail distribution of sample i.e. the name of selected universities, their enrollments strength and selected sample from each university.

Table 1

Detailed distribution of the sample

Sr. #	Public Universities	Total Enrollment	Selected Sample
1	University of the Punjab, Lahore	664	332
2	University of Education, Lahore	712	356
3	University Of Sargodha, Sargodha	147	74
4	Islamia University, Bahawalpur	150	75
5	Bahauddin Zakariya University, Multan	170	85
6	Government College University, Faisalabad	77	38
	Total	1920	960

Thus 960 prospective teachers were comprised the sample of the study.

Research Instrumentation

To study the prospective teachers' disposition of instructional planning and strategies a self-reported scale developed by Lodhi (2014) was adopted. Disposition of Instructional Planning and Strategies (DIPS) scale consisted on 22 statements that are based on six point Likert-type scale ranging from '0% agree/disagree' to '100% agree' in progressions of six levels. The reliability of the instrument was $\alpha = 0.80$.

Data Analysis and Interpretation

The questionnaire was distributed to nine hundred and sixty respondents. The data was analyzed by using Statistical Package for Social Sciences (SPSS) – 20 through descriptive and inferential statistics. Descriptive statistics was applied to summaries result of magnitude levels of disposition of instructional planning and strategies. Also inferential statistics i.e. independent samples t-test, one way ANOVA, Pearson product moment correlation (Pearson r) and linear regression were applied to find out the variation in prospective teachers' dispositions of instructional planning and strategies on the basis of demographical variables.

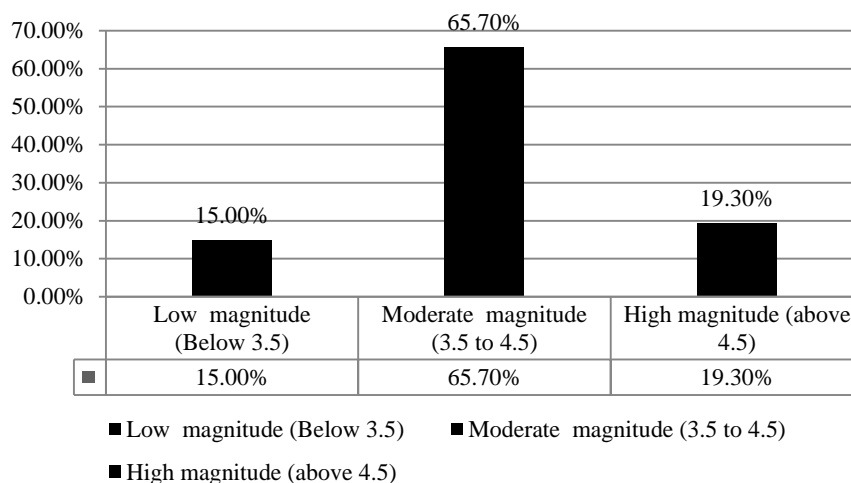


Figure 1 Percentage distribution of magnitude of PTs' dispositions about instructional planning and strategies

It is demonstrates from figure 1 that majority of prospective teachers (63.2%) had moderate magnitude of dispositions about instructional planning and strategies (DIPS). Whereas 14.4% respondents had low magnitude and 22.4% respondents had high magnitude of DIPS.

Testing Research Hypotheses

H_{01} There is no significance difference in prospective teachers' disposition about instructional planning and strategies (DIPS) among different public universities of Punjab.

Table 2*One way ANOVA between PTs' DIPS among different public universities*

Public Universities	<i>M</i>	<i>SD</i>	<i>N</i>	<i>F</i> (5, 954)	<i>p</i>	η^2
Uni1	1.97	0.609	332			
Uni2	2.05	0.567	356			
Uni3	2.11	0.563	74			
Uni4	1.92	0.564	75	5.123	0.000	0.026
Uni5	2.27	0.543	85			
Uni6	2.21	0.528	38			
Total	2.04	0.584	960			

Note: PTs= Prospective Teachers; DIPS= Disposition about Instructional Planning and Strategies; Uni1=University of the Punjab, Lahore; Uni2 = University of Education; Uni3= University Of Sargodha; Uni4= Islamia University, Bahawalpur; Uni5=Bahauddin Zakariya University, Multan; Uni6=Government College University, Faisalabad.

To compare the prospective teachers' dispositions about instructional planning and strategies among different public universities one way ANOVA was applied. The result shows that there was significant difference in prospective teachers' DIPS among different public universities as $F(5,954) = 5.123$, $p(0.000) < 0.05$. The value of partial eta square showed that only 2.6% PTs' DIPS depend on different public university. For further pairwise comparison between PTs' DIPS among different public universities LSD Post hoc test was applied. The results of comparison are given below in the table 2.1.

Table 2.1

Results of Post Hoc LSD for pairwise comparison in PTs' DIPS among different public universities

(I) University name	(J) University name	Mean Difference (I-J)	<i>p</i>	
Uni1	Uni2	-0.07	0.090	
	Uni3	-0.14	0.069	
	Uni4	0.05	0.474	
	Uni5	-0.30*	0.000	
	Uni6	-0.24*	0.017	
	Uni2	Uni1	0.07	0.090
Uni2	Uni3	-0.06	0.414	
	Uni4	0.13	0.082	
	Uni5	-0.22*	0.001	
	Uni6	-0.16	0.099	
	Uni3	Uni1	0.14	0.069
Uni3	Uni2	0.06	0.414	
	Uni4	0.19*	0.047	
	Uni5	-0.16	0.077	
	Uni6	-0.10	0.375	
	Uni4	Uni1	-0.05	0.474
Uni4	Uni2	-0.13	0.082	
	Uni3	-0.19*	0.047	
	Uni5	-0.35*	0.000	
	Uni6	-0.29*	0.012	
	Uni5	Uni1	0.30*	0.000
Uni5	Uni2	0.22*	0.001	
	Uni3	0.16	0.077	
	Uni4	0.35*	0.000	
	Uni6	0.06	0.594	
	Uni6	Uni1	0.24*	0.017
	Uni6	Uni2	0.16	0.099
Uni3		0.10	0.375	
Uni4		0.29*	0.012	
Uni5		-0.06	0.594	

Note: PTs= Prospective Teachers; DIPS= Disposition about Instructional Planning and Strategies; Uni1=University of the Punjab, Lahore; Uni2 = University of Education; Uni3= University Of Sargodha; Uni4= Islamia University, Bahawalpur; Uni5=Bahauddin Zakariya University, Multan; Uni6=Government College University, Faisalabad and * shows level of significance at <0.05

Table 2.1 shows the result for post hoc test using LSD for pair wise comparison in PTs' DIPS among Public universities. Results show that PTs' DIPS among Public universities were significant as ($p=0.000, 0.017, 0.001, 0.047, 0.000$ and 0.012) < 0.05 between pairs of PTs' DIPS of Uni1 & Uni5, Uni1 & Uni6, Uni2 & Uni5, Uni3 & Uni4, Uni4 & Uni5 and Uni4 & Uni6 respectively.

H_{02} There is no significance difference in prospective teachers' disposition about instructional planning and strategies (DIPS) on the basis of gender.

Table 3

Independent sample t-test for difference in PTs' DIPS on the basis of gender

	Male (253)		Female (707)		t	df	p	Cohen's d
	M	SD	M	SD				
DIPS	1.88	0.565	2.10	0.580	-5.186	958	0.000*	0.384

Note: PTs= Prospective teachers; DIPS= Dispositions about Instructional Planning and Strategies and* shows level of significance at <0.05

To find the difference in prospective teachers' dispositions about instructional planning and strategies on the basis of gender independent samples t-test was applied. It is evident from the table 3 that there was significant difference in prospective teachers' disposition about instructional planning and strategies on the basis of gender, as p value is less than 0.05 as $t(958) = -5.186$, $p(0.000)$ so null hypothesis is rejected. The mean values show that the female prospective teachers had more disposition about instructional planning and strategies i.e. $M= 2.10$ (having $SD= 0.580$) as compare to mean value of male prospective teachers' disposition about instructional planning and strategies i.e. $M= 1.88$ (having $SD= 0.565$). Also the value of Cohen's d shows there was medium effect size of gender on prospective teachers' disposition about instructional planning and strategies as $d=0.384$.

H_{03} There is no significance difference in prospective teachers' disposition about instructional planning and strategies (DIPS) on the basis of their teaching practice.

Table 4*Independent sample t-test for difference in PTs' DIPS on the basis of teaching practice*

	No teaching practice (409)		Yes teaching practice (551)		t	df	p	Cohen's d
	M	SD	M	SD				
	DIPS	2.03	0.612	2.05				

Note: PTs = Prospective teachers and DIPS= Dispositions about Instructional Planning and Strategies

To find the difference in prospective teachers' dispositions of instructional planning and strategies on the basis of teaching practice independent samples t-test was applied. It is evident from the table 4 that there was insignificant difference prospective teachers' dispositions about instructional planning and strategies on the basis of teaching practice, as $t(958) = -0.499$ and p value (0.618) is greater than 0.05 so the null hypothesis is accepted. Also the value of Cohen's d shows there was smallest effect size of teaching practice on prospective teachers' dispositions about instructional planning and strategies as $d=0.034$ because there was insignificant difference PTs' DIPS.

H_{04} There is no significance relationship between the prospective teachers' disposition about instructional planning and strategies (DIPS) and their academic achievement scores.

Table 5*Correlation between PTs' DIPS and their academic achievements scores*

		DIPS	Academic Achievements
DIPS	Pearson	1	0.068*
	Correlation Sig. (2-tailed)		0.036
Academic Achievements	Pearson	0.068*	1
	Correlation Sig. (2-tailed)	0.036	

Note: PTs= Prospective teachers and DIPS= Dispositions about Instructional Planning and Strategies and* shows level of significance at <0.05 and $N= 960$

To find significance relationship between the prospective teachers' disposition about instructional planning and strategies (DIPS) and their academic achievement scores, Pearson product moment correlation (Pearson r) was used. The table 5 shows that there was positive relationship between the prospective teachers' disposition about instructional planning and strategies (DIPS) and their academic achievement scores. According to literature if the value of $r = (+/-) 0$ to 0.3, it shows

a weak relationship between two variables (Clark & Randal, 2010) so the table is evident that there was a weak relationship between prospective teachers' DIPS and their academic achievement scores as $r = 0.068$. Hence it is concluded from p value (0.036) that there were a significant relationship between the prospective teachers' disposition about instructional planning and strategies (DIPS) and their academic achievement scores.

H_{05} There is no significance impact of age on prospective teachers' disposition about instructional planning and strategies (DIPS).

Table 6

Linear regression between PTs' DIPS and their age (in years)

	B	Std. Error	B	t	P	r	R ²
DIPS	-0.089	0.033	-0.088	-2.723	0.007*	0.088	0.008

Note: DIPS= Dispositions of Instructional Planning and Strategies * shows level of significance at <0.05

To find significance impact of age (in years) on prospective teachers' disposition about instructional planning and strategies (DIPS) linear regression was applied. The above table 6 shows that there was a positive relationship between prospective teachers' dispositions about instructional planning and strategies and their age (in years) but the value of correlation (r) = 0.088 show weak level of relationship. The value of R^2 shows that only 0.8 % prospective teachers' dispositions about instructional planning and strategies depends on their age. Hence there was significance impact of age on prospective teachers' disposition about instructional planning and strategies (DIPS) as $p = 0.007 < 0.05$.

Conclusion and Discussion

It is concluded from the results that the majority of PTs had moderate magnitude of dispositions about instructional planning and strategies. The results showed that there are many factors which influence the prospective teachers' disposition about instructional planning and strategies (DIPS). The findings showed that the age of the prospective teachers has a positive impact on PTs' disposition about instructional planning and strategies (DIPS) among universities of Punjab but this impact was very small.

Similarly, the comparison of prospective teachers showed a significant difference in PTs' disposition of instructional planning and strategies (DIPS) among different public universities of Punjab. Therefore it can be said that public universities are one of main factor that is the source of change in PTs' DIPS. Previous researches (Beyers, 2012; Brindle, 2012 and Sunderman, 2015) also support this finding and concluded that there is significant difference in prospective teachers' disposition.

There was significant difference in PTs' disposition of instructional planning and strategies (DIPS) on the basis of gender. This result was supported by research conducted by Schulte, Edick, Edwards, and Mackiel (2004). On the other hand, there was no statistically difference in PTs' disposition about instructional planning and strategies (DIPS) on the basis of teaching practice. This finding is supported by Frederiksen (2010) study, he concluded in his study that no statistically significant changes in PTs' dispositions were found due to teaching practice. Moreover, academic achievement had positive and weak relationship with PTs' disposition about instructional planning and strategies (DIPS). This outcome is accompanying to previous readings like Beyers (2012) and Scrivner (2009).

Recommendations

The results showed a positive picture of PTs' disposition of instructional planning and strategies (DIPS) about those who study in different public universities of Punjab. There for the following recommendations are provided:

- The finding of the study indicated that the PTs exhibits professional dispositions of moderate magnitude. Although is a very good picture of dispositions exhibited by the PTs but there is a need to take steps to improve the dispositions of PTs among public universities to increase their PTPD. The public universities should modify the teaching learning aspect to ensure proper disposition development throughout the study program.
- As finding of research revealed that teaching practice has no impact on PTs' disposition of instructional planning and strategies (DIPS). So is should be explored that what is the reason that PTs' disposition of instructional planning and strategies (DIPS) does not vary after teaching practice?
- Present research was limited to only teacher education program of two years duration (M.A education) that offered in public universities. So Undergraduate programs which are offered both by public and private sector in majority in the country should be included.

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