



Psychological Perspective: Impact of Teachers on Health and Rehabilitation Sciences College Students' Views, PNU

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ABSTRACT

Psychological perspective determines how people will intervene into problems, issue, cases and define their reasoning. It became more essential to study the psychological perspectives of medical students because they have to deal with human beings. In learning process, a teacher takes part in the learning process as a role model and becomes the greatest source of inspiration. Therefore, the main objective of this study was to investigate the impact of psychological viewpoints of teachers on Health and Rehabilitation Sciences College students' viewpoints. **Method:** Study was conducted during Sep 2016-Jan 2017, into two-time point intervention. The sample of this study comprised of (n=143) students and (n=8) teachers of college of health and rehabilitation sciences, Princess Nourah bint Abdulrahman University. Measures included were sociodemographic information data sheet and psychological view point scale. **Results:** Indicated that scores of students enrolled within traditional lecture based programs were significantly correlated ($p < 0.05$) with behavioural perspective. In contrast, students' score of PBL based programs were correlated ($p < 0.05$) with psychoanalytical perspective. Teachers of both programs scored high on behavioural and psychoanalysis and it increased average scores of students at the end of semester. **Conclusion:** The methods used for teaching and teaching teachers both can influence the students point of view.

Keywords: Psychological viewpoints, Educational Technology, Behavioural point of view, Psychoanalysis, Humanist perspective, Problem based learning, Lecture based learning

INTRODUCTION

Teachers-students' relationships have a significant role in a student's academic progression and personal growth [1]. Hallinan writes "Learning is a process that involves cognitive and social psychological dimensions, and both processes should be considered if academic achievement is to be maximized" [2]. It has been observed that the academic partnership and support between teacher and students assisted them to develop their personalities [3]. It improved their communication skills to adequately deliver ideas and viewpoints. They became outgoing and communicative. They combined their learning experiences and requested help from teachers when needed. Teachers become role models for students by their manner and attitude, while offering students evidences, proficiency and attitude on a particular topic [4]. Thus, teacher's beliefs affect the beliefs and behaviour of the students [4,5]. It is of an importance to investigate impact of teachers' belief on the students' beliefs particularly the ones who study medical sciences since their services may influence the health of the individuals whom they will serve in the future. Few studies were found conducted to compare the impact of various learning strategies, self-efficacy, and performance among medical students [6,7]. This paper aims to explore the teachers' psychological viewpoints and their effects on students' viewpoints.

In a broader scenario, psychological viewpoints can be divided into three major categories; Behavioural, Psychoanalytical and Humanistic. Behaviourist perspective for learning focus upon schedules of reinforcement of learning to achieve mastery, knowledge and skills. Thus, those teachers who have strong belief on Behavioural perspective, they follow direct instructional practices [8]. Psychoanalytic perspective focuses on psychosexual energy. This view believes upon a strong role of early childhood in personality development. Thus, psychoanalyst prefer the in-depth analysis and study psychodynamic for the change in nature [9]. Humanism focuses on our desire to grow and to reach our potential. Humanistic approach of education supports significant, meaningful, and experiential learning for medical students to develop empathy and rapport building skills [10].

As far as instructional practices in learning are concerned, teachers commonly adapt two different instructional techniques; guided instructional and minimal guided instructional practices [11]. Alternatively, it has been described as direct and non-direct instructional practices [12]. Traditional Lecture Based Learning (LBL) programs are based on guided instructional structure. Lecture based programs usually apply behavioural perspective to deliver and to yield results [8]. In comparison, minimally instructional guided programs adopt coaching, which is based on the humanistic domain. The most commonly used structure is Problem Based Learning (PBL). PBL method focuses on enhancing personal growth and well-being, through commitment, tolerance, empathy, and listening skills, where learners try to resolve problems at their own [13,14]. The essence of the PBL, had captured the attention of educational expertise as it actively involves the learner. It persists upon case studies, illustrations, problem solving, and real-life context [15].

The scope of the study was to measure the relationship of psychological view point of teachers and the students in order to understand the effect of believes. Thus, following hypothesis were formulated. "There will be a positive correlation between learning method and psychological view of the students at the end of semester/module". Secondly, "Student will score high on the psychological perspective matched with their teacher at the end of semester/module."

MATERIALS AND METHODS

Study design

Research design was comparative with two-time point administration of survey.

Ethics approval

Before starting the research project, the scientific and ethical permission was sought from Deanship of Scientific Research council, Princes Nourah bint Abdulrahman University. A consent form was developed and administered to the participants providing them information of the project and asking for their willingness to participate in the study. Furthermore, confidentiality of personal information was being assured.

Sample Size

The sample of this study comprised of students (n=143) enrolled in the Bachelor Program of the College of Health and Rehabilitation Sciences and instructors/teachers (n=8) of same college, Princess Nourah bint Abdulrahman University. Sample was calculated (n=152) by using statistical power analysis software (by using 95% C. I.). Due to inaccessibility of some students during post testing 17 survey forms were discarded that limited the data up to 143.

Inclusion criteria and exclusion criteria

Students from level 4, 5, 6 and 7 were included having the age range of 19 to 23 years (24.54 ± 0.803). Students from level 3 and 8 or higher level were excluded in order to avoid further psychological stress and maturity to avoid validity threat that could influence the results. The teachers holding Masters and PhD degrees were included. Teachers involved in teaching the general courses (University requirement courses) were excluded. Moreover, demonstrators were also excluded.

Grouping

The respondents were divided into two groups based upon their learning methods. There were 52 respondents from Problem Based Learning method and 91 respondents participated from Traditional Lecture based method. Out of 13 tracks 8 tracks were included according to inclusion/exclusion criteria.

Methodology

Data was collected by standardized self-report questionnaire and self-prepared sociodemographic information sheet.

Measures

Following are the measures used in the research:

1. Sociodemographic Form: A personal information questionnaire prepared by the researchers was used for teachers to determine their demographic and work variables. Students were asked to respond to demographic variables and academic variables.
2. Psychological view point scale: Psychologist William R. Miller (1983) of the University of New Mexico has constructed a Psychological Viewpoint Questionnaire that is used to clarify beliefs about human nature [16]. It consists of 20 items. Response are dichotomous (agree, disagree). Scale provide four beliefs of human nature consistent of behavioural, psychoanalytic, existential, and humanistic. Higher ratio of answers determines the preferred psychological view point. In order to simplify the scoring system, two categories (Existential and Humanistic) were merged into one. Perspective scores were ranked according to the preference of the participants.

Procedure

Eight (8) teachers were selected from four (4) departments, i.e., Rehabilitation Sciences, Health Sciences, Radiology and Communication Sciences, having various viewpoints (behavioural, psychoanalytical and humanistic) of human nature. After obtaining their consent to participate in the study, the scale of psychological view point was administered for the teachers before the commencement of semester. Teachers were briefed about the procedure of the study that their students will be approached at two-time points (Start of semester/module and end of semester/module). In the first stage of the study, after getting informed consent from the students, survey was administered. In the second stage, students were approached at the end of the semester or module and were requested to respond to the scales of psychological view point.

Statistical analysis

Data gathered by survey forms was analysed by using SPSS (V. 24). Descriptive Statistics of measures of central tendency and dispersion was calculated. Pearson's Product Moment Coefficient of Correlation was used to measure the relationship between the leaning method and psychological view point of students. Furthermore, average scores were calculated for the teacher and the students to calculate the difference on psychological view scores.

Table 1 Socio-demographic and academic information of students (N=143)

Variable	f	%
Age		
19 years	4	2.80%
20 years	79	55.20%
21 years	42	29.40%
22 years	15	10.50%
23 years	3	2.10%
Marital status		
Married	10	7%
Unmarried	133	93%
Family Structure		
Nuclear	116	81.10%
Joint	27	18.90%
Level		
V	117	81.80%
VII	26	18.80%
Department		
Rehabilitation	55	38.50%
Health Sciences	48	33.60%
Radiological Sciences	12	8.40%
Communication Sciences	28	19.60%
Track		
Occupational therapy	26	18.20%

Physiotherapy	29	20.30%
Clinical Nutrition	22	15.40%
Epidemiology & Health Promotion	26	18.20%
Ultrasound	12	8.40%
Speech & Swallowing	18	12.60%
Audiology & Balance	10	7.00%
Program Method		
Problem based learning method	52	36.30%
Traditional Lecture based method	91	63.60%

Note. f= frequency, %= percentage, M=Mean and SD=Standard Deviation

Table 2 Correlation of learning method with psychological perspectives (n=143 students)

Method	Learning Method	Behavioural	Psychoanalysis
Learning Method	-		
Behavioural	.197*	-	
Psychoanalysis	-.198*	-0.119	-
Humanistic	-0.087	-0.127	0.157

*p<0.05; learning method: (1) PBL, (2) LBL

Table 3 Results of average score on psychological point of view scale

Psychological Point of view		Group			
		PBL		LBL	
		M Students	M Teachers	M Students	M Teachers
Behavioral	Before	3.85	-	3.64	4.5
	After	3.94	4	4.48	-
Psychoanalysis	Before	4.46	5	4.46	4.33
	After	4.88	-	4.29	-
Humanistic	Before	3.48	4.5	3.33	3.17
	After	3.6	-	3.42	-

RESULTS AND DISCUSSION

Results in Table 1 indicated that most of the students at the College of Health and Rehabilitation Sciences who participated in this study were related to the age group of 20 years (55%). Most of the students were unmarried (93%) and living in nuclear family structure (81%). In many countries, society structure is transforming from extended to nuclear family structure [17]. Although Saudi society is still considered as collectivistic and family oriented society [18]. Thus, the high percentage of nuclear families of the respondents in the study might be due to metropolitan city of Riyadh. Furthermore, it can be seen in Table 1 that only two levels of students who have participated in this study. Other levels were either not offered by the college or excluded due to the study criteria. Proportion wise, students from the Department of Rehabilitation Sciences were representing the majority (39%). Simultaneously, highest ratio students were found in Physiotherapy track (20%). This can be attributed to its historical background being the oldest track in the college with a high number of enrolled students. Most of the students were enrolled in lecture based traditional learning method (64%). At College of Health and Rehabilitation Sciences only four tracks offer problem base learning program i.e., Epidemiology, Health promotion, Occupational therapy and Clinical Psychology. Hence, Clinical Psychology students were excluded in sampling, thus, three program students participated.

First hypothesis has been partially approved. Table 2 is indicating that there is significant correlation of traditional method students with behavioural perspective ($r=0.197$, $p<0.05$) at the end of semester. Result is consistent with the previous study for traditional lecture based learning method [8]. In comparison, PBL students scored significantly correlated with Psychoanalysis perspective ($r=-0.198$, $p<0.05$). Although, most of the studies conducted for PBL, yield results in the favour of Humanistic perspective but in current study students of PBL scores correlated with psychoanalysis perspective. It can be explained by the level and nature of programs offered by College. PBL has been offered at Bachelor level programs. Thus, the instructors keep in mind that they cannot fully rely on minimal guidance/ instruction for undergraduate medical students [11]. As, in above mentioned review article revealed that

PBL could not produce desired outcome within medical studies. Moreover, three of the programs that offered PBL method (Occupational therapy, Epidemiology and Health Promotion) are more concerned toward the in-depth study and to understand the dynamics of behaviour.

The results are fully supporting second hypothesis that student scored high on the psychological perspective matched with their teacher at the end of semester/module. Table 3 is indicating that among PBL group most preferred point of view of teachers and students was psychoanalysis. It can be seen the occurrence of increased mean score among students of PBL on psychoanalysis perspective at the end of semester. In contrast, preferred point of view toward human nature of LBL teachers was behavioural. Teachers preference of behavioural point of view further lead average score of LBL students toward noticeably increase at the end of semester. Therefore, the methods of teaching as well as teachers can influence the student's personality or point of views.

CONCLUSION

It is highly significant to investigate on the factors that impact students' academic performance and to investigate on the students' preparedness for their studies to gain insights into their perceptions of the academic and social changes that will happen. It can be concluded that not only the learning method but teachers' point of view also impacts upon students' viewpoints. In future studies inclusion of other medical colleges can provide comprehensive results.

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