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Teacher Power Use in the College Classroom: Turkish Students' Views

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Abstract

The primary focus of this study is to determine the undergraduate students' perceptions of teacher power use (ie, *coercive, reward, expert, legitimate, and referent power*) and it was also aimed to investigate whether or not students' views differ significantly in terms of gender, class level and department variables. To this end we, firstly, conducted a pilot study to investigate the validity and reliability of the "*Teacher Power Use Scale*". Turkish adoptation, validity and reliability studies of the scale were done by data gathered from a total number of 395 undergraduate students. For validity studies, exploratory and confirmatory factor analyses were carried out, and also item-total correlations were estimated. For reliability studies, Cronbach Alpha and test-retest correlation coefficients were estimated. Overall findings demonstrated that Turkish version of the scale had high validity and reliability scores.

Keywords: Teacher power use, university students, scale adoptation,higher education;

1. Introduction

Power, as a term commonly employed in a wide variety of academic disciplines, has a lot of different definitions from one discipline to another, or even within a given discipline (McCroskey and Richmond, 1983). Considering the educational context, especially colleges, instructors and students frequently engage in a negotiation of power in the college classroom. The task of negotiating power between students and instructors affect how both parties choose to communicate and respond to each other (Goodboy, Bolkan, Myers & Chao; 2011). McCroskey and Richmond (1983) noted that, the types of power that instructors exert in the college classroom have a significant impact on the quality of instructor-student communication. Considering its' vital role in the teaching and learning process, without

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teacher-student communication it is quite difficult to achieve educational aims. As cited in Hurt, Scott and McCroskey (1978, p.3), there is "a difference between knowing and teaching, and that difference is communication in the classroom".

Instructors and/or teachers try to exert their influence over students through the use of power (Goodboy & Bolkan, 2011). Based on French and Raven's (1959) typology of relational power (reward, coercive, legitimate, referent, and expert), some researchers and theorists (Golish, & Olson, 2000; Kearney, Plax, Richmond & McCroskey,1985; McCroskey, & Richmond, 1983; McCroskey, Richmond, Plax, & Kearney, 1985; Plax, Kearney, McCroskey & Richmond, 1986; Richmond, & McCroskey, 1984; Turman, & Schrodt, 2006) have examined teacher power research in educational settings, especially higher education instutitions. Result from these research showed that, referent, expert, and reward power are viewed as prosocial forms of power and are positively associated with cognitive learning, affective learning, and student motivation, while legitimate and coercive power are viewed by students as antisocial forms of power and are negatively associated with these same learning outcomes (Schrodt, Witt & Turman, 2007).

1.1. The purpose of the study

The primary focus of this study is to determine the undergraduate students' perceptions of teacher power use (ie, *coercive, reward, expert, legitimate, and referent power*) and it was also aimed to investigate whether or not students' views differ significantly in terms of gender, class level and department variables.

2. Method

A quantitative research design was used to collect and analyze the data in this study. To measure students' perceptions of power use, *Teacher Power Use Scale* (TPUS), originally developed by Schrodt, Witt & Turman (2007) was used in this research. The TPUS is a 30-item, Likert-type scale asking students to evaluate the extent to which their teachers use five types of relational power in the classroom, including: coercive power (sample item, ''*When students do not perform at an acceptable level, my teacher embarrasses them in front of the class.*''), reward power (sample item., ''*When a student performs well in the course, my teacher gives him/her recognition in the class*.''), referent power (sample item, ''*My teacher demonstrates commitment to the class by being authentic and genuine when interacting with students*.''), legitimate power (sample item, ''*My teacher demonstrates that he/ she considers the position of Professor to be superior to that of a student*.''), and expert power (sample item, ''*I can tell my teacher really knows how to teach this course by the way he/she organizes the class and delivers instruction.*''). Since the scale originally developed in English we, firstly, conducted a pilot study to investigate the validity and reliability of the "*Teacher Power Use Scale*". Turkish adoptation, validity and reliability studies of the scale were done by data gathered from a total number of 395 undergraduate students studying at two different university located eastern part of Turkey (students from Inonu University =105, Students from Cumhuriyet University =290). For validity studies, exploratory and confirmatory factor analyses were carried out, and also item-total correlations were estimated. For reliability studies, Cronbach Alpha and test-retest correlation coefficients were estimated.

3. Findings & Results

In order to test the construct validity of the scale, the scale was subjected to exploratory (EFA) and confirmatory factor analysis (CFA). While former analysis tries to obtain factor structures based on the correlations between variables, the latter tests a hypothesis or theory established in advance regarding the correlations between variables (Pallant, 2011; Tabachnick ve Fidell, 2007). Before applying EFA, the data were analyzed for its distribution properties. Kurtosis values for the distribution of responses to individual items ranged from "−0.78" to "1.34" and Skewness values ranged from "-0.24" to "1.37" indicating no significant deviations from normality. And also prior to performing EFA the suitability of data for factor analysis was assessed. Kaiser-Mayer-Olkin's Measure (KMO) of

Sampling Adequacy was found ".914", exceeding the recommended value of ".60", and the Bartlett's Test of Sphericity reached statistical significance (6723. 909, p=.00), supporting the factorability of the correlation matrix (Pallant, 2011). After factorability of the data set was confirmed, the 29· items of the TPUS scale were subjected to EFA using principal components analysis (PCA), a common factor extraction technique. As determining the number of factors some indicators such as; "Kaiser criteria (>1 eigenvalue), scree test, component matrix, communalities and total variance explained" was used (quoted in Büyüköztürk, 2010; Hair et al., 2006; Pallant, 2011; Tabachnick & Fidell, 2007). First analysis produced 5 factors with eigenvalues over "1". It was, hovewer, detected that some items (1, 13, 15, 23) have poor-loadings (below .30), wrong-loadings (*inconsistent items in terms of meaning and scope of the factor*) and/or cross-loadings (*items load at .30 or higher on two or more factors*). These items were discarded, the analysis was repeated, which yielded a five factor structure as evidenced by scree plot. Factor loadings, eigenvalue, % of cumulative variance explained, Cronbach Alpha coefficient, and item-total correlation coefficients for remaining nine items were shown in Table 1.

Table 1- Means, standart deviations, communalities, factor loadings and item-total correlation coefficients and Cronbach Alpha coefficients of the items

Item No	Mean	Std. Deviation	Communalities	Component					Item-Total Correlations
				Factor 1 *Expert Power*	**Factor 2** *Reward Power*	**Factor 3** *Coercive Power*	**Factor 4** *Referrent Power*	**Factor 5** *Legitimate Power*	
27	3,14	1,30	,795	,854					,882
28	3,22	1,32	,804	,853					,887
26	2,89	1,33	,770	,836					,875
29	3,13	1,35	,735	,778					,855
24	3,07	1,30	,631	,740					,796
25	3,00	1,19	,555	,650					,737
9	2,43	1,16	,715		,827				,794
10	2,22	1,12	,767		,818				,819
11	2,33	1,10	,676		,785				,809
8	2,80	1,19	,612		,762				,767
12	2,29	1,18	,477		,527				,607
7	2,03	1,15	,469		,489		,324		,618
4	1,74	1,01	,658			,793			,747
3	2,06	1,19	,688			,747			,828
5	2,43	1,20	,643			,733		,302	,812
6	2,03	1,22	,615			,700			,806
2	2,01	1,12	,626			,672		,316	,804
17	2,34	1,11	,720				,774		,862
14	2,10	1,15	,689				,754		,833
16	2,37	1,15	,759	,384			,748		,882
18	2,34	1,15	,687	,309			,746		,833
22	2,84	1,20	,579					,698	,704
21	2,54	1,28	,649			,396		,693	,829
20	2,37	1,26	,621			,383		,681	,814
19	2,31	1,11	,498					,607	,665
			Eigen Values	7,527	4,395	1,995	1,393	1,028	**Total**

· **Authors' Note:** For the Turkish version of the scale 23rd item of the original scale [*My teacher says things like ''If you don't like the course policies, you can always drop this class and take a different one*''] was discarded as it is not suitable in Turkish higher education system. In most cases, higher education students in Turkey do not have an opportunity to drop their class and take a diffirent one as they wish. In this regard there are just 29 items in translated form of the scale not 30 as original.

Variance Explained (%)	17,672	13,554	13,340	11,660	9,126	65,352
Cronbach Alpha	,916	,829	,859	,875	,749	

As it is seen in Table 1, the factor loadings of the items range between ".489" and ".854" and item-total correlation coefficients range between ".607" and ".887". It was also found that this five-factor solution explained a total of 65.35 percent of the total variance. Kline (1994) argues that for a scale to explain more than 40 % of the total variance is a significant indicator in favour of construct validity. Estimated Cronbach Alpha coefficients was found respectively, ".916" for *Expert Power* sub-scale, ".829" for *Reward Power* sub-scale, ".859" for *Coercive Power* sub-scale, ".875" for *Referrent Power* sub-scale and, ".749" for *Legitimate Power* sub-scale. CFAanalysis is well under way; the results will be presented soon.

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