

Analysing the relationship between pre-service preschool teachers' self-leadership skills and motivation to teach[†]

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Abstract

The aim of this research is to examine the relationship between pre-service preschool teachers' self-leadership skills and motivation to teach. The study group included 186 pre-service preschool teachers who are senior students at Department of Preschool Education at three universities in Istanbul in spring semester of 2015–2016 school year. 'Self-Leadership Scale' and 'Motivation to Teach Scale' were used as data collection tools. Pearson Product-Moment Correlation, Mann–Whitney U and Kruskal–Wallis H analysis were conducted for data analysis. Results have shown that there is a significant positive correlation between pre-service teachers' Self-Leadership Scale total scores and Motivation to Teach Scale total scores ($p < 0.01$). It was also found that Behaviour-Focused strategies and constructive thought strategies of Self-Leadership Scale were in a significant positive relationship with both Intrinsic and Extrinsic Motivation dimensions of Motivation to Teach Scale. In addition, students' mean scores of Self-Leadership Scale significantly differ according to their GPAs on behalf of students with higher GPA.

Keywords: Motivation, preschool, pre-service teachers, self-leadership.

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1. Introduction

As the basic element of the education sector, the teachers' leading themselves has a crucial role in rapidly developing and rejuvenating institutions to keep up with the times and to work functionally. There are many theoretical approaches about leadership in the literature. One of these approaches as the notion of self-leadership is first defined as 'the process of self-motivation and self-direction of the individual in order to obtain personal and institutional success' by Manz (1986). Self-leadership (Manz, 1986) is a broader notion that includes self-control notion (Houghton & Neck, 2002), as well as self-regulation, self-efficacy and self-management notions expressed in the social learning theory of Bandura (Neck & Houghton, 2006).

According to self-leadership approach, everybody is a leader of oneself. The new criteria for the leaders are regarded as that determining their own future in a right manner, that knowing own abilities and that developing them in utmost level. In general, three strategies are used in self-leadership: Behaviour-Focused Strategies, Natural Reward Strategies and Constructive Thought Strategies (Houghton & Neck, 2002; Manz, 1992; Manz & Sims, 1980; Neck & Houghton, 2006; Lovelace, Manz & Jose, 2007; Pearce, Manz & Sims, 2008).

Behavior-Focused Strategies are designed onto the processes of self-evaluation, self-reward and self-discipline (Anderson & Prussia, 1997). These strategies consist of self-observation, self-goal setting, self-reward, self-punishment and self-cueing (Neck & Houghton, 2006).

Natural Reward Strategies aim to create situations that provide individual to be motivated willingly to pleasant sides of a work or a task without any external influence (Manz & Neck, 2004). These strategies consist of two parts, that of implementing more charming and more pleasurable features to the task, and that of shaping the perceptions as being focused on the positive sides of the work and away from the unpleasant features (Manz & Sims, 2001).

Constructive Thought Strategies are based on the individual's influencing and orienting oneself using certain cognitive strategies (Godwin, Neck & Houghton, 1999; Manz & Neck, 1991; Neck & Manz, 1992). These strategies consist of visualising successful performance, self-talk and evaluating beliefs and assumptions (Tabak, Sigri & Turkoz, 2013).

According to Manz (1986), individuals with high self-leadership perception are the people who have high intrinsic motivation and who are able to concentrate their thoughts and who have self-confidence about finding creative and innovative solutions to the problems at work and make preparations and rehearsals about them. Motivation is a power that orients the individual to certain goals and activates her/him to move in line with these goals. Motivation is not a product but a process, that is, activation or motivation is not a spontaneous and sudden issue (Guney, 2011; Mobrand, Turns & Mobrand, 2013).

Motivation resources are divided into internal and external. The source of individual's intrinsic motivation may be the feelings come from within, such as curiosity, interest, the desire to know, to understand and to being competent and developed (Akbaba, 2006; Ergun, 2011). Self-leadership strategies are considerably related to the notion of intrinsic motivation (Neck & Houghton, 2006). While the self-management approaches emphasise the extrinsic rewards, such as recognition, praise and reinforcement, self-leadership, beyond this perspective, underscores natural rewards that result from the execution of the task or activity itself (Manz, 1986; Neck & Houghton, 2006). Contrary to intrinsic motivation, extrinsic motivation is based on the reward and punishment. Individual acts upon the goals, such as a better position or a merit-based promotion. In other words, individual is more concerned with the resulting gains of the act instead of the act itself. The leaders with high self-leadership skills do not need extrinsic motivations since they are capable of being activated by affecting their own self (Akbaba, 2006; Lovelace, Manz & Jose, 2007).

Nowadays, the characteristics exhibited by chosen individuals who can easily use intrinsic and extrinsic drives for motivation and who are self-moving are subsumed by the self-leadership

phenomenon. In this regard, the motivation to teach of pre-service teachers with self-leadership characteristics is also considered to be high. Since there is no sufficient research on the relationships between the self-leadership characteristics and motivations of the teachers and pre-service teachers in the literature, this study aims to investigate the relationship between motivation to teach of pre-service preschool teachers and their levels of self-leadership. To this end, the scope of research sought answers to the following questions:

1. What are the levels of pre-service preschool teachers' self-leadership skills and motivations to teach?
2. Is there a relationship between self-leadership skills and motivations to teach of pre-service preschool teachers?
3. Do pre-service preschool teachers' self-leadership skills and motivations to teach differ significantly according to the variable of weighted grade point averages (WGPA)?

2. Method

2.1. Research model

In this study, it was aimed to determine the relationship between the self-leadership characteristics and the motivations to teach of pre-service preschool teachers. In accordance with this purpose, survey method as a relational quantitative research design was used. While correlative research designs could not indicate a substantial cause-and-effect relationship, it allows making prediction for second variable providing the first variable is available (Karasar, 2000).

2.2. Study group

The sample group of the research consists of 186 pre-service preschool teachers who study in preschool education programs of faculties of education in three universities, one is a private foundation university and other two are state universities, in 2015–2016 academic year. Universities were selected according to the availability and accessibility of the pre-service teachers attending these universities who are willing to contribute to research and cooperate with the researchers.

One hundred and seventy five (94.1%) of pre-service teachers participating the research are female, while 11 (5.9%) are male. 149 (80.2%) of them are from the private foundation university and 37 (19.9%) are from the state universities. 174 (93.5%) of them are in 21–25, 6 (3.2%) are in 26–30, and 6 (3.2%) are in 31–35 age ranges.

In addition, 47.3% of the pre-service preschool teachers participated in the study are from Vocational High Schools, 23.1% from Anatolian High Schools, 16.1% from Teacher Education High Schools, 10.8% from Regular Public High Schools and 2.7% from Prayer (Imam Hatip) High Schools.

Table 1. Frequency and percentage values according to WGPA of pre-service preschool teachers

WGPA	<i>f</i>	%
2.01–2.50	17	9.1
2.51–3.00	66	35.5
3.01–3.50	79	42.5
3.51–4.00	24	12.9
Total	186	100

Examining the fourth grade fall semester WGPA of pre-service preschool teachers participated in the research shows that 9.1% are in 2.01–2.50 range, 35.5% are in 2.51–3.00 range, 42.5% are in 3.01–3.50 range and 12.9% are in 3.51–4.00 range as in Table 1.

2.3. Data collection tools

In the research, Pre-service Teacher Information Form, Self-Leadership Questionnaire and Motivation to Teach Scale are used for data collection.

2.3.1. Pre-service Teacher Information Form

Developed by the researchers, this form includes questions regarding age, gender, university, graduated high school and WGPA of pre-service teachers.

2.3.2. Self-leadership questionnaire

The questionnaire was developed by Houghton and Neck (2002) and adapted to Turkish by the study of Dogan and Sahin (2008) and Tabak, Sigri and Turkoz (2013) for defense industries and private and public institutions. In this study, the Turkish version of the questionnaire adapted for education institutions by Konan and Atik (2015) was used.

The Turkish form of the questionnaire has the same factor structure with the original and consists of 29 item and 9 dimensions. Under the 'Behavior-Focused Strategies', there are 5 dimensions as 'self-goal setting', 'self-reward', 'self-punishment', 'self-observation' and 'self-cueing'. Under the 'Natural Reward Strategies', the only dimension is 'Concentrate Thoughts on Natural Rewards'. Under the 'Constructive Thought Model Strategies', there are 'Visualising Successful Performance', 'Self-Talk' and 'Self-Evaluation of the Ideas and Thoughts' dimensions.

Each item on the questionnaire is evaluated on a Likert scale as having one of the value points of '1 = Never', '2 = Rarely', '3 = Sometimes', '4 = Often' and '5 = Always'. The highest score of the scale may be 145, while the lowest score 29. High scores mean that the participant's self-leadership skills are high and he/she applies the strategies often. According to the inner consistency results of reliability analyses, the Cronbach's Alpha coefficients of nine dimensions are measured as 0.70, 0.75, 0.72, 0.67, 0.75, 0.75, 0.69, 0.71, 0.72, respectively.

2.3.3. Motivation to teach scale

The scale is developed by Kouffman, Yilmaz-Soylu and Duke (2011) for measuring the intrinsic and extrinsic motivations of pre-service teachers. The original form of the scale has 12 items and 2 sub-dimensions. The high scores from the scale means higher motivation to teach and lower ones means the lower motivation. According to the results of the reliability analysis, the reliability of the intrinsic motivation dimension is 0.86 and the reliability of the extrinsic motivation dimension is 0.76. The Cronbach's Alpha reliability coefficient is measured as 0.84 for the scale and for the dimensions for intrinsic motivation is measured as 0.70 and for the extrinsic motivation is 0.76 according to the reliability analysis conducted by Ayik, Atas Akdemir and Secer (2015).

2.4. Data Analysis

Research data have been analysed with the SPSS 15.0 program. Before moving to the analysis of research data, incomplete data and errors in the data set have been identified and the necessary corrections have been made. In the next step, the sub-problems of the research were resolved. The mean and standard deviations of the scores that pre-service preschool teachers get from the Self-Leadership Questionnaire and the Motivation to Teach Scale were measured. Also, in order to understand if the self-leadership skills and motivation to teach differentiates according to the GPAs' of the students, Kruskal-Wallis H test was applied. Mann-Whitney U analysis was used for determining which groups are responsible from differentiation. In order to determine if there is a significant relationship between self-leadership skills and motivation to teach of pre-service teachers, the Pearson Product-Moment Correlation Coefficient was calculated between the results derived from self-leadership and motivation to teach.

3. Results

This section is devoted to findings obtained towards the research purposes.

3.1. Self-leadership skills and motivation to teach levels of pre-service preschool teachers

Table 2. Mean and standard deviation values of Self-Leadership Questionnaire

Strategies	N	\bar{X}	SD
Behavior-Focused Strategies	186	3.87	0.46
Natural Reward Strategies	186	3.88	0.51
Constructive Thought Model Strategies	186	3.85	0.53
Total	186	3.86	0.42

As shown in Table 2, the mean of Behavior-Focused Strategies scores of pre-service teachers' sample group is 3.87; mean of Natural Reward Strategies scores is 3.88; mean of the Constructive Thought Model Strategies scores is 3.85. On the other hand, the arithmetic mean of the total score that pre-service teachers get from Self-Leadership Questionnaire is 3.86.

Table 3. Mean and standard deviation values of the sub-dimensions of motivation to teach scale

The sub-dimensions	N	\bar{X}	SD
Intrinsic Motivation	186	3.28	0.80
Extrinsic Motivation	186	3.06	0.77
Total	186	3.17	0.71

As shown in Table 3, arithmetic mean of Motivation to Teach Scale Intrinsic Motivation sub-dimension scores of the pre-service teachers is 3.28; mean of Extrinsic Motivation sub-dimension scores is 3.06. On the other hand, the arithmetic mean of the total score pre-service teachers got from the Motivation to Teach Scale is 3.17.

3.2. The relationship between the self-leadership skills and motivation to teach levels of pre-service preschool teachers

Table 4. The relations between self-leadership skills and motivation to teach levels of pre-service preschool teachers

Self-Leadership Questionnaire	Motivation to Teach Scale		
	Intrinsic Motivation	Extrinsic Motivation	Total
Behaviour-Focused Strategies	0.300**	0.232**	0.294**
Natural Reward Strategies	0.201**	0.108	0.171 *
Constructive Thought Model Strategies	0.260**	0.203**	0.257**
Total	0.321**	0.241**	0.311**

* $p < 0.05$.

** $p < 0.01$.

As shown in Table 4, the mean scores of Intrinsic Motivation sub-dimension of the Motivation to Teach Scale have a positive significant relationship ($r = 0.300$, $p < 0.01$) with the mean scores of Self-Leadership Questionnaire Behaviour-Focused Strategies; a positive significant relationship ($r = 0.201$, $p < 0.01$) with the mean scores of Natural Reward Strategies and a positive significant relationship ($r = 0.260$, $p < 0.01$) with the mean scores of Constructive Thought Model Strategies. In addition, the mean scores of Extrinsic Motivation sub-dimension of the Motivation to Teach Scale have a positive significant relationship ($r = 0.232$, $p < 0.01$) with the mean scores of Self-Leadership Questionnaire

Behaviour-Focused Strategies and a positive significant relationship ($r = 0.203, p < 0.01$) with the mean scores of Constructive Thought Model Strategies. However, there was no significant correlation between the mean scores of Extrinsic Motivation and Natural Reward Strategies ($p > 0.05$). It was also found that there was a positive significant relationship ($r = 0.311, p < 0.01$) between the total mean scores of Self-Leadership Questionnaire and the Motivation to Teach Scale.

3.3. Determining whether self-leadership skills and motivation to teach values of pre-service preschool teachers differ significantly according to WGPA variable

Table 5. Results of Kruskal–Wallis H Test applied for determining whether average scores of Self-Leadership Questionnaire differ significantly according to WGPA variable

	Groups	N	Mean Ranks	χ^2	SD	p
	2.01–2.50	17	92.50			
Self-Leadership	2.51–3.00	66	78.62			
Questionnaire Total	3.01–3.50	79	100.82	9.061	3	0.028
Score	3.51–4.00	24	111.04			
	Total	186				

As shown in Table 5, the results of Kruskal–Wallis H Test applied for determining whether mean scores of Self-Leadership Questionnaire differ significantly according to WGPA variable indicates that the differentiation between the mean ranks of the groups is statistically significant ($\chi^2 = 9.061; p < 0.05$). In order to determine which groups are responsible for this differentiation, Mann–Whitney U analysis was applied as a complementary analysis.

As a result of Mann–Whitney U test applied for determining between which groups the Self-Leadership Questionnaire total scores differ according to WGPA variable, these were determined: The aforementioned differentiation takes place between the students with grade point average range of 2.51–3.00 and the students with grade point average range of 3.01–3.50 ($U = 1983.5, z = -2.477, p = 0.013$), in favour of higher grade point students; and between the students with grade point average range of 2.51–3.00 and the students with grade point average range of 3.51–4.00 ($U = 523.5, z = -2.451, p = 0.014$), in favour of the students with higher grade point. The difference between the mean ranks of other groups is not statistically significant ($p > 0.05$).

As a result of Kruskal–Wallis H Test applied for determining if mean scores of Motivation to Teach Scale differ significantly according to WGPA variable, it was found that there is not a significant difference between the mean ranks of the groups ($\chi^2 = 5.664; p > 0.05$).

4. Discussion and conclusion

The results of this study that aims to investigate the relationship between self-leadership skills and motivation to teach of pre-service preschool teachers show that there is a significant positive correlation between motivation to teach and self-leadership skills of pre-service teachers. As a result, the higher the self-leadership levels of pre-service teachers, the higher the motivation to teach, and also the lower the self-leadership levels, the lower the motivation to teach.

Research findings show that pre-service preschool teachers who use Behaviour-Focused Strategies, Natural Reward Strategies and Constructive Thought Model Strategies have higher intrinsic motivation. In other words, pre-service preschool teachers who apply self-goal setting, self-observation, self-reward, self-punishment and who concentrate on natural reward, visualise successful performance and self-evaluate their thoughts have higher intrinsic motivation.

It was also found that pre-service teachers who use Behaviour-Focused Strategies and Constructive Thought Model Strategies have higher extrinsic motivation. That is, concentrating on natural rewards does not have significant correlation with extrinsic motivation. Findings also show that the pre-service

teachers with higher grade point averages have higher self-leadership skills. However, their levels of motivation to teach do not differ significantly according to grade point averages of pre-service teachers.

In the study, the perception of self-leadership of pre-service preschool teachers has found to be at high level. In another research conducted by Ay, Karakaya and Yilmaz (2015), the perception of self-leadership skills of pre-service teachers has also found as high. According to those results, pre-service preschool teachers are mostly individuals who employ self-goal setting, self-observation, self-reward, and self-punishment, concentrating on natural rewards, visualising successful performance, self-talk and self-evaluation.

The perception of motivation to teach of pre-service preschool teachers has been found to be at medium level. In terms of dimensions, teachers have a higher perception of intrinsic motivation than extrinsic motivation. Studies on this topic show similar findings (Ayik & Atas, 2014; Dereli & Acat, 2010; Yalcin & Korkmaz, 2013). The high level of both intrinsic and extrinsic motivation of pre-service teachers indicates that they have a positive attitude towards the teaching profession. According to Kaya, Yildiz and Yildiz (2013), the high intrinsic motivation indicates that the teaching is a spiritually high profession which is away from material concerns. Furthermore, having fewer problems in the process of appointment of the students who graduated from preschool education departments, having more assigning probabilities than other branches and efforts made for compulsory preschool education may have increased the extrinsic motivation of students (Dereli & Acat, 2010).

Arguably, the findings of this study, indicating that there is a significant positive correlation between self-leadership and motivation to teach, are in compliance with the self-leadership definitions in the literature, that it represents self-efficacy processes such as self-motivation and self-management (DiLiello & Houghton, 2006; Manz & Neck, 2004), and that intrinsic motivation is considered as one of the explanatory components of self-leadership, and especially of natural reward and Behaviour-Focused Strategies of self-leadership (Neck & Houghton, 2006). Moreover, in the study conducted by Curral and Marques-Quinteiro (2009), it has been concluded that there is a significant relationship between self-leadership and intrinsic motivation.

In the research, it has been found that the pre-service teachers with higher grade point averages have higher self-leadership skills. Considering that the term 'self-management' is usually used in the meaning of 'self-leadership' in the organisational psychology literature, similar result has been found in the study conducted by Ercoskun (2016). In this study, carried out with 7,460 pre-service teachers, a significant positive correlation is found between self-management skills of pre-service teachers and their academic achievements. Similarly, a research conducted by Covarrubias and Stone (2015) shows a positive and significant correlation between self-monitoring and math achievement scores of university students. The significant positive correlation between the perception of self-leadership and grade point averages of pre-service teachers can be explained by that the individuals with a high self-leadership perception have the higher level of possibility to reach their personal goals.

The research shows that the motivation levels do not differ significantly according to the grade point averages of pre-service preschool teachers. However, in the research conducted by Acat and Dereli (2012), it has been found that the academic achievements of preschool teachers predict their motivation on teaching profession. According to the results, factors other than the grade point averages can be considered as affecting the motivations of pre-service teachers.

The research has revealed important findings for pre-service teachers. First of all, it is important in the determination of the factors that affect self-leadership. Thus, it is required, in order for the pre-service teachers to have higher self-leadership skills, that the education faculties to put into practice the innovations and changes within the curriculum or extra curriculum. In addition, determining the relationship between self-leadership and motivation to teach will be beneficial for pre-service teachers, who are the future teachers, to develop and support leadership skills necessary for doing

their profession with a high motivation. Furthermore, in order to regulate education and training activities properly, it is also required to determine the factors cause lower motivation.

The findings of this research are limited to the fourth grade students of the Preschool Education Departments of Education Faculties of one private foundation university and two public universities in Istanbul. The study can be examined more comprehensively through extending the study groups studying in different departments and focusing on different variables that are expected to affect self-leadership.

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