

Transformational teaching in higher education: The relationship between the transformational teaching of academic staff and students' self-efficacy for learning

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Abstract

This study examined the the relationship between the transformational leadership behaviors of the faculty members and the students' self-efficacy beliefs in learning based on the opinions of higher education students. The research was carried out with 915 students studying at Yozgat Bozok University and analyzed by quantitative methods. The *Transformational Teaching Scale* (TTS) developed by Tahir (2018) has been adapted to Turkish in order to determine the transformational teaching levels of the instructors. Self-efficacy for Learning Scale (SELS) developed by Klobas, Renzi and Nigrelli (2007) has been adapted to Turkish in order to determine the higher education students' self-efficacy in learning. In the analysis of the data, descriptive statistics and the structural equation model were used. As a result of the research, sub-dimensions of transformational teaching, *considerate intellectual stimulation* and *charisma*, were found to have positive relationships with dimensions of self-efficacy for learning, *finding and info processing*. It has been determined that the transformational teaching is a significant predictor of learning self-efficacy of students.

Keywords: Transformational leadership, transformative teaching, self-efficacy for learning

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Introduction

Technological developments, innovations in the field of information accelerate organizational change and differentiate social expectations. The learned information requires continuous updates to adapt to the age. At this point, the most important goal of higher education institutions that prepare individuals for their future professions is to give individuals the ability in lifelong learning. Nowadays, learning cannot be limited only to the school, therefore, self-efficacy for learning have great importance for individuals.

The opinions of individuals about how they are perceived by their environment and the behavior of those around them affect their self-efficacy belief (Linnenbrink & Pintrich, 2002). In this regard, it can be stated that the faculty members who believe that students can learn, improve themselves, who are influential on students with their individual charisma and have adopted transformational leadership, would lead an increase in students' learning self-efficacy. From this point of view, the relationship between the transformational teaching of the teaching staff and the learning self-efficacy of the students was examined in this research.

Transformational teaching

Transformational leadership, also accepted as one of the new leadership approaches, has covered a wide range of leadership research in the past 20 years (Bryman, 1992). The growing interest in transformational leadership, defined by Burns (1978) as the process in which leaders and followers interact to elevate each other to a higher level of motivation, performance and morality, is due to the positive relationship between transformational leadership in organizations and the employees' organizational attitudes (Dede, 2019; Yukl, 1989), trust level (Pilla, Schriesheim and Williams, 1999; Dirks and Ferrin, 2002), performance (Garcia-Morales, Llorens-Montes & Verdu, 2008). Transformative leaders, defined as interactive, passionate, empowering, visionary and creative in the literature, are the leaders who express a realistic vision of the future, intellectually stimulate their subordinates and take into account individual differences (Hackman and Johnson, 2004; Yammarino & Bass, 1988).

Relying on the positive results in different sectors, it has been assumed that it would be useful to transfer the transformational leadership theory to teaching. The idea that the transformational leadership carried out in organizations can be transferred to the teaching environment is based on the understanding that the educational institutions are also organizations. Covering processes such as communication, organization and supervision (Barnard, 1938; Kuchinke, 1999), presence of tools such as reward and pressure, and differences in power among organization members such as expertise and authority (Raven and French, 1958), leaders' responsibility in influencing, initiating, focusing, determining and coordinating a targeted activity (House and Podsakoff, 1994) can be listed as common points of organizational leadership and teaching leadership. When teaching environments are

evaluated as organizations, teachers or academic staff are positioned as leaders and students as followers (Pounder, 2008; Weaver & Qi, 2005).

Higher education institutions are considered as a social organization where there are differences of power between individuals, responsibilities taken by everyone, exchange of ideas, formal and informal relations. Accordingly, the idea of the implementation of transformational leadership in higher education institutions has been accepted. (Pounder, 2008; Weaver & Qi, 2005). Especially, the idealized effect of the academic staff in other words, their charisma and their ability to provide intellectual stimulation are in accordance with higher education.

Bass (1985) improving Burns's (1978) theory, explained transformational leadership behavior in four dimensions as *idealized influence*, *intellectual stimulation*, *individualized consideration* and *inspirational motivation*. In the literature these dimensions have been preferred. *The idealized influence* is the charisma of the transformative leader, and the leader's ability to express vision to followers and motivate them to participate in the vision (Bass, 1999). The idealized influence provides strong emotions and identification between the leader and his followers (Yukl, 2006). As a result, followers have a high degree of confidence in the leader (Bass, 1985). *Intellectual stimulation* is that the leader encourages his followers to question even tried and succeeded paths and always seek for better. Intellectual stimulation is an important element of organizational learning and change. Brown and Posner (2001) noted that the intellectual stimulation component of transformative leadership played a useful role in organizational learning because it reflected the value that leader gives to the learnings of both himself/herself and the followers. Intellectual stimulation encourages followers to challenge, question, and thus innovative thinking (Bass & Steidlmeier, 1999).

Individualized consideration is the leader's encouragement, support and coaching to his followers (Yukl, 2006). Individualized interest occurs only when strong relationship is developed between the leader and his followers. Being a mentor and coach, leaders recognize and take the individual development needs of followers into account. They help their followers realize their potential. (Barnett, McCormick & Connors, 2001; Bass & Steidlmeier, 1999). *Inspirational motivation* is leaders' ability to move their followers towards realization of the vision with appropriate behavior models and organizational symbols. Transformational leaders give meaning to the vision itself and the process of reaching vision, and ensure that the group focuses on vision despite the obstacles that may arise (Kent, Crotts & Azziz, 2001).

When the transformational leadership is transferred to the teaching, it is examined within similar dimensions. Ingram (1997) and Yuen and Cheng (2000) have classified the transformational leadership behaviors of educators as *inspiration*, *social support* and *facilitation*. *Inspiration* means creating a vision and providing motivational tasks; *social support* means supporting a learning culture, providing support networks, and managing conflicts; and *facilitation* means developing knowledge

and skills and creating intellectual stimulation (Yuen & Cheng, 2000). Tahir (2018), who has examined the characteristics of the transformational leadership of the instructors, combined the four-dimensional structure and formed two dimensions: *considerate intellectual stimulation* and *charisma*. *Considerate intellectual stimulation* involves the behaviors of transformational academic staff that take into account the individual differences of students, support them according to their needs, and encourage them to venture into innovation. *Charisma* refers to the teaching staff's knowledge of expertise and communication skills and their ability to guide and influence students towards target.

Transformational leaders increase the motivation of their followers and encourage them to perform at the highest level they can reach. Transformational educational leaders also support their students for higher academic achievement and personal development (Slavich and Zimbardo, 2012). They focus on each student individually (Mulford & Silins, 2003) and support them by appreciating their work and taking into account their individual opinions. They can transfer the goals of school and education to students and encourage them regarding these goals. While encouraging students to seek better, they raise awareness of the current situation and what can be done in the future (Mulford & Silins, 2003).

Harrison (2011) stated that through *individualized consideration*, academic staff deal with each student as an individual and enable them to progress in their personal development and thus reach their potential. Transformational teaching leaders can create excitement among students through their charisma and considerate intellectual stimulation, and convey the mission and vision to students by gaining their respect (Banjeri & Krishnan, 2000; Tahir, 2018). Studies conducted in the literature show the importance of transformational teaching leaders in creating an effective teaching environment (Boyd, 2009; Cheng, 1994). Transformational teaching leaders who are open to innovation and willing to change, both for themselves and for other members of the organization, provide intellectual stimulation in the classroom by making students realize the assumptions that restrict their thinking (Boyd, 2009).

Self-efficacy for Learning

Self-efficacy refers to a person's belief in his/her ability to learn or perform actions at a certain level (Bandura, 1977). It is the individual's personal belief in the ability to make and organize arrangements to perform a task or to solve a problem (Eccles & Wigfield, 2002). Learning self-efficacy is the limitation of self-efficacy definitions to learning. In other words, it is the belief of the individual that he/she can make the necessary arrangements to learn. Learning self-efficacy also includes learning self-regulation, which means that the individual regulates his/her behaviors in the learning process by monitoring and controlling his/her behavior, emotions and motivations (Polleys, 2002). In this process, the individual determines the learning objectives and makes arrangements accordingly. The belief that you can reach the goals is self-efficacy belief.

Self-efficacy is a broad concept and gives more valid results when it is evaluated at a level specific to the target area (Bandura, 1986; Pajares, 1996). For example, by examining the general self-efficacy belief, the prediction of academic self-efficacy beliefs may not produce significant results. Individuals' self-efficacy beliefs vary in three dimensions; level, strength and generality (Bandura, 1997; Holladay & Quinones, 2003). The belief in the *level* of difficulty that people can achieve affects their belief in their *strength* to achieve that level. *Generality* indicates that the competence belief related to an activity can be generalized to a series of similar activities within the same field of activity (Holladay & Quinones, 2003). From this point on, it is stated that a general belief in learning, rather than a single subject area, can be addressed (Klobas, Renzi & Nigrelli, 2007).

Studies in the literature show that learning self-efficacy is positively correlated with students' efforts for learning goals and their resistance to difficulties (Cavaco, Chettiar & Bate, 2003; Niemczyk & Savanye, 2001; Pintrich, 1995). Academic motivation of students also increases in parallel to learning self-efficacy, so they perform better (Pajares, 2003; Niemczyk & Savanye, 2001). Learning self-efficacy ensures that the individual insists on learning activities and increases their expectations and improve their performance in these activities (Zimmerman, 1995). In addition, Bandura (1997) suggests that self-efficacy beliefs are effective in the choice of behaviors. Individuals tend to prefer behaviors that they have high self-efficacy beliefs, in other words, the actions they believe they can achieve. From this point of view, it can be thought that the development of learning self-efficacy in higher education has a significant effect on the lifelong learning of university students. Individuals with high beliefs in that they can learn, would approach the new conditions they face with confidence and consider the changes as an opportunity.

Individuals' personal characteristics, behaviors and environmental variables affect each other in mutual relationship. Therefore, self-efficacy beliefs of individuals are also influenced by the environment and the behaviors exhibited towards them (Linnenbrink & Pintrich, 2002). At this point, it can be stated that the faculty members who adopt different leadership approaches will lead a difference on the beliefs of students' self-efficacy. The transformational teaching leadership involves the behaviors that stimulate students intellectually, evaluate each student as individuals with differences and encourage them. Therefore, it is considered that the academic staff who show the transformational teaching leadership will increase the students' self-efficacy for learning.

Studies have revealed that transformational teaching affects the student's motivation (Bolkan and Goodboy, 2009; Griffith, 2004; Kuchinke, 1999; Politis, 2001; Pounder, 2008; Hoehl, 2008), attitude to the school (Walumbwa, Wu, & Ojode, 2004; Slavich & Zimbardo, 2012), confidence in the faculty member (Pounder, 2008; Hoehl, 2008), commitment (Slavich & Zimbardo, 2012), the level of attendance in the course (Kuchinke, 1999; Leithwood & Jantzi, 2000) and ultimately academic performance (Bolkan & Goodboy, 2009; Griffith, 2004; Kuchinke, 1999; Politis, 2001; Harvey, Royal

& Stout, 2003; Kinicki & Schriesheim, 1978; Pounder, 2008 Boyd, 2009; Pounder, 2004). In the literature, there are studies revealed the positive influence of transformational teaching leaders on students. Slavich (2006; 2009) revealed how teachers can be leaders and how they can motivate students by convincing to understand the common vision for a course, which encourages them to realize their potential. Similarly, Boyd (2009) explained that transformational leaders provide students with a compelling and larger vision of their education and future. Beauchamp and Morton (2011) revealed that transformational teaching of teachers increase students' motivation and influence their beliefs towards the class positively. The findings of Morton et al. (2010) and Beauchamp et al. (2010) are also in line with this finding. In this context, it can be thought that the individual attention, encouragement and intellectual stimulation shown by the academic staff will also increase students' self-efficacy for learning. In the 21st century, the main goal of education is to teach individuals how to learn. In today's rapidly changing conditions, for individuals who are aware of how they learn, changes and updates are only elements that will not disrupt the flow of life. At this point, individuals' beliefs in self-efficacy for learning are of great importance. Especially, the high levels of self-efficacy of new adults who will have important roles in society and the examination of academic staff's leadership that may increase students' self-efficacy beliefs will contribute to the field. The aim of this study is to examine the relationship between the transformational leadership behaviors of the academic staff and the students' self-efficacy for learning. Accordingly, the following questions have been sought.

1. What is the level of academic staff's transformational teaching leadership and students' self efficacy for learning?
2. Is there a significant relationship between academic staff's transformational teaching leadership (charisma and considerate intellectual stimulation) and students' self-efficacy for learning (info processing and finding)?
3. Is academic staff's transformational teaching leadership (charisma and considerate intellectual stimulation) a significant predictor of students' self efficacy for learning (info processing and finding)?

Method

Research model

This study is a quantitative study designed in the survey model. In this model, the relationship between two or more variables is determined (Karasar, 1999). According to the opinions of higher education student, it is aimed to describe the current state of relationship between the transformational teaching levels of academic staff and the learning self-efficacy of students. Model of the research is presented in Figure 1.

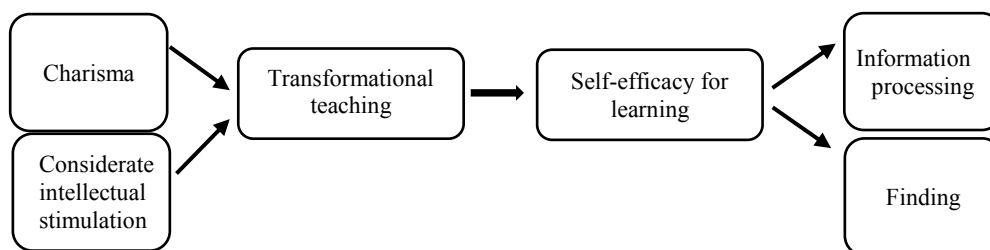


Figure 1. Research Model

Population and Sample

The population of this research is the university students who are studying at Yozgat Bozok University in the 2019-2020 academic year. The entire population consists of 20917 students who continue their studies. Since the entire population cannot be reached, the research was carried out by the sample. Stratified sample method was preferred to reach the minimum number of students according to the student ratio in each faculty. Simple random method was followed to reach a sufficient number of students. The sample determination formula was used to determine the sample that could represent the 20917 population of the study (Erkuş, 2017). According to this formula, 378 participants can represent the population. The data were collected through *googleforms* on a voluntary basis and 915 students participates to the study.

When the participants data of the study is examined, it is observed that 69.4% (635) of the participants are female while 30.6% (280) of them are male. 405 of the participants (44.3%) are students in the 1st grade, 258 (28.2%) of them are in the 2nd grade, 171 (18.7%) of them are in the 3rd grade and 81 (8.9%) are in the 4th grade of their education. In the reseach there are 51 students from School of Physical Education and Sports, 165 from Faculty of Education, 108 from Faculty of Arts and Sciences, 71 from Faculty of Economics and Administrative Sciences, 171 from Faculty of Theology, 32 from Faculty of Communication, 94 from Faculty of Engineering, 36 from Faculty of Health Sciences, 52 from Faculty of Medicine, 96 from Vocational School of Health Sciences and 60 from Vocational School of Social Sciences.

Data Collection Tools

Transformational Teaching Scale (TTS): The scale was developed by Tahir (2018) to determine the level of transformational leadership in teaching and was adapted to Turkish as part of the current study. Permission was obtained from the responsible author before the adaptation process. The scale items were translated into Turkish by language experts. The items translated into Turkish were re-translated into English and examined in terms of language equivalence and found appropriate. Pilot application of the scale was realized with 209 participants. Confirmatory factor analysis (CFA)

was applied to the collected data and the fit values of the scale [$\chi^2 = 258,659$; $\chi^2 / df = 2.192$; CFI= 0.92; TLI= 0.91; RMSEA= 0.07] confirmed the two-factor structure of the scale.

The scale consists of two dimensions called *considerate intellectual stimulation* and *charisma*. *Considerate intellectual stimulation* dimension includes items such as "Treat students as individuals with different strengths and weaknesses" and "Engage students in critical thinking in the class". In the dimension of *charisma*, there are items such as "Attract great admiration" and "Show empathy for students' struggles to learn". It has 5-point Likert structure ranging from 1 (strongly disagree) to 5 (strongly agree). For reliability analysis of the scale Cronbach alpha values were examined and calculated as .90 for *considerate intellectual stimulation*, .88 for *charisma*, and .93 for the entire scale. Accordingly, the scale was determined to be reliable.

Self-efficacy for Learning Scale (SELS): The scale was developed by Klobas, Renzi and Nigrelli (2007). The scale consists of ten items and two dimensions. It was adapted to Turkish as part of the current study. It has 5-point Likert structure ranging from 1 (strongly disagree) to 5 (strongly agree). *Info processing* dimension has items such as "When I find something new about a topic that I am studying, I am able to connect it with other things that I know about the topic" and "Soon after the end of a lesson, I am able to distinguish the most important concepts from concepts of less importance". The dimension of *finding* includes items such as "I am able to decide whether to go to the library or use the web, based on the type of information that I am seeking" and "I am [usually, always] able to identify useful information on the web for an essay".

In the adaptation process, permission was obtained from the author who developed the scale. The scale items were translated into Turkish and then re-translated to English to control language equivalence. Items were found appropriate by the language experts. 209 people participated in the Pilot application and the validity of the Turkish version of the scale was questioned with the CFA. Fit indexes [$\chi^2 = 152,134$; $\chi^2 / df = 4.47$; CFI= 0.91; TLI= 0.90; RMSEA= 0.07] of the scale was determined to be valid. As a result of reliability analysis, Cronbach alpha coefficient was calculated .83 for *the info processing* dimension; .88 for *finding* and .88 for the whole scale. As a result, the scale was found to be reliable.

Analysis of Data

This research was conducted with the students of Yozgat Bozok University in the 2019-2020 academic year. Within the scope of the research, the personal information form, TTS and SELS were used. The missing data was checked and deleted prior to the analysis phase. As a result of the normality and outlier analysis, 17 scales were removed from the data set. A total of 898 scales were found to be appropriate for the analysis.

The skewness (-1.215 to .434) and kurtosis (-.246 to 1.278) values accepted as the signs of normal distribution of the data (Tabachnick and Fidell, 2013). VIF and tolerance levels were examined to control the multicollinearity problem between variables. In order to avoid multicollinearity problem, VIF value must be less than 10, tolerance values must be equal to 0.20 or higher (Multistay, Şekercioğlu and Büyüköztürk, 2010). In the current study, it was determined that VIF values (2.74; 2.75, respectively) and tolerance values (.364; .364, respectively) of *considerate intellectual stimulation* and *charisma* dimensions were in the acceptable range. It was found that the correlation values between dimensions are lower than .80, and the data does not have multiple connection problems based on these results (Table 1).

During the analysis phase, the data was analyzed using descriptive statistics. To determine the transformational teaching levels of the academic staff and the learning self-efficacy levels of the students average and standard deviation scores were used. Structural equality model was used to determine the predictor effect of transformational teaching on students' self-efficacy for learning. Mplus7 and SPSS programs were used in the analysis of the data.

Results

In this section, the transformational teaching levels of the academic staff and the learning self-efficacy of the students were examined according to the opinions of higher education students. The findings on the level of students' learning self-efficacy and transformational teaching and of the academic staff were revealed. Table 1 presented the descriptive results of research variables.

Table 1. Descriptive results and correlation coefficients of transformative teaching and self-efficacy for learning

Variables	Mean	Df	1	1a	1b	2	2a	2b
1.Transformational teaching	3.56	.856	1					
1a. Charisma	3.43	.916	.773**	1				
1b.Considerate Intellectual Stimulation	3.68	.899	.753**	.797**	1			
2.Self-efficacy for learning	3.98	.730	.587**	.515**	.594**	1		
2a. Info processing	3.86	.779	.600**	.542**	.594**	.737**	1	
2b. Finding	4.15	.813	.436**	.362**	.461**	.767**	.638**	1

**p<.01

Findings regarding the first and second research questions are presented here. As can be viewed from Table 1, the average of students' learning self-efficacy level is $x=3.98$ and the average of academic staff's transformational teaching behaviors is $x=3.56$. Both averages are higher than *moderate* level and close to *high* level. When the relationship between variables was examined, a *moderate* level positive relationship was found between academic staff's transformational teaching level and students' learning self-efficacy ($r=.566$; $p<.01$). Regarding the sub-dimensions, there is a

positive *moderate* relationship between *charisma* and *info processing* dimensions (.587; $p < .01$) and *finding* dimension ($r = .420$). Moreover, it was observed that *considerate intellectual stimulation* has a positive *moderate* meaningful relationship with *info processing* dimension and the *finding* dimension ($r = .594$; $r = .461$; $p < .01$, respectively). The findings on the prediction level on the students' self-efficacy for learning are presented in Figure 2.

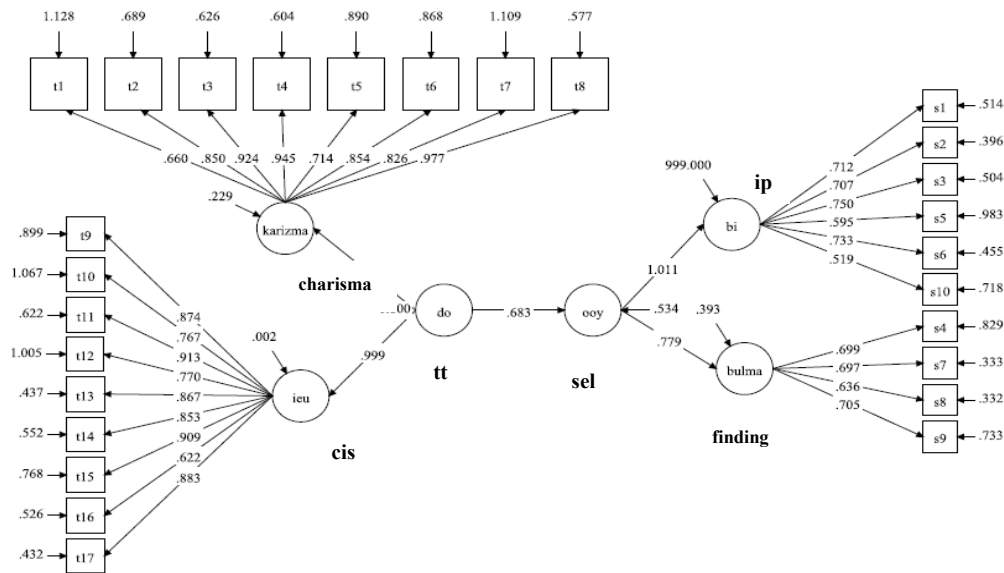


Figure 2. Path analysis

In this section, findings regarding the third sub-question of the research is revealed. As can be observed from Figure 2, it was determined that the path coefficients of all items that make up the transformational teaching scale and self-efficacy for learning scale are significant ($p < .05$). Moreover, the independent variable, academic staff's transformational teaching behaviors, was found to be a significant predictor of the dependent variable, students' learning self-efficacy ($\beta = .683$, $p < .05$). The values of RMSEA, SRMR and CFI should be reported for the fit of the model (Kline, 2005). First of all, the ratio of χ^2/df is expected to be below 5. The value indicates 'excellent' fit when it is $\leq .05$ for RMSEA; $\leq .08$ for SRMR; and $\geq .95$ for CFI, and .90 indicates 'acceptable' fit for CFI (Kline, 2005; Hooper Coughlan & Mullen, 2007). When the fit values of the current study were examined, it was observed that the model showed high level of fit [$\chi^2 = 1427.407$; $\chi^2/df = 319$; RMSEA = .06; CFI = .90; TLI = .90; SRMR = .04].

Discussion, Results and Suggestions

According to the opinions of higher education students, this study aimed to examine the relationship between the transformational teaching levels of the academic staff and the students' self-efficacy for learning. Firstly, the transformational teaching levels of the academic staff and the self-efficacy levels of the students were examined. The transformational teaching level of the instructors

was close to the high level. Similarly, Eker (2019), in her study examining the transformational leadership behaviors exhibited by lecturers according to the views of university students, revealed that lecturers display transformational leadership behaviors at a high level. Most of the studies in the literature deal with the transformational leadership behaviors of managers (Kahya, 2020; Başaran, 2020; Yang, 2014). Among these studies, Çelik and Eryılmaz (2006) found that school principals exhibit transformational leadership behaviors at a moderate level. In terms of the sub-dimension of transformational teaching, *considerate intellectual stimulation*, was found to have a relatively higher average than *charisma* dimension. Based on this finding, students believe that academic staff have individual influence. This influence, which can be expressed as idealized effect or charisma, shows that there is strong feeling and identification between the academic staff and the students. The intellectual stimulation encourages followers to always question, seek innovation and push them to improve. Accordingly, it can be stated that students find the instructors challenging for their improvement.

As a result of the study, it was determined that the students' learning self-efficacy levels were very close to the high level. This finding is parallel to the findings of Sökmen (2019) who studied the role of self-efficacy in the relationship between the learning environment and student engagement. Sökmen (2019) has found that students have *high* level of self-efficacy. On the other hand, Güç (2019), in her mixed method research, revealed that students' self-stated self-efficacy level is *moderate*. The levels of self-efficacy in *finding* dimension were found to be relatively higher than the *info processing* dimension. Students believe they can identify and obtain the necessary materials for their learning. Beyond accessing materials and resources, *info processing* dimension involves using these resources to initiate a new learning process. It can be stated that the active use of the learned information, such as being able to identify the important points of the learned subject and to evaluate them with comparisons, is more difficult than identifying information sources. The belief in the difficulty level of a job also affects the self-efficacy beliefs of individuals (Bandura, 1997; Holladay & Quinones, 2003). Therefore, the finding of students' having a relatively lower belief in information processing can be explained within this framework.

Current research shows that there are meaningful, positive and *moderate* relationships between the subdimensions of transformational teaching of academic staff and learning self-efficacy of students. It has been determined that the transformational teaching behaviors of the academic staff are significant predictor of students' self-efficacy for learning. According to these results, as the transformational teaching levels of the academic staff increase, students' level of self-efficacy for learning also increase.

One of the elements that constitutes the self-efficacy belief is individual's opinion on how he/she is perceived by the environment. In other words, the individual observes how he/she is

evaluated and regulates his/her self-efficacy belief based on these assessments. Transformative teaching leaders reflect students that they believe students can achieve. They support them to realize their potential. They always lead them to new learning opportunities by providing intellectual stimulation. Therefore, it can be stated that the transformational teaching behaviors of the instructors positively affect students' learning self-efficacy.. This finding is consistent with the studies of Warlizasusi, Supriyati and Karnati (2018) who revealed that via direct positive effect transformational leadership can lead improvement in self-efficacy in learning. Similarly, studies of Morton et al. (2010) and Beauchamp et al. (2010) demonstrated that students' self-reported motivation and self-efficacy belief is positively influenced by teachers' transformational teaching leadership.

Peters (2014) observed a positive relationship between transformational leadership behaviors of teachers and students' performance. Similarly, Harrison (2011) revealed that thanks to the individualized consideration, academic staff deal with each student as an individual and support their personal development, thereby enable students to reach their potential. Transformative teaching leaders support their students for a high-level academic achievement and personal development. (Slavich & Zimbardo, 2012). Transformational leaders value learning and innovative thinking, thus encourage their followers to question and challenge (Bass & Steidlmeier, 1999).

As a result of the study, it was determined that the transformational teaching behaviors of the academic staff are significant predictor of students' learning self-efficacy. The positive impact of self-efficacy belief on academic success and the fact that learning self-efficacy is critical in lifelong learning (Aslim and Kocabatmaz, 2019; Linnenbrink and Pintrich, 2003) makes transformative teaching behaviors of academic staff more important and critical. Peters (2014), as a result of his experimental work, revealed that transformational teaching behaviors can be learned. From this point of view, it should be aimed for the academic staff to improve themselves in becoming transformational leaders.

In fact, the main purpose of transformative leadership is to empower, inspire and challenge individuals to achieve their best personal and collective potential (Bass and Riggio 2006; Beauchamp and Morton 2011). In this direction, making teaching goals more and more difficult in the process and supporting students will provide new opportunities for students to improve themselves and increase their self-efficacy belief in learning. In addition, the charisma of the academic staff, their field mastery, their openness to innovation and learning, will affect students in line with their role model.

This study is limited to students studying at Yozgat Bozok University in the 2019-2020 academic year. Based on the results of this study, it may be recommended to inform academic staff through various trainings about the positive effects of transformational leadership behavior and the application of transformative leadership in teaching. Based on the relatively lower self-efficacy of the students regarding info processing, it would be useful to create application opportunities where they

can actively use the learned knowledge in order to improve themselves. In addition, repeating this study with larger study groups in different universities may help to describe the relationship between variables in more detail. In the future studies, the mediating relationships with variables such as academic motivation and resilience can be examined. The effect of transformational teaching and students' self-efficacy for learning on student performances can be observed.

References

- Aslım, S., & Kocabatmaz, H. (2019). The relationship between teacher candidates' self-efficacy levels and lifelong learning tendencies. *Uluslararası Eğitim Programları ve Öğretim Çalışmaları Dergisi*, 9, 179-202. 10.31704/ijocis.2019.008.
- Bandura, A. (1977). *Social Learning Theory*. Albert Bandura (Ed), New Jersey: Prentice Hall
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice Hall
- Bandura, A. (1997). *Self Efficacy: The exercise of control*. New York: Freeman.
- Banjeri, P., & Krishnan, V. R. (2000). Ethical preferences of transformational leaders: An empirical investigation. *Leadership & Organization Development Journal*, 21(8), 405-413.
- Barnard, C. I. (1938). *The functions of the executive*. Cambridge, MA: Harvard University.
- Barnett, K., McCormick, J., & Connors, R. (2001). Transformational leadership in schools—panacea, placebo, or problem? *Journal of Educational Administration*, 39(1), 24-46. Retrieved March 1, 2010, from ProQuest Education Journals.
- Bass, B. M. (1985). *Leadership and performance beyond expectations*. New York, NY: Free Press.
- Bass, B. M. (1999). Two decades of research and development in transformational leadership. *European Journal of Work and Organizational Psychology*, 8(1), 9-32. .
- Bass, B. M., & Riggio, R. E. (2006). *Transformational leadership (2nd ed.)*. Lawrence Erlbaum Associates Publishers.
- Bass, B. M., & Steidlmeier, P. (1999). Ethics, character, and authentic transformational leadership behavior. *Leadership Quarterly*, 10(2), 181-217. Retrieved March 30, 2010, from ABI/Inform.
- Beauchamp, M. R., & Morton, K. L. (2011). Transformational teaching and physical activity engagement among adolescents. *Exercise and Sport Sciences Reviews*, 39(3), 133-139.
- Beauchamp, M. R., & Morton, K. L. (2011). Transformational teaching and physical activity engagement among adolescents. *Exercise and Sport Sciences Reviews*, 39, 133-139.
- Beauchamp, M. R., Barling, J., & Morton, K. L. (2011). Transformational teaching and adolescent self-determined motivation, self-efficacy, and intentions to engage in leisure time physical activity: A randomised controlled pilot trial. *Applied Psychology: Health and Well-Being*, 3, 127-150.
- Bolkan, S., & Goodboy, A. K. (2009). Transformation leadership in the classroom: Fostering student learning, student participation, and teacher credibility. *Journal of Instructional Psychology*, 36(4), 296-303.

- Boyd, B. L. (2009). Using a case study to develop the transformational teaching theory. *Journal of Leadership Education*, 7(3), 50-59.
- Boyd, B. L. (2009). Using a case study to develop the transformational teaching theory. *Journal of Leadership Education*, 7, 50–59.
- Brown, L. M., & Posner, B. Z. (2001). Exploring the relationship between learning and leadership. *Leadership & Organization Development Journal*, 22(6), 274-280. Retrieved March 30, 2010, from ABI/Inform. Bryman, 1992).
- Burns, J. M. (1978). *Leadership*. New York, NY: Harper & Row.
- Cavaco, A., Chettiar, V. ve & Bate, I. (2003). Achievement motivation and self-efficacy perception amongst portuguese pharmacy students. *Pharmacy Education*, 3(2), 109–116.
- Cheng, Y. C. (1994). Teacher leadership style: A classroom-level study. *Journal of Educational Administration*, 32(3), 54–71.
- Çelik, S., & Eryılmaz, F. (2006). Öğretmen algılarına göre endüstri meslek lisesi müdürlerinin dönüşümcü liderlik düzeyleri, Ankara ili örneği. *Politeknik Dergisi*, 9(4), 211-224 .
- Dede, N.P. (2019). Dönüşümcü liderlik ve örgütsel bağlılık ilişkisinde lidere güvenin aracı rolü üzerine bir araştırma. *Business & Management Studies: An International Journal* 7(4), 1923-1943. doi: <http://dx.doi.org/10.15295/bmij.v7i4.1250>
- Dirks, K. T., & Ferrin, D. L. (2002). Trust in leadership: Meta-analytic findings and implications for research and practice. *Journal of Applied Psychology*, 87(4), 611–628.
- Eccles J.S. & Wigfield, A. (2002). Motivational beliefs, values and goals, *Annual Review of Psychology*, 53, 109-132.
- Eker, N. (2019). *Examination of the relationship between transformational leadership behaviours of English instructors and motivation of students*. Unpublished master's dissertation. İstanbul Okan Üniversitesi, İstanbul.
- Erkuş, A. (2017). *Davranış bilimleri için bilimsel araştırma süreci*. Ankara: Seçkin Yayıncılık
- García-Morales, V., Llorens Montes, F., & Verdu, A. (2008). The effects of transformational leadership on organizational performance through knowledge and innovation. *British Journal of Management*, 19, 299-319. 10.1111/j.1467-8551.2007.00547.x.
- Griffith, J. (2004). Relation of principal transformational leadership to school staff job satisfaction, staff turnover, and school performance. *Journal of Educational Administration*, 42(3), 333-356. Retrieved March 30, 2010, from ProQuest Education Journals.
- Güç, F. (2019). *Self-efficacy beliefs of Turkish efl learners and the relationship between self-efficacy and academic achievement*. Unpublished master's dissertation. Pamukkale Üniversitesi, Denizli.
- Hackman, M. Z., & Johnson, C. E. (2004). *Leadership: A communication perspective* (4th ed.). Prospect Heights, IL: Waveland Press.
- Harrison, J. (2011). Instructor transformational leadership and student outcomes. *Emerging Leadership Journeys*, 4(1), 82–136.

- Harvey, S., Royal, M., & Stout, D. (2003). Instructor's transformational leadership: University student attitudes and ratings. *Psychological Reports, 92*(2). <http://doi.org/10.2466/PR0.92.2.395-402>
- Hoehl, S. (2008). The relationship between transformational leadership and student educational outcomes as moderated by verbal and nonverbal immediacy. (Unpublished doctoral dissertation) Regent University, Virginia Beach, VA. Retrieved March 22, 2010, from Dissertations & Theses @ Regent University. (Publication No. AAT 3309288).
- Holladay, C. L., & Quinones, M. A. (2003). Practice variability and transfer of training: The role of self-efficacy generality. *Journal of Applied Psychology, 88*(6), 1094-1103.
- Hooper, D. & Coughlan, J. & Mullen, M. (2007). Structural eEquation mModeling: Guidelines for dDetermining mModel fFit. *The Electronic Journal of Business Research Methods, 6*.
- House, R. J., & Podsakoff, P. M. (1994). Leadership effectiveness: Past perspectives and future directions for research. In J. Greenberg (Ed.), *Organizational behavior: The state of the science* (pp. 45-82). Hillsdale, NJ: Erlbaum.
- Ingram, P. (1997). Leadership behaviors of principals in inclusive educational settings. *Journal of Educational Administration, 35*(5), 411-427. Retrieved March 1, 2010, from ProQuest Education Journals.
- Karasar, N. (1999). *Bilimsel Araştırma araştırma yYöntemi*. Ankara: Nobel Yayın Dağıtım
- Kent, T. W., Crotts, J. C., & Azziz, A. (2001). Four factors of transformational leadership behavior. *Leadership & Organization Development Journal, 22*(5), 221-229. Retrieved March 1, 2010, from ABI/Inform.
- Kinicki, J. A., & Schriesheim, C. A. (1978). Teachers as leaders: A moderator variable approach. *Journal of Educational Psychology, 70*(6), 928-935.
- Kline, R. B. (2005). *Principles and Practice of Structural Equation Modeling* (2nd ed.). New York: Guilford Press.
- Klobas, J., Renzi, S., & Nigrelli, M. (2007). A scale for the measurement of self-efficacy for learning (SEL) at university. "Carlo F. Dondena" Centre for Research on Social Dynamics (DONDENA), University Commerciale Luigi Bocconi, Working Papers.
- Kuchinke, K. (1999). Workforce education faculty as leaders: do graduate-level university instructors exhibit transformational leadership behaviors? *Journal of Vocational Education Research, 24*(4), 209-25. Retrieved April 5, 2010, from Education Full Text database.
- Kuchinke, K. P. (1999). Leadership and culture: Work-related values and leadership styles among one company's U. S. and German telecommunication employees. *Human Resource Development Quarterly, 10*(2), 135-154. <https://doi.org/10.1002/hrdq.3920100205>
- Leithwood, K., & Jantzi, D. (2000). The effects of transformational leadership on organizational conditions and student engagement with school. *Journal of Educational Administration, 38*. 112-129. 10.1108/09578230010320064.
- Linnenbrink, E. A., and Pintrich, P. R. (2002). Motivation as an enabler for academic success. *School Psychology Review, 31*, 313-327.

- Linnenbrink, E. A., and Pintrich, P. R. (2002). Motivation as an enabler for academic success. *School Psychology Review, 31*, 313–327.
- M. C. Niemczyk, & W. C. Savenye, (2001). *The relationship of student motivation and self regulated learning strategies to performance in an undergraduate computer literacy course*. Annual proceedings of selected research and development papers presented at the national convention of the association for educational communications and technology. Atlanta, Georgia, November 8–12, 2001
- Mesterova, J., Prochazka, J., Vaculik, M., & Smutny, P. (2015). Relationship between Self-Efficacy, Transformational Leadership and Leader Effectiveness. *Journal of Advanced Management Science, 3*. 109-122. 10.12720/joams.3.2.109-122.
- Morton, K. L., Keith, S. E., & Beauchamp, M. R. (2010). Transformational teaching and physical activity: A new paradigm for adolescent health promotion? *Journal of Health Psychology, 15*, 248–257.
- Mulford, B., & Silins, H. (2003). Leadership for organisational learning and improved student outcomes. *Cambridge Journal of Education, 33*(2), 175-195.
- Pajares, F. (1996). Self efficacy beliefs in academic settings. *Review of Educational Research, 66*, 543-578
- Peters, J. M. (2014). *Transformational teachership: how principles of transformational leadership foster student outcomes*. Unpublished doctoral dissertation, Colorado State University, Fort Collins, Colorado
- Pillai, R., Schriesheim, C. A. ve Williams, E. S. (1999). Fairness perceptions and trust as mediators for transformational and transactional leadership: A two-sample study. *Journal of Management, 25*(6), 897-933.
- Pintrich, P. R. (1995). Understanding self-regulated learning. *New Directions for Teaching and Learning, 63*, 3-12.
- Politis, J. D. (2001). The relationship of various leadership styles to knowledge management. *Leadership & Organization Development Journal, 22*(8), 354-364..
- Polleys, M. S. (2002). *A study of relationships between self-regulated learning, personality and achievement*. Paper presented at the annual meeting of the mid-south educational research association, 6-8 November 2002, Chattanooga.
- Pounder, J. S. (2004). *The classroom leadership styles of Hong Kong university teachers: A case study of teachers in a business school* (Unpublished doctoral dissertation). University of Leicester, UK.
- Pounder, J. S. (2008). Transformational classroom leadership: A novel approach to evaluating classroom performance. *Assessment & Evaluation in Higher Education, 33*(3), 233-243.
- Raven, B. H., & French, J. (1958). Legitimate power coercive power, and observability in social influence. *Sociometry, 21*, 83-97. Retrieved from Academic Search Complete database.
- Salvich, G. M., & Zimbardo, P. G. (2012). Transformational teaching: Theoretical underpinnings, basic principles, and core methods. *Educational Psychology Review, 24*, 569-608.
- Slavich, G. M. (2009). On 50 years of giving psychology away: An interview with Philip Zimbardo. *Teaching of Psychology, 36*, 278–284.

- Slavich, G. M. (2006). On becoming a teacher of psychology. In J. G. Irons, B. C. Beins, C. Burke, B. Buskist, V. Hevern, & J. E. Williams (Eds.), *The teaching of psychology in autobiography: Perspectives from exemplary psychology teachers* (pp. 92-99). Washington, D.C.: American Psychological Association.
- Sökmen, Y. (2019). The role of self-efficacy in the relationship between the learning environment and student engagement. *Educational Studies*, 1-19.
- Tahir, K. (2018). Transformational Teaching: Pakistani Students' Perspectives in the English Classroom. *International Journal of Teaching and Learning in Higher Education*, 30(1), 61-69.
- Walumbwa, F. O., Wu, C., & Ojode, L. A. (2004). Gender and instructional outcomes: The mediating role of leadership style. *The Journal of Management Development*, 23, 124-140. Retrieved March 1, 2010, from ProQuest Education Journals.
- Warlizasusi, J., Supriyati, Y., & Karnati, N. (2018). The Effect of Transformational Leadership, Self Efficacy and Self Learning toward Lecturers Job Performance at STAIN Curup Rejang Lebong Regency of Bengkulu Province. *International Journal of Scientific Research and Management*, 6(07), EL-2018. <https://doi.org/10.18535/ijstrm/v6i7.el01>
- Weaver, R. R., & Qi, J. (2005). Classroom organization and participation: College students' perceptions. *The Journal of Higher Education*, 76, 570-601. doi:10.1353/jhe.2005.0038
- Yammarino, F. J., & Bass, B. M. (1988). *Long-term forecasting of transformational leadership and its effects among naval officers: Some preliminary findings*. Center for Leadership Studies. Retrieved from <http://www.dtic.mil/dtic/tr/fulltext/u2/a204110.pdf>
- Yang, Y. (2014). Principals' transformational leadership in school improvement. *The International Journal of Educational Management*, 28(3).
- Yuen, P. Y., & Cheng, Y. C. (2000). Leadership for teachers' action learning. *International Journal of Educational Management*, 14(5), 198-209. Retrieved March 1, 2010, from ProQuest Education Journals.
- Yukl, G. (1989). Managerial leadership: A review of theory and research. *Journal of Management*, 15(2), 251-289.
- Yukl, G. (2006). *Leadership in Organizations* (6th ed.). Upper Saddle River, NJ: Pearson Education, Inc.
- Zimmerman, B. J. (1995). Self-efficacy and educational development. In A. Bandura (Ed.), *Self-efficacy in Changing Societies* (pp. 202-231). Cambridge, UK: Cambridge University Press.