Motivation to teach as a predictor of resilience and appreciation: An examination in terms of the self-determination theory

Aylin Mentiş Köksoy
Department of Elementary Education, Faculty of Education, Ege University, İzmir, Turkey
aylinmentiskoksoy@gmail.com

Mehmet Uğur Kutluer
Department of EU Studies, Institute of Social Sciences, Dokuz Eylül University, İzmir, Turkey

The aim with this research was to investigate the correlation between the intrinsic and extrinsic motivation of teacher candidates regarding their desire to teach, and the variables of resilience and appreciation. In order to establish this correlation, we used the resilience scale, originally developed by Wagnild and Young in 1993 and adapted to the Turkish context by Terzi in 2006. Additionally, the motivation-to-teach scale, developed by Kauffman, Yılmaz Soylu and Duke in 2011 and adapted to the Turkish context by Güzel Candan and Evin Gencel in 2015, as well as the gratitude, resentment and appreciation test-revised short (GRAT-RS), developed by Thomas and Watkins in 2003 and adapted to the Turkish context by Oğuz Duran in 2017, were employed. The participants in this study comprised 328 fourth-year teacher candidates enrolled in undergraduate programmes in the Faculty of Education at the Ege University during the 2019–2020 academic year. According to the findings, the motivation to teach demonstrates predictive qualities for both resilience and appreciation. The teacher candidates with high motivation to teach, that is, the teacher candidates who studied at a faculty of education by choice, showed more positive emotions towards their profession (Ayik & Ataş, 2014). This research shows that the level of autonomy is effective over positive emotions. If we aim to have better education and teachers who inspire students with positive energy, it may be easier to achieve this with teachers who have a higher level of autonomy.

Keywords: appreciation; education; motivation to teach; organismic integration theory; positive psychology; resilience; self-determination theory; teacher candidates

Introduction

There is an increase in the rate of psychological problems like depression and anxiety among students every day. Across the world, changing conditions and developing needs that depend on these conditions have also been reflected in the field of education. Currently, the psychological problems experienced by individuals have increased, resulting in reflections in the field of education and leading to more focus on the psychological well-being of students in education. According to recent data published by the World Health Organization, this problem mentioned by Seligman, Ernst, Gillern, Reivich and Linkins in their 2009 article on positive education remains strong. In addition, certain study data show that individuals who experience psychological difficulties have difficulty in demonstrating their professional skills (Kuşçu Karatepe & Tiryaki Şen, 2019), even if this is assessed with an attitude other than the humanistic approach. All this data contradict the goal of contributing to humanity, the ultimate objective of education. This contradiction supports the proliferation of positive education approaches that pay attention to students’ well-being (Kruger, 2019). In this article we emphasise that autonomy can be an important point in reaching better education and that autonomous teachers convey positive energy to their students.

Literature

Positive education is a very wide field in which researchers conduct many studies. Within the positive education approach there are many different variables including perseverance and empowerment, which are shown as the needs of students’ well-being and by different theories addressing these variables within a framework (Ergün Tekinalp & İşık, 2019). One of them, self-determination, is a theory addressing the basic needs for well-being in the context of autonomy (Deci & Ryan, 1985a). Self-determination is not just a psychological theory that produces studies and applications for the education field (Peters, Calvo & Ryan, 2018). The fact that education theories develop under the influence of psychological theories of dealing with human behaviour makes self-determination more meaningful for education. The expectation that self-determination will ensure students’ well-being and will contribute to the continuity of the learning outcomes makes self-determination important for education. This is supported by the expectation that the actions taken by individuals as a result of their own choices will be continuous in line with these expectations. It can be stated that what makes self-determination significant for education is the belief that knowledge and values that students learn by choice are likely to show more continuity after school and throughout life, which will contribute to students’ well-being. Although self-determination is believed to be effective in unveiling the potential of individuals in their fields, its prevalent contribution is thought to ensure individuals’ well-being as well as maintaining the continuity of the outcomes. Developed by Edward Deci and Richard Ryan (1985a), the self-determination theory (SDT) argues that individuals are born with an intrinsic motivation towards their own interests and potential and emphasises the importance of nurturing this intrinsic motivation. In addition, they state that individuals’ basic needs for well-
being are autonomy, relatedness and competence. Among the studies conducted using the SDT perspective, Gillet, Morin, Huygebaert, Burger, Maillot, Poulin and Tricard (2019) conducted a study with 461 university students which revealed global levels of psychological need satisfaction, as proposed by SDT. In this study, educational results were discussed according to certain trajectory profiles. In a study conducted by Salikhova, Lynch and Salikhova (2019) with 227 doctorate students at Kazan University, the relationship between tolerance for ambiguity, and intrinsic and extrinsic motivation was addressed. It was concluded that doctorate students with a low tolerance for ambiguity had higher intrinsic motivation to perform academic activities. In a study conducted by Orsini, Binnie and Tricio (2018) with 924 university students studying at the San Sebastian University in Chile, the relationship between students’ motivation profiles and academic performance was examined. It was determined that students with an intrinsic motivation profile had better learning traits. In a study conducted by Trenshaw, Revelo, Earl and Herman (2016) with 17 university students studying at the University of Illinois in the United States of America (USA), the effects of the course content redesigned in line with the principles of SDT on students’ intrinsic motivation orientation were examined. The study results put forth that relatedness affected students’ motivation more than autonomy support. Litäläinen, Guay and Morin (2015) discussed motivation as a determinant of students’ completing their doctorate degrees. The researchers stated that almost half of the doctorate students in the USA and Canada drop out, and they developed a scale which considered motivation as a determinant in degree completion. The concept of motivation in this study was discussed in terms of the degrees of extrinsic motivation within the organismic integration theory, a mini-theory of SDT. In his study conducted with 1,166 students studying at Konya Necmettin Erbakan University in Turkey, Eliüşük (2014) examined the predictive power of participants’ self-determination (autonomy) and certain personality traits over their patience levels. The study results reveal that self-determination (autonomy) predicted patience as a positive psychological capital element, with all its sub-dimensions. All these studies eventually revealed a significant relationship between autonomy and many positive psychological variables. As seen in literature examples on SDT, no studies were conducted to examine motivation to teach using the positive psychological elements of our study.

SDT, which has been researched since the 1970s, is more than an easily explicable theory. This theory has developed an increasing number of mini theories over the years. With the latest research, this number has reached six. The following theories are explained in our study: the cognitive evaluation theory, the organismic integration theory, the causality orientations theory, the basic psychological needs theory, the goal contents theory, and the relationships motivation theory (Ryan & Deci, 2000a).

When the main and all mini theories are examined, it is seen that much focus is on two concepts: autonomy and motivation. In fact, the concept of motivation has been discussed in great detail from different perspectives in various mini theories. In the mini theory of organismic integration, in which motivation is classified as intrinsic and extrinsic and the continuum of autonomy in different forms is emphasised, the concept of motivation is handled in a more complex model (Ryan & Deci, 2000b).

Cognitive evaluation theory
The cognitive evaluation theory is a theory emphasising that individuals exhibit behaviour since birth in line with the orientation of their existence, and that they have an intrinsic motivation to prioritise themselves (Ryan & Deci, 2008).

Organismic integration theory
The organismic integration theory examines extrinsic motivation according to the level of internalisation. It deals with extrinsic motivation with a perspective based on intrinsic motivation. This perspective is the internalisation of extrinsic motivation by nurturing autonomy, relatedness and competence needs, and the extrinsic motivational structures emerging through this process. The roles of autonomy and relatedness in this process are underlined. Structures emerging through the internalisation of extrinsic motivation are external regulation, introjected regulation, identified regulation and integrated regulation.
As is seen in Figure 1, external regulation includes impersonal sourced motivation, which refers to the behaviour put forward to get rewards or avoid punishments. Of this behaviour, intrinsicness is at the lowest level. The introjected regulation addresses the behaviour manifested by intrinsic pressures such as guilt, anxiety and pride without full integration with the self. Even though these behaviours contain partial intrinsic regulations, they have not manifested themselves due to autonomous reasons. Identified regulation refers to the behaviour that the individual exhibits by providing integration with the self and identity at a higher level than introjected regulation. Although the behaviour related to external regulation is discussed here, some important values underlie the behaviour, and these values are taken into consideration before any action. Despite being based on non-autonomous reasons, integrated regulation deals with the behaviour manifested by integrating with the individual’s self. It is the closest structure to intrinsic motivation, but it does not manifest itself in a natural process such as intrinsic motivation (Ryan & Deci, 2000a, 2000b).

Causality orientations theory
The causality orientations theory addresses the causality underlying the orientations in the context of autonomy, competence and relatedness. In the context of these three factors, the theory assesses three types of orientation (Deci & Ryan, 1985b).

Basic psychological needs theory
SDT bases individuals’ well-being and health on fulfilling three basic needs, namely, autonomy, relatedness and competence. The theory argues that the three basic needs are interrelated and represent integrity. If any of these needs is thwarted, it will lead to negative situations (Ryan & Deci, 2000b).

Autonomy
Autonomy refers to the state of an individual having control over the processes of manifesting, maintaining, and ending his or her own behaviour. In this theory, autonomy and independence do not mean the same. In the manifestation of autonomous behaviour, the awareness of the values constituting the will factor and the behaviour infrastructure and the adoption of these values are emphasised. During the decision-making phase, the individual plays an active role in the processes of manifesting, maintaining and ending his or her behaviour, and acts with intrinsic motivation. In addition, it is stated that an individual’s intrinsic motivation is open to external effects, and the structures formed by this interaction are even classified and explained (Ryan & Deci, 2000c).
**Competence**
Competence refers to being an individual who is useful and who can perform a function that is important to society. This functionality provides the individual with an area in which he or she can be superior to his or her environment, and the individual develops a sense of competence. Competence, which also provides the individual with the ability to influence and direct his or her environment, emphasises not only functionality but also environmental adaptability (Deci & Ryan, 1985a).

**Relatedness**
Relatedness refers to an individual’s bond with other people and a feeling that he or she is a part of the whole. This need is met through relationships based on trust, love and respect. In this theory, quality and satisfying relationships support intrinsic motivation (Ryan & Deci, 2006).

**Goal contents theory**
The goal contents theory categorises goals intrinsically and extrinsically. It examines the effects of goals on well-being and motivation. It addresses intrinsic and extrinsic motivation as the determinants of intrinsic and extrinsic goals. While issues such as ensuring personal development and developing close relationships and relationships with society are discussed within intrinsic goals, issues such as improving financial situation, achieving good social status and increasing recognition are discussed within extrinsic goals (Deci & Ryan, 2000).

**Relationships motivation theory**
The relationships motivation theory is a neglected mini-theory which focuses on the need of relatedness, one of the three basic needs of the SDT. It argues that besides being a basic need, the relationship will feed the other needs, namely autonomy and competence, depending on the relationship’s quality level.

The universality of the SDT is a matter of debate. Some researchers argue that this theory can only be valid in Western societies as they emphasise individualism, not in Eastern societies, which emphasise collectivism. As a matter of fact, studies conducted by Ahmed and Bruinsma (2006), Iyengar and Lepper (1999) reveal that the autonomous motivation of European students is higher than that of Asian students. It is explained that in collectivist societies it is within the framework of the organic integration theory (Deci & Ryan, 2000) that the individual gains a more autonomous structure when he or she internalises the values of the society.

Studies by Elişük (2014), Gillet et al. (2019), Litalien et al. (2015), Orsini et al. (2018), Salikhova et al. (2019), and Trenshaw et al. (2016) dealt with positive psychology variables from the perspective of the SDT.

**Motivation to teach**
The word “motivation”, which comes from the Latin word movere, means to act. (Mobrand, Turns & Mobrand, 2013). Motivation to teach refers to the motivation of teachers or prospective teachers for the act of teaching (Güzel Candan & Evin Gencel, 2015). Studies reveal that teachers’ levels of motivation affect their attitudes towards their profession (Ayık & Ataş, 2014) as well as the quality of their teaching (Owens, 1998). Classified as intrinsic and extrinsic, motivation also affects goals. Goals can also be considered as intrinsic and extrinsic, depending on motivation. In such research the effects of goals on well-being and motivation are examined and intrinsic and extrinsic motivation are considered to be determinants of intrinsic and extrinsic goals. While issues such as ensuring personal development and developing close relationships and relationships with society are discussed within the frame of intrinsic goals, issues like improving one’s financial situation, achieving good social status and increasing recognition are considered to exemplify extrinsic goals (Deci & Ryan, 2000).

In a study conducted by Gök and Atalay Kabasakal (2019), it was shown that a positive relationship exists between teacher’s beliefs of self-efficacy, teaching motivation and attitudes towards the teaching profession. In a study conducted by Ada, Akan, Ayık, Yıldırım and Yağcı (2013), it was seen that in regions with low socio-economic status, classroom teachers needed strong and reassuring administrator support, satisfying human relations and social needs such as experiencing feelings of success. In a study conducted by Akhan and Kaymak (2021), it was seen that teacher candidates’ teaching motivation and teaching self-efficacy had increased at the end of their teaching practice compared to the time that they started and that their teaching motivation was moderately related to their beliefs of teaching self-efficacy.

The study group in our study consisted of pre-service teacher students at a faculty of education. In addition, the level of motivation to teach, which is believed to be an important factor for education and teaching, was discussed as a predictive variable. It was hypothesised that whether a teacher candidate was motivated to teach and the level of his or her motivation would indicate that he or she pursued to study education by choice. In fact, it was believed that a candidate teacher’s level of teaching motivation would provide a clue of how he or she determined his or her social position, and to what extent he or she made autonomous decisions. According to the SDT, it is believed that individuals who can make autonomous decisions and apply their own will can also have more
positive emotions. In addition, many studies show that there is a significant relationship between positive psychological variables and levels of teaching skills (Amk & Tösten, 2019; Çalışmak & Arabacı, 2017; Yıldırım & Tösten, 2019). Therefore, it was predicted that individuals who did not make their own decisions and were forced into situations would have more negative emotions and lower levels of psychological well-being indicators. Psychological well-being is considered as a factor that will positively or negatively affect the teacher candidates’ future teaching experience. Many emotions and factors indicate the state of psychological well-being. In this study, two of these factors, namely, resilience and appreciation are discussed.

Resilience and appreciation
These two concepts have increasingly been mentioned together in the field of positive psychology. Resilience, which means psychological strength, refers to normalisation. In other words, it refers to returning to the former self after a difficult life experience (Ebersöhn, 2017). Studies reveal that individuals with high levels of psychological resilience have positive emotions and high levels of psychological well-being. Although the concept of appreciation is discussed separately from the concept of gratitude in some philosophical studies, it is used side by side with the concept of gratitude as a positive psychological concept (Oğuz Duran, 2017). The term “gratitude” does not imply a negative sense of failure to fulfillment or a sense of debt to a person or a thing that cannot be paid. It is a positive concept that refers to responding and appreciating the source of a good experience with an external source.

It is believed that our study, with its perspective on addressing theory and the holistic structure revealed by the variables used will take its rightful place with a unique contribution to the literature. The well-being of teachers means the well-being of the students. Therefore, this study is conducted on the subject of fostering teachers’ experiences of well-being (Wessels & Wood, 2019). This study was performed on the presupposition that teacher candidates with high motivation to teach, that is, teacher candidates who studied education by choice had more positive emotions. With this study we attempted to answer the question: “Is there a predictive relationship between teaching motivation and resilience and appreciation variables?”

Method
With this study we aimed to emphasise the effects of the SDT on education and its elements. Therefore, it was believed that the study would contribute to the scientific studies and positive education applications conducted on SDT by addressing the motivation to teach as a predictive variable of resilience and appreciation and by revealing the predictive value of autonomy on teacher candidates’ psychological well-being. In addition, with the measurement values of these two concepts, which come to the fore in positive psychology studies, it is believed that the status of teacher candidates’ psychological well-being can be revealed.

In this research, a correlational design was employed to explore the associations between multiple variables by administering scales to teacher candidates. Correlational studies aim to examine the relationships between variables within a group and provide insights into the likelihood of causation and effect among those variables (Büyüköztürk, Çalışmak, Akgün, Karadeniz & Demirel 2012; Karasar, 2012).

The participants in this study consisted of 328 fourth-grade teacher candidates who were enrolled in undergraduate programmes at Ege University during the 2019–2020 academic year. The convenience sampling method was employed due to constraints in terms of time, budget, and manpower (Büyüköztürk, 2012).

To measure resilience, we used the resilience scale, which was originally developed by Wagnild and Young in 1993 and adapted to the Turkish context by Terzi in 2006. The scale comprises 24 items, such as “I follow the plans I make”, “I get through things somehow”, and “I am more confident than anyone else.” The results show a significant correlation between the scores on this scale (R = .83). The Cronbach’s alpha coefficient for the scale was .82, indicating high internal consistency, and the test-retest correlation coefficient was found to be R = .84. The item-total correlation coefficients ranged from .03 to .69. Based on the reliability and validity study, it can be concluded that the resilience scale is a reliable and valid instrument.

The motivation to teach scale, originally developed by Kauffman et al. in 2011 and adapted to the Turkish context by Güzel Candan and Evin Gencel in 2015, was used in this study. This scale consists of 12 items. These items encompass statements such as “I opted for teaching because it would offer me better prospects in the future”, “Teaching is, in my opinion, the most enjoyable profession”, and “I chose teaching due to the freedom it affords me.” The scale exhibited a satisfactory Cronbach Alpha internal consistency coefficient of .92 ($X^2 = 136.086$ ($SD = 44$ $p = .00$), $X^2/SD = 3.10$, RMSEA = 0.08, NFI = 0.92, CFI = 0.94, GFI = 0.94, adjusted goodness of fit index = 0.89). Consequently, we conclude that the motivation to teach scale (MTS) is a dependable and valid measure within the Turkish context.
The GRAT-RS, originally developed by Thomas and Watkins (2003) and subsequently adapted to the Turkish context by Oğuz Duran (2017), consists of 16 items. These items include statements such as “Many people have played a crucial role in getting me where I am today”, “Life has consistently treated me well” and “Nothing is ever enough for everyone, so I never receive my fair share.” Three separate studies were conducted involving a total of 974 participants to determine the psychometric properties of the gratitude, resentment, and appreciation test-revised short (GRAT-RS) for Turkish college students. In Study 1 (N = 304), the factor structure of the scale was examined through confirmatory factor analysis. The results confirmed the original three-dimensional model ($\chi^2$/df = 265.15/101; GFI = .90; CFI = .92; SRMR = .07; RMSEA = .07). Subsequently, Study 2 (N = 551) was undertaken to evaluate the convergent and criterion validity, as well as the internal reliability of the scale. The findings revealed associations between gratitude scores and measures of well-being, along with satisfactory internal reliability.

Finally, the results of Study 3 (N = 119) demonstrate favourable test-retest stability for both the overall score and all three subscales. Collectively, the outcomes of the three studies provided robust evidence regarding the sound psychometric qualities of the Turkish GRAT-RS in assessing dispositional gratitude among Turkish college students.

**Results**

Before data analysis, the data set was reviewed for missing values, of which none were found. The purpose with this study was to examine the relationships between variables. Therefore, before performing regression analysis, normality, homoscedasticity and linearity were investigated with a scatter plot. These assumptions were met. Multivariate outlier values were assessed by the Mahalanobis distance test, and two cases were determined as extreme values. These cases were deleted, and the data analysis was carried out with 328 cases. The significance level in the study was accepted as .05.

### Table 1 Test of normality

<table>
<thead>
<tr>
<th></th>
<th>Intrinsic motivation</th>
<th>Extrinsic motivation</th>
<th>The lack of sense of deprivation</th>
<th>Simple appreciation</th>
<th>Appreciation of others</th>
<th>Resilience</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>26.17</td>
<td>17.15</td>
<td>28.85</td>
<td>41.28</td>
<td>25.16</td>
<td>125.83</td>
</tr>
<tr>
<td>SD</td>
<td>7.96</td>
<td>4.96</td>
<td>9.62</td>
<td>8.15</td>
<td>6.138</td>
<td>19.37</td>
</tr>
<tr>
<td>Skewness</td>
<td>-2.4</td>
<td>-0.6</td>
<td>-0.8</td>
<td>-0.56</td>
<td>-0.56</td>
<td>-0.70</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>-5.2</td>
<td>-3.4</td>
<td>-5.2</td>
<td>-12</td>
<td>-0.6</td>
<td>-0.61</td>
</tr>
</tbody>
</table>

In accordance with Table 1, the skewness and kurtosis values were assessed as part of the normality test. The analysis revealed that the skewness value fell within the range of -0.70 to .08, while the kurtosis value ranging from -0.52 to 0.61. According to Tabachnick and Fidell (2013), when both the skewness and kurtosis values fall between -1.5 and +1.5, it is considered indicative of a normal distribution.

### Table 2 Correlation coefficients of resilience

<table>
<thead>
<tr>
<th></th>
<th>Resilience</th>
<th>Intrinsic motivation</th>
<th>Extrinsic motivation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resilience</td>
<td>-</td>
<td>.32*</td>
<td>.31*</td>
</tr>
<tr>
<td>Intrinsic motivation</td>
<td>.32*</td>
<td>-</td>
<td>.72*</td>
</tr>
<tr>
<td>Extrinsic motivation</td>
<td>.31*</td>
<td>.72*</td>
<td>-</td>
</tr>
</tbody>
</table>

Note. *p < .01.

In accordance with Table 2, moderate positively significant relationships between resilience and intrinsic and extrinsic motivation were found.

### Table 3 Predictors of resilience

<table>
<thead>
<tr>
<th>Predictive variables</th>
<th>B</th>
<th>SE</th>
<th>β</th>
<th>t</th>
<th>Tolerance</th>
<th>Variance inflation factor (VIF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>101.92</td>
<td>3.82</td>
<td>.19</td>
<td>26.69*</td>
<td>.48</td>
<td>2.07</td>
</tr>
<tr>
<td>Intrinsic motivation</td>
<td>.46</td>
<td>.18</td>
<td>.19</td>
<td>2.50*</td>
<td>.48</td>
<td>2.07</td>
</tr>
<tr>
<td>Extrinsic motivation</td>
<td>.70</td>
<td>.29</td>
<td>.18</td>
<td>2.38*</td>
<td>.48</td>
<td>2.07</td>
</tr>
<tr>
<td>r^2</td>
<td>.12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R^2</td>
<td>.11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. *p < .05.
In accordance with Table 3, the regression analysis revealed that the model was significant ($f(2,325) = 21.20, p < .001$). The variables in the model explained 11% of the variance of resilience. Intrinsic motivation ($B = .46, t = 2.50, p < .05$) and extrinsic motivation ($B = .70, t = 2.38, p < .05$) are positive predictors of resilience. According to these results, one unit increase in intrinsic motivation predicts a .46 unit increase in resilience scores as is seen from the extrinsic motivation score. Similarly, a one-unit increase in extrinsic motivation predicts a .70-unit increase in resilience scores.

### Results regarding the Lack of a Sense of Deprivation

**Table 4 Correlation coefficients of the lack of a sense of deprivation**

<table>
<thead>
<tr>
<th></th>
<th>Lack of a sense of deprivation</th>
<th>Intrinsic motivation</th>
<th>Extrinsic motivation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of a sense of deprivation</td>
<td>-</td>
<td>.00</td>
<td>.05</td>
</tr>
<tr>
<td>Intrinsic motivation</td>
<td>.00</td>
<td>-</td>
<td>.72*</td>
</tr>
<tr>
<td>Extrinsic motivation</td>
<td>.05</td>
<td>.72*</td>
<td>-</td>
</tr>
</tbody>
</table>

*Note. *p < .05.

As seen from Table 4, no significant correlation was found between the lack of a sense of deprivation and intrinsic and extrinsic motivation. Despite the absence of a significant relationship based on the correlation analysis, a regression analysis was conducted to assess the combined predictive power of the two independent variables on the dependent variable. Regression analysis is used to determine how an independent variable is numerically related to the dependent variable. On the other hand, correlation is employed to depict the linear relationship between two variables. In this case, although a linear relationship was not observed, regression analysis still provided predictive value, indicating a non-linear relationship between the variables.

**Table 5 Predictors of the lack of a sense of deprivation**

<table>
<thead>
<tr>
<th>Predictive variables</th>
<th>B</th>
<th>SE</th>
<th>β</th>
<th>t</th>
<th>R²</th>
<th>Adjusted R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>29.93</td>
<td>2.01</td>
<td>14.88</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intrinsic motivation</td>
<td>.09</td>
<td>.10</td>
<td>.08</td>
<td>.98</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extrinsic motivation</td>
<td>-.21</td>
<td>.15</td>
<td>-.11</td>
<td>-1.34</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As is seen from Table 5, regression analysis showed that the model was not significant ($f(2,325) = .89, p > .05$). According to this result, intrinsic and extrinsic motivation has no significant contribution to the model.

### Results regarding the Prediction of Simple Appreciation

**Table 6 Correlation coefficients of simple appreciation**

<table>
<thead>
<tr>
<th></th>
<th>Simple appreciation</th>
<th>Intrinsic motivation</th>
<th>Extrinsic motivation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simple appreciation</td>
<td>-</td>
<td>.29*</td>
<td>.24*</td>
</tr>
<tr>
<td>Intrinsic motivation</td>
<td>.29*</td>
<td>-</td>
<td>.72*</td>
</tr>
<tr>
<td>Extrinsic motivation</td>
<td>.24*</td>
<td>.72*</td>
<td></td>
</tr>
</tbody>
</table>

*Note. *p < .01.

As is seen from Table 6, there was a low level of significant positive relationships between simple appreciation and intrinsic and extrinsic motivation.

**Table 7 Predictors of simple appreciation**

<table>
<thead>
<tr>
<th>Predictive variables</th>
<th>B</th>
<th>SE</th>
<th>β</th>
<th>t</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>32.89</td>
<td>1.63</td>
<td>20.16</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intrinsic motivation</td>
<td>.27</td>
<td>.08</td>
<td>.26</td>
<td>3.41*</td>
<td>.48</td>
<td>2.07</td>
</tr>
<tr>
<td>Extrinsic motivation</td>
<td>.08</td>
<td>.13</td>
<td>.05</td>
<td>.67</td>
<td>.48</td>
<td>2.07</td>
</tr>
</tbody>
</table>

R²: .09
Adjusted R²: .08

*Note. *p < .05.
As is seen from Table 7, as a result of the regression analysis, the model was found to be significant \( f(2,325) = 15.88, p < .001 \).

The variables in the model explained 8% of the variance of simple appreciation. Intrinsic motivation \( (B = .27, t = 3.41, p < .05) \) is a positive predictor of simple appreciation. According to this finding, a one unit increase in intrinsic motivation predicts a .27 unit increase in simple appreciation scores.

**Results regarding the Prediction of Appreciation of Others**

<table>
<thead>
<tr>
<th></th>
<th>Appreciation of others</th>
<th>Intrinsic motivation</th>
<th>Extrinsic motivation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appreciation of others</td>
<td>-</td>
<td>.31*</td>
<td>.23*</td>
</tr>
<tr>
<td>Intrinsic motivation</td>
<td>.31*</td>
<td>-</td>
<td>.72*</td>
</tr>
<tr>
<td>Extrinsic motivation</td>
<td>.23*</td>
<td>.72*</td>
<td>-</td>
</tr>
</tbody>
</table>

*Note. *\( p < .01 \).*

As is seen in Table 8, a moderate positive relationships exists between appreciation of others and intrinsic motivation, and a low level of positive relationships between appreciation of others and extrinsic motivation.

**The predictors of appreciation of others**

<table>
<thead>
<tr>
<th>Predictive variables</th>
<th>B</th>
<th>SE</th>
<th>( \beta )</th>
<th>( t )</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>18.83</td>
<td>1.22</td>
<td>15.37*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intrinsic motivation</td>
<td>.22</td>
<td>.06</td>
<td>.28</td>
<td>3.73*</td>
<td>.48</td>
<td>2.07</td>
</tr>
<tr>
<td>Extrinsic motivation</td>
<td>.04</td>
<td>.09</td>
<td>.03</td>
<td>.38</td>
<td>.48</td>
<td>2.07</td>
</tr>
</tbody>
</table>

\( R^2 = .09 \)

Adjusted \( R^2 = .09 \)

*Note.* \( p < .05 \).

As a result of the regression analysis, the model was found to be significant \( f(2,325) = 16.70, p < .001 \).

In accordance with Table 9 the variables in the model explained 9% of the variance of appreciation of others. Intrinsic motivation \( (B = .22, t = 3.73, p < .05) \) is a positive predictor of appreciation of others. According to this finding, it can be seen that a one unit increase in intrinsic motivation predicts a .22-unit increase in simple appreciation scores.

**Discussion**

Teacher candidates are the teachers of the future. The well-being of teachers implies the well-being of their students. Therefore, studies are conducted on the subject of fostering teachers’ experiences of well-being (Wessels & Wood, 2019). In addition, research with teacher candidates means addressing the issue at its origin, therefore, many studies have been conducted with teacher candidates.

Although the biggest criticism for SDT has been in terms of universality, extensive research refuting this claim has been done.

It has been said that the SDT as theory has no universal validity as it emphasises Western ideology and individualism. Studies put forth results disproving this claim (Bao & Lam, 2008). However, this still does not make the research results unshakable truths but it is a fact that other confirmatory research for SDT and this research has revealed important data using today’s scientific research methods.

No significant relationship was found between the lack of a sense of deprivation and motivation for teaching in this study as deprivation as sub-dimension was not the focus in this study.

The results of our study based on SDT support the hypothesis that there is a predictive relationship between positive psychological variables and motivation for teaching. Furthermore, motivation to teach based on intrinsic and extrinsic motivation also produced predictive values supporting the organismic integration theory, an important mini-theory of self-determination. The study results are supportive of the theory that extrinsic motivation can be internalised at different levels and are in line with the theory’s narrative.

**Conclusion**

With our study we revealed that motivation to teach was a predictive variable of resilience and appreciation. A significant predictive relationship between teacher motivation and positive psychological variables was also found. Furthermore, internality in education contributes to the well-being of teacher candidates, who are the most important elements in future education. Within the framework of the organic integration theory, Deci and Ryan (2000) state that the level of autonomous motivation will increase along with the internalisation of values in Asian collectivist
societies. The findings of this study conducted in Turkey, that reflects the collectivist structure of Asian societies, support the claim of SDT to be universal as well as supporting the argument of the organismic integration theory. This is shown by the significant predictive relationship between positive psychological variables that determine psychological well-being and motivation.

In our opinion, the original concept created by considering the positive psychological variables of resilience and appreciation in an integrated manner with teaching motivation and the investigation of the predictive relationship of these variables makes a unique contribution to the literature.

Authors’ Contributions
Both authors worked on the article together. The study was mainly conducted by the corresponding author.

Notes
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References


