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### **TEACHERS' INTRINSIC AND EXTRINSIC MOTIVATION AS PREDICTORS OF STUDENT ENGAGEMENT**

#### **ABSTRACT**

It is claimed that teachers has an important influence on students' engagement which is generally considered to be among the better predictors of learning The purpose of this study was to study examined teachers' work motivation that actively affects students' engagement based on Self-Determination Theory. Study group of this research consists of 289 teachers from 29 elementary schools in the province of Edirne, Turkey. The results of the study indicated that student engagement was predicted significantly by primary school teachers' intrinsic motivation and extrinsic motivation. While teachers' extrinsic motivation has also a direct and positive influence on student engagement, their intrinsic motivation is the most important predictor of student engagement. Teachers' extrinsic motivation had also strong and significant positive effects on their intrinsic motivation. Therefore, the principals should be to enhance the intrinsic motivation for teachers to teach effectively and at the same time, to supply some extrinsic rewards.

**Keywords:** Self-Determination Theory, Intrinsic Motivation, Extrinsic Motivation, Student Engagement

### **ÖĞRETMENİN İÇSEL VE DIŞSAL GÜDÜLENMESİNİN ÖĞRENCİ KATILIMINA ETKİSİ: BİR ÖZ-BELİRLEME KURAMI UYGULAMASI**

#### **ÖZET**

Öğretmenlerin, öğrenmenin en güçlü yordayıcılarından biri olarak görülen öğrenci katılımı üzerinde önemli bir etkiye sahip olduğu öne sürülmektedir. Bu araştırmanın amacı öz-belirleme kuramı doğrultusunda öğretmenin işe güdülenme düzeylerinin öğrenci katılımına etkisini ortaya koymaktır. Araştırmanın çalışma grubu Edirne ilindeki 29 ilköğretim okulunda görev yapan 289 öğretmenden oluşmaktadır. Çalışmanın sonucunda ilköğretim okulu öğretmenlerinin içsel güdülenme ve dışsal güdülenme düzeylerinin öğrencilerin katılımının anlamlı birer yordayıcısı oldukları görülmektedir. Öğretmenlerin dışsal güdülenme düzeylerinin de öğrenci katılımı üzerinde doğrudan ve pozitif yönde bir etkisi bulunsa da, öğrenci katılımının en önemli yordayıcısı öğretmenlerin içsel güdülenme düzeyleridir. Ayrıca öğretmenlerin dışsal güdülenme düzeylerinin, içsel güdülenme düzeyleri üzerinde de pozitif yönde anlamlı bir etkisi olduğu görülmüştür. Bu doğrultuda, okul yöneticilerine etkili bir öğretim için öğretmenlerin içsel güdülenmesini artırmanın yanı sıra dışsal ödüllerden de yararlanmaları önerilmiştir.

**Anahtar Kelimeler:** Öz-Belirleme Kuramı, İçsel Güdülenme, Dışsal Güdülenme, Öğrenci Katılımı

## **1. INTRODUCTION (GİRİŞ)**

Teachers are the most important factors in determining the quality of education that students receive. Teacher motivation has an important effect on student and their satisfaction and fulfilment (Atkinson, 2000). Teacher job satisfaction has been tied to teachers' work performance, including teachers' involvement, commitment, and motivation on the job. Teacher job dissatisfaction is closely associated with teacher absenteeism and a tendency toward attrition from the teaching profession (Sargent & Hannum, 2005). In spite of the fundamental importance attributed to teacher motivation, it is a common research finding that teachers show lower levels of motivation and higher levels of stress than other professional groups. When the general importance of having motivated teachers is contrasted with the general lack of teacher motivation, a gross disparity is evident: In short, while teacher motivation is fundamental to the teaching/learning process, many teachers are not highly motivated (Jesus & Lens, 2005). Finally, teachers' motivation appears crucial because it predicts not only teachers' engagement and well being but also students' outcomes such as engagement.

## **2. RESEARCH SIGNIFICANCE (ÇALIŞMANIN ÖNEMİ)**

A considerable amount of research in the last 30 years has explored how various aspects of students' motivation and several educational outcomes (Guay, Mageau, & Vallerand, 2003; Vansteenkiste, Simons, Lens, Sheldon, & Deci, 2004; Assor, Haya, Kanat-Maymon, & Roth, 2005; Vansteenkiste, Simons, Lens, Soenens, & Matos, 2005; Soenens & Vansteenkiste, 2005; Patrick, Hisley, Kempner, & College, 2000; Green & Foster, 1986; Houlfort et al., 2002; Steffen & McMullin, 1982; Bozanoğlu, 2004; Buyukyazı, 1995; Sendur, 1999; Gecer, 2002; Ceylan, 2003). Although many studies have been reported on the topic of student motivation, research on teacher motivation that actively affects student engagement has been relatively scarce.

Different approaches have been used in order to examine teachers' motivation in these studies. However, few motivation theories have provided insight as to why teachers engage in their work tasks and as to how teachers integrate the different tasks' within their self. A potentially useful theoretical framework for understanding teachers' motivation is Self-Determination Theory (Deci & Ryan, 2000). More precisely, this theory makes an important distinction between self-determined and controlled types of motivation. Thus, the theory focuses not only on the quantity of motivation but also on the quality. Based on SDT, the purpose of this paper is to explain teachers' motivation that actively affects student engagement.

## **3. SELF-DETERMINATION THEORY (ÖZ BELİRLEME TEORİSİ)**

Self-Determination Theory (Deci & Ryan, 2000) is an approach to human motivation and personality that uses traditional empirical methods while employing an organismic metatheory that highlights the importance of humans' evolved inner resources for personality development and behavioural self-regulation.

According to self-determination theory, different types of motivation underlie human behaviour. These types of motivation are posited to differ in their inherent levels of self-determination. Self-determination involves a true sense of choice, a sense of feeling free in doing what one has chosen to do (Guay et al., 2000). Briefly, to be self-determining means to experience a sense of choice in

initiating and regulating one's own actions (Deci, Connell, & Ryan, 1989).

Self-Determination Theory differs from other need-based theories in that it proposes that human motivation is based on innate psychological needs for competence, autonomy and relatedness. In Self-Determination distinguished between different types of motivation based on the different reasons or goals that give rise to an action. Hence, self-determination theory proposes that there are two basic types of motivation: intrinsic and extrinsic motivation.

### **3.1. Intrinsic Motivation (İçsel Güdülenme)**

According to Ryan and Deci's (2000) intrinsic motivation refers to perform an activity for its inherent satisfactions rather than for some separable consequence. When intrinsically motivated, people engage in activities that interest them, and they do so freely, with a full sense of volition and without the necessity of material rewards or constraints (Deci et al., 1991). People who are intrinsically motivated feel that they are doing an activity because they have chosen to do so voluntarily and because the activity represents a challenge to their existing competencies and require them to use their creative capabilities. This kind of motivation is considered to be highly self-determined in the sense that the reason for doing the activity is linked solely to the individual's positive feelings while performing the task (Noels et al., 1999).

Deci and Ryan (2000) suggests that social environments can facilitate or forestall intrinsic motivation by supporting versus thwarting people's innate psychological needs. Strong links between intrinsic motivation and satisfaction of the needs for autonomy and competence have been clearly demonstrated, and some work suggests that satisfaction of the need for relatedness, at least in a distal sense, may also be important for intrinsic motivation. However, that people will be intrinsically motivated only for activities that hold intrinsic interest for them, activities that have the appeal of novelty, challenge, or aesthetic value. For activities that do not hold such appeal, the principles of CET do not apply, because the activities will not be experienced as intrinsically motivated to begin with. To understand the motivation for those activities, we need to look more deeply into the nature and dynamics of extrinsic motivation.

### **3.2. Extrinsic Motivation (Dışsal Güdülenme)**

Although intrinsic motivation is clearly an important type of motivation, most of the activities people do are not intrinsically motivated (Deci & Ryan, 2000). Indeed, many activities in work organizations are not intrinsically interesting and the use of strategies such as participation to enhance intrinsic motivation is not always feasible (Gagne & Deci, 2005).

Extrinsic motivation, in contrast to intrinsic motivation, requires an instrumentality between the activity and some separable consequences such as tangible or verbal rewards, so satisfaction comes not from the activity itself but rather from the extrinsic consequences to which the activity leads (Deci et al., 1991; Ryan & Connell, 1989). That is, the behaviour is not performed for its own sake, but instead to receive a reward or to avoid some punishment once the behaviour has ended (Pelletier et al., 1997). Initial conceptualizations viewed intrinsic and extrinsic motivation as being invariantly antagonistic. Intrinsic motivation was considered self-determined, whereas extrinsic motivation was thought to reflect a lack of self-determination. However, later research has indicated that

extrinsic motivation does not necessarily undermine intrinsic motivation and that it may even enhance it, implying that extrinsic motivation is invariantly controlled. These findings resulted in a more refined analysis of extrinsic motivation (Vansteenkiste et al., 2006; Pelletier et al., 1997). Within SDT, Deci and Ryan (2000) introduced a second sub theory, called organismic integration theory, to detail the different forms of extrinsic motivation and the contextual factors that either promote or hinder internalization and integration of the regulation for these behaviours. Specifically, various types of extrinsic motivation were distinguished that differ in their degree of autonomy or self-determination, depending on the extent to which people have been successful in internalizing the initially external regulation of the behaviour (Vansteenkiste et al., 2006).

Besides intrinsic and extrinsic motivation, Deci and Ryan (2000) have proposed a third motivational concept namely, amotivation, to fully understand human behaviour. When amotivated, a person's behaviour lacks intentionality and a sense of personal causation. Amotivation results from not valuing an activity, not feeling competent to do it, or not believing it will yield a desired outcome.

### **3.3. The Interrelationship of Intrinsic and Extrinsic Motivation (İçsel ve Dışsal Güdülenme Arasındaki İlişki)**

Cognitive evaluation theory suggested first that external factors such as tangible rewards, deadlines, surveillance, and evaluations tend to diminish feelings of autonomy, prompt a change in perceived locus of causality (PLOC) from internal to external, and undermine intrinsic motivation. In contrast, some external factors such as providing choice about aspects of task engagement tend to enhance feelings of autonomy, prompt a shift in PLOC from external to internal, and increase intrinsic motivation (Gagne & Deci, 2005).

A number of recent studies have investigated the effect of extrinsic rewards upon intrinsic motivation. Researchers have found evidence indicating that intrinsic rewards are more effective motivators than are external rewards such as money (e.g. Goudas, Biddle & Underwood, 1995; Dündar, Özutku, Taspınar, 2007). Evidence also indicates that the use of external rewards reduces internal motivation (Hitt et al., 1992; Sherman & Smith, 1984; Staw et al., 1980).

A number of meta-analyses have been conducted on the experimental studies, which have examined the effects of reward on intrinsic motivation. In a meta-analysis on the topic, Rummel and Feinberg (1988) concluded from a meta-analysis that the existence of the detrimental effects of extrinsic rewards on intrinsic motivation. In meta-analysis of 128 studies, Deci, Koestner and Ryan (1999) examined the effects of extrinsic rewards on intrinsic motivation and concluded that rewards -whether contingent on engagement, completion, or performance- significantly undermined intrinsic motivation. In each of these meta-analyses, rewards are shown to increase measures of intrinsic motivation.

Cameron and Pierce (1994) presented a meta-analysis of extrinsic reward effects on intrinsic motivation, concluding that; overall, rewards do not decrease intrinsic motivation. In the few studies that have also shown positive effects of rewards on intrinsic motivation (Brennan & Glover, 1980; Lopez, 1981; Özer, 2009). According to Eisenberger, Rhoades and Carmeron (1999), rewards generally increase perceived self-determination. Receiving rewards that we have earned means that we are no longer at the mercy of a capricious or over

controlling environment, and we have gained control over our outcomes. Therefore extrinsic rewards should increase, not decrease, perceived autonomy and personal control.

The value and importance of intrinsic and extrinsic rewards in the teaching profession have received considerable attention by researchers. For example, Wild, Enzle, Nix and Deci (1997) observed that participants who were taught a skill by an extrinsically motivated teacher reported lower interest in learning and lower task enjoyment than those taught by an intrinsically motivated teacher. More importantly, when these students subsequently acted as teachers, their students reported lower levels of interest, task enjoyment, and positive mood. These studies suggest that contexts where pressure or rewards are used may affect directly teachers and lead them to become more controlling with their students. On the other hand, when students feel that teachers support their autonomy they are likely to value the task and experience positive feelings toward it. Consequently they are also more likely to show considerable engagement (Assor et al., 2002; Reeve et al., 2004; Yeşilyurt, 2008).

Marks (2000) conceptualized engagement as "a psychological process, specifically, the attention, interest, investment, and effort students expend in the work of learning. In school settings, engagement is important because it functions as a behavioural pathway by which students' motivational processes contribute to their subsequent learning and development (Reeve et al., 2004). Researchers have found strong empirical support for the connection between engagement, achievement and school behaviour (Klem & Connel, 2004; Kelly, 2007; Marks, 2000). In contrast, students with low levels of engagement are at risk for a variety of long-term adverse consequences, including disruptive behaviour in class, reduced use of cognitive strategies on classroom, assignments, absenteeism, and dropping out of school (Marks, 2000; Klem and Connel, 2004; Lessard et al., 2007; Kelly, 2007).

Self-determination researchers (Deci et al., 1996; Assor et al., 2002) also assume that there are a number of teacher behaviours that affect students' engagement in learning. However, it seems that research to date has not explored the specific facets of students' engagement that are related to teachers' intrinsic and extrinsic motivation. It is therefore considered important to explore the role played by students' engagement in their teachers' work motivation. Furthermore, recent studies have investigated the effect of extrinsic motivation upon intrinsic motivation. In this research context, Self Determination Theory suggests that student engagement is jointly determined by teachers' work motivation. This leads to the following hypotheses:

H<sub>1</sub>: Teachers' intrinsic motivation has positive effect on the student engagement.

H<sub>2</sub>: Teachers' extrinsic motivation has positive effect on the student engagement.

H<sub>3</sub>: Teachers' extrinsic motivation has positive effect on their intrinsic motivation.

#### **4. METHOD (YÖNTEM)**

The Self Determination Theory is adopted as the theoretical basis for explaining teachers' work motivation that actively affects student behaviours. In the following paragraphs, the methodological details of the current work are discussed.

#### 4.1. Participants (Katılımcılar)

Data were collected from 29 elementary schools in the province of Edirne, Turkey. A total of 289 teachers (108 men and 181 women) participated in the study. The mean age of the participants was 41.3 years (SD=9.39) and the mean of their experience was 16.1 years (SD=8.48).

#### 4.2. Measurement (Ölçme Aracı)

The Teacher Motivation Questionnaire was used to obtain information regarding teacher motivation. The questionnaire was developed using intrinsic and extrinsic factors as motivators. Further, it also evaluates consequences of intrinsic and extrinsic motivation rather than motivation per se. Cronbach's alpha was calculated as a measure of internal consistency of the items.

Extrinsic motivation (EM) was measured with six items on a 5-point scale, ranging from 'strongly disagree' (1) to 'strongly agree' (5). The extrinsic intrinsic motivators contain the following factors such as: salary, advancement, working condition, appreciation, social statue, and interpersonal relations. An example is; 'I am satisfied with my salary'. The measure of extrinsic motivation had a satisfactory alpha coefficient ( $\alpha=0.79$ ). Intrinsic motivation (IM) was assessed with seven items on 5-point scales. The intrinsic motivators contain the following: skill variety, work itself, participative decision making, autonomy, responsibility, personal and professional growth and, achievement. An example is; 'I am satisfied with my wok.' on a scale ranging from 'strongly disagree' (1) to 'strongly agree' (5). Cronbach's alpha reliability for the intrinsic motivation scale was satisfactory ( $\alpha=0.81$ ).

Measure of student engagement (SE) is formed of five items assessing behavioural, affective, and cognitive aspects of students' engagement in classroom (interest regarding academic subjects, working effectively and very hard, active participation in classroom activities, coming to class prepared, and thinking critically and analytically). Teachers completed the student engagement for students in their classroom. Responses to these items were recorded on 5-point scales ranging from 'almost never' (1) to 'almost always' (5). The alpha coefficient for this scale was 0.80.

Using this data collected from 289 respondents, the corrected-item total correlation and reliability (alpha) for each of the three factors were calculated, thus the instrument's validity was evaluated in terms of internal consistency (i.e. reliability). As shown in Table 1, based on the data collected, all constructs exhibited an  $\alpha$ -value greater than 0.7. Thus, the internal consistency of each construct is fairly high. Table 1 presents descriptive statistics and  $\alpha$ -values of the constructs.

Table 1. Mean, standard deviations and bivariate correlations of research variables

(Tablo 1. Aritmetik ortalama, standart sapma ve değişkenler arası korelasyon katsayıları)

Variables	Mean	SD	Alpha	IM	EM
IM	25.21	5.23	0.81		
EM	19.57	4.76	0.79	0.71**	
SE	14.97	4.53	0.80	0.64**	0.50**

\*\*p<0.01

As shown in Table 1, Pearson's correlation coefficients point out that student engagement was positively correlated with intrinsic and extrinsic motivation.

Confirmatory factor analysis (CFA) was applied to assess the construct validity of the five scales in the model with LISREL 8.3. Each item was modelled as a reflective indicator of its latent construct. The model's overall fit with the data was evaluated using common model goodness-of-fit measures. Based on the data from the responses collected, model resulted in 1.91 in the  $\chi^2$  to df. ratio, which is satisfactory with respect to the commonly recommended value of 3.0. The model fit assessed using other common fit indexes: comparative fit index (CFI), normed fit index (NFI), root mean square residual (RMR), root mean square error of approximation (RMSEA), goodness of fit index (GFI), and adjusted goodness of fit index (AGFI). Model exhibited a fit value exceeding the commonly recommended threshold for the respective indexes. The fit statistics indicate that the research model provides reasonable fit to the data ( $\chi^2= 222.95$ ,  $df=117$ ,  $p=0.00$ ,  $CFI=0.95$ ,  $NFI= 0.90$ ,  $RMR=0.08$ ,  $RMSEA=0.05$ ,  $GFI=0.92$ ,  $AGFI=0.89$ ). In general, model exhibited a reasonable fit to the data for the responses collected.

### 5. RESULTS (BULGULAR)

Data were analysed using LISREL 8.3 with maximum likelihood estimation. Hypothesized relationships were tested by examining the direction and significance of the path coefficients in the research model. Figure 1 depicts overall explanatory power, estimated path coefficients, and associated t-value of the paths.

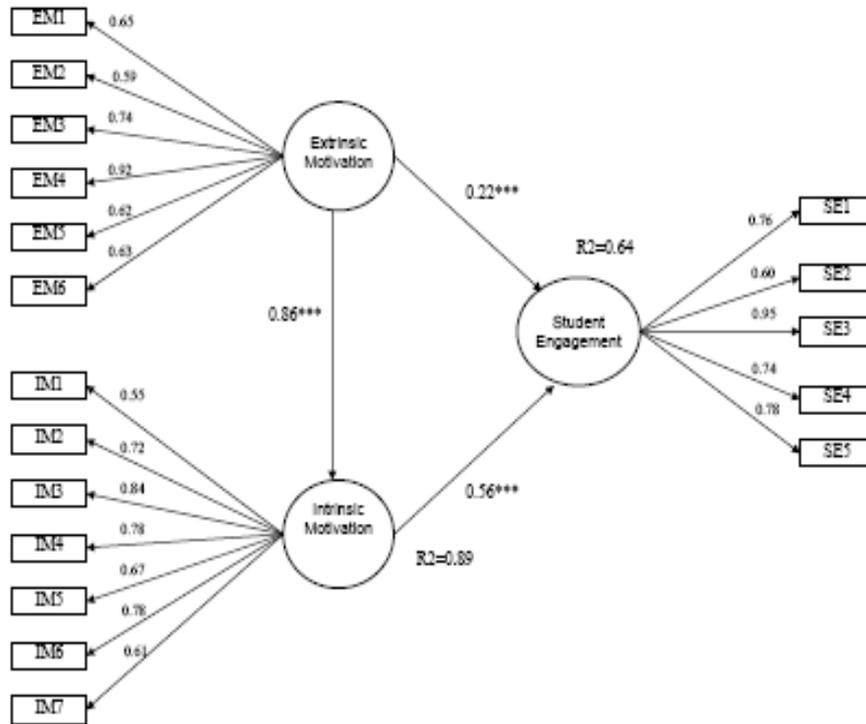


Figure 1. Structural equation model showing the relationships between intrinsic motivation, extrinsic motivation, and student engagement.  
 (Şekil 1. Öğretmenin içsel ve dışsal güdülenmesi ile öğrenci katılımı arasındaki ilişkiye dair yapısal eşitlik modeli)

It was found that intrinsic motivation significantly affected student engagement. ( $\beta=0.56$ ,  $p<0.001$ ), supporting hypothesis H1. Extrinsic motivation was found to have significant effect on student engagement ( $\beta=0.22$ ,  $p<0.001$ ). Therefore, H2 was supported. Finally, hypothesis 3 was supported with a statistically significant relationship between extrinsic motivation and intrinsic motivation ( $\beta=0.86$ ;  $p>0.001$ ). Summarized results for the hypothesis tests are shown in table 2.

Table 2. Hypothesis testing result  
 (Tablo 2. Hipotez testi sonuçları)

Hypothesis	Path	Path coefficient	Result
H1	IM→SE	0.56***	Supported
H2	EM→SE	0.22***	Supported
H3	EM→IM	0.86***	Supported

\*\*\* $p<0.001$

Standardized regression coefficients indicated that intrinsic motivation explained 56% of the variance of student engagement. Extrinsic motivation explained 22% of the variance of student engagement. Extrinsic motivation explained 89% of the variance of intrinsic motivation. Intrinsic motivation and extrinsic motivation together explained 64% of the variance of student engagement.

In summary, these results indicate that the model performs well in explaining the variance for the endogenous variables. Thus, the model was found to be effective in explaining the variance of student engagement.

## 6. DISCUSSION (TARTIŞMA)

Self-Determination Theory makes an important distinction between self-determined and controlled types of motivation. Thus, the theory focuses not only on the quantity of motivation but also on the quality. The aim of this study was to examine teachers' work motivation that actively affects student engagement based on Self-Determination Theory. The model was specified and tested using structural equation modelling and was found to be model fitted the data well.

Overall, the result of the study provides support for the adequateness of the Self-Determination Theory for predicting and understanding of teachers' work motivation that actively affects student engagement. The study also supported the idea that teachers' intrinsic and extrinsic motivations are the antecedent of student engagement. In model, intrinsic motivation and extrinsic motivation together explained 64% of the variance on student engagement. The results of the study indicated that student engagement was predicted significantly by teachers' intrinsic motivation and extrinsic motivation. While teachers' extrinsic motivation have also a significantly influence on student engagement, their intrinsic motivation is the most important predictor of student engagement, which is consistent with results of previous studies (e.g. Dermer, 1975; Wild et al., 1997; Reeve et al., 1999). Previous studies on students' perception of their teachers have shown that students taught by an intrinsically motivated teacher enjoyed their tasks more and were more interested in their learning than those taught by extrinsically motivated teachers.

However, in contrast to any undermining effect, extrinsic motivation had strong and significant positive effects on intrinsic

motivation. Clearly, these findings also show that teachers' extrinsic motivation does not result in a loss of their intrinsic motivation.

The results are similar to previous research results; extrinsic reinforcement and extrinsic cues do not lower intrinsically motivated behaviour (e.g. Brennan & Glover, 1980). In fact, Ryan and Deci (2000) suggest that extrinsic rewards can depend on circumstances and individuals, increase intrinsic motivation if they generate feelings of self-determination.

In conclusion, whereas some researchers suggested that the effects of intrinsic and extrinsic motivation on performance were additive, others imply intrinsic and extrinsic motivation is both positively and negatively interactive. In the current study, results indicated that the effects of teachers' intrinsic and extrinsic motivation on performance were additive.

According to Ofoegbu (2004), teachers have both intrinsic and extrinsic needs. A teacher who is intrinsically motivated may be observed to undertake a task for its own sake, for the satisfaction it provides or for the feeling of accomplishment and self-actualization. On the other hand, an extrinsically motivated teacher may perform the activity/duty in order to obtain some reward such as salary. Extrinsic motivation plays an important part in people's life.

This study has some implications for educational practice. Whether teachers are intrinsically or extrinsically motivated affect their students' engagement. Therefore, the aim of the school management should be to build on and enhance the intrinsic motivation for teachers to teach effectively and at the same time, to supply some extrinsic motivation along the way for school improvement. Principals should be aware of the supporting needs of teachers and methods of providing assistance in order to enhance their motivation. Thus, in order to increase teachers' motivation they should provide support that might include assistance with instructional resources and professional development. Principals should attempt to make teachers' work as interesting and challenging as possible; there should be opportunities for teachers for autonomy and variety, and for a sense of shared decision-making and achievement. Teachers also should benefit from feedback about the progress. Principals should make suggestions to help them improve themselves. Principals can regularly encourage teachers' efforts and outstanding work they do. In addition to intrinsic motivators, principals have a significant role in eliminating and reducing dissatisfiers such as poor physical conditions of classrooms, poor organizational practices and other forms of extrinsic motivators, which may in turn lead to increased motivation. Principals should provide working conditions as tolerable as possible in order to satisfy teachers' basic needs to increase teachers' motivation.

#### **REFERENCES (KAYNAKLAR)**

1. Assor, A., Haya, K., Kanat-Maymon, Y., and Roth, G., (2005). Directly controlling teacher behaviors as predictors of poor motivation and engagement in girls and boys: the role of anger and anxiety. *Learning and Instruction*, 15, 397-413.
2. Assor, A., Kaplan, H., and Roth, G., (2002). Choice is good, but relevance is excellent: Autonomy-enhancing and suppressing teacher behaviours predicting students' engagement in schoolwork. *British Journal of Educational Psychology*, 72, 261-278.

3. Atkinson, E.S., (2000). An investigation into the relationship between teacher motivation and pupil motivation. *Educational Psychology*, 20 (1), 45-57.
4. Bozanoğlu, İ., (2004). Akademik güdülenme ölçeği: geliştirmesi, geçerliliği, güvenirliği. *Ankara Üniversitesi Eğitim Bilimleri Fakültesi Dergisi*, 37(2), 83-98.
5. Brennan, T.P. and Glover, J.A., (1980). Examination of the effect of extrinsic reinforcers on intrinsically motivated behaviour: experimental and theoretical. *Social Behaviour and Personality*, 8 (1), 27-32.
6. Büyükyazı, M., (1995). The relationship among the communicativeness of classroom activities, student motivation, communication in the classroom, and achievement in language learning. Master Thesis, Ankara: Bilkent University.
7. Cameron, J. and Pierce, W.D., (1994). Reinforcement, reward, and intrinsic motivation: a meta-analysis. *Review of Educational Research*, 64, 363-423.
8. Ceylan, M., (2003). Sınıfta motivasyon, Yüksek Lisans Tezi, Eskişehir: Anadolu Üniversitesi.
9. Deci, E.L. and Ryan, R.M., (2000). Intrinsic and extrinsic motivations: classic definitions and new directions. *Contemporary Educational Psychology*, 25, 54-67.
10. Deci, E.L., Ryan, R.M., and Williams, G.C., (1996). Need satisfaction and the self-regulation of learning. *Learning and Individual Differences*, 8, 165-183.
11. Deci, E.L., Vallerand, R.J., Pelletier, L.G., and Ryan, R.M., (1991). Motivation and education: the self-determination perspective. *Educational Psychologist*, 26 (3/4), 325-346.
12. Deci, E.L., Connell, J.E., and Ryan, R.M., (1989). Self-determination in a work organization. *Journal of Applied Psychology*, 74 (4), 580-590.
13. Deci, E.L., Koestner, R., and Ryan, R.M., (1999). A meta-analytic review of experiments examining the effects of extrinsic rewards on intrinsic motivation. *Psychological Bulletin*, 125 (6), 627-668.
14. Dermer, J., (1975). The interrelationship of intrinsic and extrinsic motivation. *Academy Of Management Journal*, 18, 125-129.
15. Dündar, S., Özutku, H., and Taspınar, F., (2007). İçsel ve dışsal motivasyon araçlarının işgörenlerin motivasyonu üzerindeki etkisi: ampirik bir inceleme. *Journal of Commerce & Tourism Education*, 2, 106-119.
16. Eisenberger, R., Rhoades, L., and Carmeron, J., (1999). Does pay for performance increase or decrease perceived self-determination and intrinsic motivation? *Journal of Personality and Social Psychology*, 77, 1026-1040
17. Gagne, M. and Deci, E.L., (2005). Self-determination theory and work motivation. *Journal of Organizational Behavior*, 26, 331-362.
18. Gecer, K.A., (2002). Öğretmen yakınlığının öğrencilerin başarıları, tutumları ve güdülenme düzeyleri üzerindeki etkisi. Doktora Tezi, Ankara: Ankara Üniversitesi.
19. Goudas, M., Biddle, S., and Underwood, M., (1995). A prospective study of the relationships between motivational orientations and perceived competence with intrinsic motivation and achievement in a teacher education course. *Educational Psychology: An International Journal of Experimental Educational Psychology*, 15 (1), 89-96.

20. Green, L. and Foster, D., (1986). Classroom intrinsic motivation: effects of scholastic level, teacher orientation, and gender. *Journal of Educational Research*, 80 (1), 34-39.
21. Guay, F., Mageau, G.A., and Vallerand, R.J., (2003). On the hierarchical structure of self-determined motivation: a test of top-down, bottom-up, reciprocal, and horizontal effects. *Personality and Social Psychology Bulletin*, 29 (8), 992-1004.
22. Guay, F., Vallerand, R.J., and Blanchard, C., (2000). On the assessment of situational intrinsic and extrinsic motivation: the situational motivation scale (SIMS). *Motivation and Emotion*, 24 (3), 175-212.
23. Hitt, D.D., Marriott, R. G., and Eser, J.K., (1992). Effects of delayed rewards and task interest on intrinsic motivation. *Applied Social Psychology* 13 (4), 405-414.
24. Houlfort, N., Koestner, R., Joussemet, M., Nantel-Vivier, A., and Leves, N., (2002). The impact of performance-contingent rewards on perceived autonomy and competence. *Motivation and Emotion*, 26 (4), 279-295.
25. Jesus, S.N. and Lens, W., (2005). An integrated model for the study of teacher motivation. *Applied Psychology: An International Review*, 54 (1), 119-134.
26. Kelly, S., (2007). Classroom discourse and the distribution of student engagement. *Social Psychology of Education*, 10, 331-352
27. Klem, A.M. and Connell, J.P., (2004). Relationship matter: Linking teacher support to student engagement and achievement. *Journal of School Health*, 74 (7), 262-273.
28. Lessard, A., Butler-Kisber, L., Fortin, L., Marcotte, D., Potvin, P., and Royer, É., (2008). Shades of disengagement: high school dropouts speak out. *Social Psychology of Education*, 11, 25-42.
29. Lopez, E.M., (1981). Increasing intrinsic motivation with performance-contingent reward. *The Journal of Psychology*, 108, 59-65.
30. Marks, H.M., (2000). Student engagement in instructional activity: Patterns in the elementary, middle, and high school years. *American Educational Research Journal*, 37 (1), 153-84.
31. Noels, K.A., Clement, R., and Pelletier, L.G., (1999). Perceptions of teachers' communitive style and students' intrinsic and extrinsic motivation. *The Modern Language Journal*, 88, 23-34.
32. Ofoegbu, F.I., (2004). Teacher motivation: a factor for classroom effectiveness and school improvement in Nigeria. *College Student Journal*, 38 (1), 81-89.
33. Özer G., (2009). Öz-belirleme kuramı çerçevesinde ihtiyaç doyumu, içsel güdülenme ve bağlanma stillerinin üniversite öğrencilerinin öznel iyi oluşlarına etkileri, Yüksek Lisans Tezi, Ankara: Gazi Üniversitesi.
34. Patrick, B.C., Hisley, J., Kempler, T., and College, G., (2000). What's everybody so excited about? The effects of teacher enthusiasm on student intrinsic motivation and vitality. *Journal of Experimental Education*, 68 (3), 217-236.
35. Pelletier, L.G., Se'Guin-Le'Ve'sque, C., and Legault, L., (2002). Pressure from above and pressure from below as determinants of teachers' motivation and teaching behaviors. *Journal of Educational Psychology*, 94 (1), 186-196.

36. Pelletier, L.G., Tuson, K.M., and Haddad, N.K., (1997). Client motivation for therapy scale: a measure of intrinsic motivation, extrinsic motivation, and amotivation for therapy. *Journal of Personality Assessment*, 68 (2), 414-435.
37. Reeve, J., Bolt, E., and Cai, Y., (1999). Autonomy-supportive teachers: how they teach and motivate students. *Journal of Educational Psychology*, 91, 537-548.
38. Reeve, J., Jang, H., Carrell, D., Jeon, S., and Barch, J., (2004). Enhancing students' engagement by increasing teachers' autonomy support. *Motivation and Emotion*, 28 (2), 147-168.
39. Rummel, A. and Feinberg, R., (1988). Cognitive evaluation theory: a meta-analytic review of the literature. *Social Behavior and Personality*, 16 (2), 147- 164.
40. Ryan, R.M. and Connell, J.P., (1989). Perceived locus of causality and internalization: examining reasons for acting in two domains. *Journal of Personality and Social Psychology*, 57, 749-761.
41. Sargent, T. and Hannum, E., (2005). Keeping teachers happy: job satisfaction among primary school teachers in rural northwest china. *Comparative Education Review*, 49 (2), 173-204.
42. Sendur, E.P., (1999). Sınıf atmosferi ve öğrenme güdüsü. *Yüksek Lisans Tezi*, İzmir: Dokuz Eylül Üniversitesi.
43. Sherman, J.D. and Smith, H.L., (1984). The influence of organizational structure on intrinsic versus extrinsic motivation. *Academy Of Management Journal*, 27, 877-885.
44. Soenens, B. and Vansteenkiste, M., (2005). Antecedents and outcomes of self-determination in life domains: the role of parents' and teachers' autonomy support. *Journal of Youth and Adolescence*, 34 (6), 589-604.
45. Staw, B.M., Calder, B.J., Hess, R.K., and Sandelands, L.E., (1980). Intrinsic motivation and norms about payment. *Journal of Personality*, 48 (1), 1-13.
46. Steffen, J.J. and McMullin, D.J., (1982). Intrinsic motivation and performance standards. *Social Behavior and Personality*, 10 (1), 47-56.
47. Vansteenkiste, M., Lens, W., and Deci, E.L., (2006). Intrinsic versus extrinsic goal contents in: self-determination theory: another look at the quality of academic motivation. *Educational Psychologist*, 41(1), 19-31.
48. Vansteenkiste, M., Simons, J., Lens, W., Sheldon, K.M., and Deci, E.L., (2004). Motivating learning, performance, and persistence: the synergistic effects of intrinsic goal contents and autonomy-supportive contexts. *Journal of Personality and Social Psychology*, 87 (2), 246-260.
49. Vansteenkiste, M., Simons, J., Lens, W., Soenens, B., and Matos, L., (2005). Examining the motivational impact of intrinsic versus extrinsic goal framing and autonomy-supportive versus internally controlling communication style on early adolescents' academic achievement. *Child Development*, 76 (2), 483-501.
50. Walker, W.A., (2002). Motivation at work: a partial test of the Vallerand (1997) hierarchical model of intrinsic and extrinsic motivation. *Dissertation*, The Faculty of the C. T. College Of Business, University of Houston (UMI Number: 3054071).
51. Wild, T., Enzle, M.E., Nix, G., and Deci, E.L., (1997). Perceiving others as intrinsically or extrinsically motivated: effects on expectancy formation and task engagement. *Personality and Social Psychology Bulletin*, 23, 837-848.

52. Yeşilyurt, S., (2008). The relationship between students' perceived autonomy support and motivational patterns in English writing courses: a self-determination theory approach, Atatürk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 12(2), 397-412.