Medical Faculty Students’ Academic Motivation Types:  
A Comparison with Respect to Various Variables

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ABSTRACT The purpose of this paper is to determine the types of academic motivation of medical faculty 
students according to the type of university they study at and their gender. The study group of this descriptive 
paper consists of 165 students who study at a state university and 162 students who study at two private universities. 
The total number of the study group was 327 medical faculty students. In order to find out the motivation types 
of the students, the Turkish version of “Academic Motivation Scale” was used. After t-tests analysis, it was found 
out that, statistically there is no significant difference between the motivation types of the state university 
students and private university students. On the other hand, when compared the motivation types of the female 
and male students, the paper concluded that there is a significant difference regarding intrinsic, extrinsic and total 
motivation types in favour of female students.

INTRODUCTION

The rapidly globalizing world has caused 
dramatic changes and novel developments in 
every field of life. Triggered by constantly im-
proving information and communication tech-
nologies, especially with the age of individual-
ism, accordingly, in the second half of the twen-
tieth century, individual values and differences 
were recognized, respected and carried into the 
centre of every layers of the modern society (Ar-
nold and Fonseca 2004). As a result, the human 
being started to be considered not only as a 
physical construct but also as a whole construct 
of physical, cognitive and affective variables 
(Akbari and Hosseini 2008). This new tendency 
has made it possible for human beings to be ac-
cepted as “human” literally.

This shift of attention has exerted its impact 
on how education is viewed and practiced. As a 
result, the individual differences of the learners 
were injected into the heart of educational pro-
cesses and procedures. The focus on individual 
differences began to occupy such an important 
part of the debate related to the literature about teaching/learning that the professional literature 
was obsessed with a number of terms and phras-
es indicating the indefinable concepts that dis-
tinguish people from each other (Crystal 1997). 
Consequently, the perceptions that all students 
were different in terms of physical, cognitive and 
affective variables, all of which have crucial in-
fluence on the outcome of academic performance 
were incorporated into education. In this per-
spective, educational researchers and psychol-
gists set out to conduct studies on the differ-
ences that distinguish human beings from one 
another. These differences are defined as “varia-
tions or deviations among individuals with re-
gards to a single characteristic or a number of 
characteristics” (Good 1959).

Out of a number of variations or similarities 
among people ranging from psychological as-
pects such as intelligence, personality, interest, 
and aptitude to physical factors such as body 
size, gender, age, the current paper has attempt-
ed to shed light on the impact of motivation on 
learners’ academic performance (Aydin 2014). 
Motivation of students in education is seen as 
one of the most prominent factor exerting a de-
termining impact on academic performance and 
as a result occupies a wide range of space in the 
related literature. In this respect, a number of 
studies with diverse populations have been con-
ducted by different researchers in different con-
texts on the student’s self-motivation and its re-
lationships with many variables ranging from 
academic performance to gender (Schunk 1991; 
Williams et al. 1994; Barnett et al. 1998; Von Both-
mer and Fridlund 2005; Aunola et al. 2006; Meece 
et al. 2006; Tella 2007; Juriševiè et al. 2008; Mar-
tin and Dowson 2009; Kaya 2015; Pekrun et al. 
2009; Kusurkar et al. 2010; Othman and Leng 
2011).

Motivation is accepted as a theoretical con-
struct explaining the drives behind the students’
behaviours including the reasons for their actions, desires, and needs (Acar et al. 2015). Within the scope of this paper, as an indicator of academic achievement, motivation is defined in a number of ways. While it is used by some researchers to simply refer to some factors that activate, direct, and sustain goal-directed behaviour (Nevid 2013), some other researchers such as Maehr and Meyer define motivation as to include the concepts like initiation, direction, intensity, persistence, and quality of behaviour and goal-directed behaviour (Maehr and Meyer 1997).

Motivation is adopted from different angles by different researchers, as a result of which it has evolved into many different theories throughout the history. Brophy puts this flow of development in four theories as Behavior Reinforcement Theories, Need Theories, Goal Theories, and Intrinsic Motivation Theories. He details this classification as follows “Theories of human motivation have evolved from an emphasis on reactive responses to pressures (external reinforcement contingencies or internally felt needs) to an emphasis on intrinsically motivated, self-determined actions” (Brophy 2013; Lafer 2014).

Within this perspective, based on the factors affecting the motivation, motivation is classified in different ways in the literature. The current paper is conceptually based on the Self-Determination Theory put forward by Deci and Ryan. This theory and accordingly the current paper embrace “both an organismic and a dialectical framework for the study of personality growth and development” (Deci and Ryan 2002). This indicates how much crucial humans’ evolved inner resources are for personality development and behavioural self-regulation (Hall and Quinn 2014; Ryan et al. 1997). This dialectical relationship takes place between people’s active organisms and their social environment to satisfy their three main needs: competence, autonomy and relatedness (Deci and Ryan 2000a). As a result of these interactions, they put forward three types of motivation as intrinsic motivation referring to the drive for accomplishing a task or an activity simply for the pleasure or satisfaction; extrinsic motivation referring to the drive of pursuing an activity with the sense of obligation; and a motivation referring to the lack of absence of drive to pursue an activity (Deci and Ryan 1985, 2000a, 2000b, 2002). Then, they expanded extrinsic motivation classifying it into four types as external regulation, introjected regulation, identified regulation and integrated regulation, all of which differ according to the degree of self-determination that the individual associates with the behaviour itself. Therefore, the focus of SDT is on “the investigation of people’s inherent growth tendencies and innate psychological needs that are the basis for their self-motivation and personality integration, as well as for the conditions that foster those positive processes” (Deci and Ryan 2000a).

A body of research on the construct of motivation seem to signal the importance of motivational problems that are likely to arouse in today’s educational contexts. These results fortify the need to investigate students’ motivational problems (Uzbas 2009). In this respect, in this paper, the researcher used the Academic Motivation Scale (AMS) to collect data about the motivational beings of university students (Vallerand et al. 1989; Vallerand and Bissonnette 1992; Vallerand 1993). The AMS, originally developed in French in 1989, consists of 28 items and seven subscales. Based on self-determination theory of Ryan and Deci, the scale is divided into seven subscales, one standing for subscale of amotivation, three for subscales of intrinsic motivation and three for subscales of extrinsic motivation (Deci and Ryan 1985). The current paper administered the Turkish adaptation of the scale, which is explored to be linguistically equivalent to the original scale in addition to being used as a valid and reliable indicator of Turkish university students’ motivation types (α = 0.97) (Karatas and Erden 2012).

In conclusion, acknowledging that motivation is an important variable that could easily exert its impact on many variables in educational settings. This paper attempts to shed light on the motivational sources of the university students enrolled at medicine department together with the impact of gender on them. As a result, the paper promises important results that should be taken into regard by the teachers to reconstruct and trim their teaching according to students’ attitudes or motives to study.

**METHODOLOGY**

**Participants**

A total of 327 medical faculty students formed the study group, 175 (53.5%) of whom were female and 152 (46.5%) were male students. 165 (50.5%) students of the study group attend a
state university and 162 (49.5%) students attend two private universities.

**Instruments**

In order to determine the students’ motivation types towards English, Academic Motivation Scale which was developed by Vallerand et al. (1992) and translated into Turkish by Karatas and Erden (2012) was used. The scale consists of 27 items and three sub-scales, which assess three types of intrinsic motivation (intrinsic motivation to know, to accomplish things and to experience stimulation), three types of extrinsic motivation (external, introjected and identified regulation) and amotivation (Karatas and Erden 2012). The reliability coefficient (Cronbach Alpha) for the scale was calculated as 0.91.

**Data Collection**

In the process of data collection, two petitions attached with Academic Motivation Scale were written to two private universities for the purpose of permission. After the approval of the petitions, the scale was applied to the students of the state university and one of the private universities by the researcher himself before the classes. The scale was applied to the students of other private university by their teachers before the classes.

**Data Analysis**

In accordance with the purpose of this paper, in order to determine the motivation types of students in terms of university that they attend and their gender, descriptive statistics was used. Furthermore, independent samples t-test analysis was employed to find out whether the students’ academic motivation types differentiate in terms of the university they study at and their gender.

**RESULTS**

Table 1 shows the descriptive statistics related with the study’s variables. For the total of 327 students, the minimum intrinsic motivation value is 15.00; the maximum value is 77 and arithmetic mean is 52.38. In extrinsic motivation, the minimum value is 22.00; maximum value is 84.00 and arithmetic mean is 55.96. In total motivation, the minimum value is 42.00; maximum value is 158 and arithmetic mean is 108.32.

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Min.</th>
<th>Max.</th>
<th>X</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>IM</td>
<td>327</td>
<td>15.00</td>
<td>77.00</td>
<td>52.38</td>
<td>14.12</td>
</tr>
<tr>
<td>EM</td>
<td>327</td>
<td>22.00</td>
<td>84.00</td>
<td>55.96</td>
<td>13.04</td>
</tr>
<tr>
<td>Total</td>
<td>327</td>
<td>42.00</td>
<td>158.00</td>
<td>108.32</td>
<td>24.38</td>
</tr>
</tbody>
</table>

Intrinsic Motivation (IM), Extrinsic Motivation (EM)

Table 2 displays separately the t-test analysis results of intrinsic, extrinsic and total motivation type in terms of the university they study at. In this respect, the state university students’ arithmetic mean in intrinsic motivation is 53.31; the private university students’ arithmetic mean is 51.44. Although there is a difference in arithmetic mean in favour of state university students, it was found out that, regarding the analysis, p value is .23 (p=.23) and this value is not significant at the level of 0.05.

In the case of extrinsic motivation, it is inferred that, the state university students’ arithmetic mean is 53.31; the private university students’ arithmetic mean is 55.39. Despite the fact that there is a difference in arithmetic mean in favour of state university students, it was found out that, regarding analysis, p value is .43

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>X</th>
<th>SD</th>
<th>t</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>IM</td>
<td>State</td>
<td>165</td>
<td>53.31</td>
<td>14.93</td>
<td>1.19</td>
<td>3253</td>
</tr>
<tr>
<td>EM</td>
<td>State</td>
<td>165</td>
<td>56.52</td>
<td>12.28</td>
<td>.78</td>
<td>325</td>
</tr>
<tr>
<td></td>
<td>Private</td>
<td>162</td>
<td>55.39</td>
<td>13.78</td>
<td>.77</td>
<td>319.31</td>
</tr>
<tr>
<td>Total</td>
<td>State</td>
<td>165</td>
<td>109.80</td>
<td>24.73</td>
<td>1.10</td>
<td>325</td>
</tr>
<tr>
<td></td>
<td>Private</td>
<td>162</td>
<td>106.81</td>
<td>24.01</td>
<td>1.11</td>
<td>324.95</td>
</tr>
</tbody>
</table>

p<0.05
Intrinsic Motivation (IM), Extrinsic Motivation (EM)
Table 3: The independent samples t-test results of medical faculty students’ intrinsic, extrinsic and total motivation types in terms of their gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>X</th>
<th>SD</th>
<th>t</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>IM</td>
<td>Female</td>
<td>175</td>
<td>54.87</td>
<td>15.05</td>
<td>3.47</td>
<td>325</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>152</td>
<td>49.52</td>
<td>12.40</td>
<td>3.52</td>
<td>324.11</td>
</tr>
<tr>
<td>EM</td>
<td>Female</td>
<td>175</td>
<td>58.58</td>
<td>11.81</td>
<td>3.98</td>
<td>325</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>152</td>
<td>52.94</td>
<td>13.75</td>
<td>3.94</td>
<td>322.67</td>
</tr>
<tr>
<td>Total</td>
<td>Female</td>
<td>175</td>
<td>113.37</td>
<td>24.21</td>
<td>4.11</td>
<td>325</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>152</td>
<td>102.51</td>
<td>23.34</td>
<td>4.12</td>
<td>321.48</td>
</tr>
</tbody>
</table>

*p<.01
Intrinsic Motivation (IM), Extrinsic Motivation (EM)
and male students is needed to inform policy and practice in efforts to promote optimal growth and development at each level of education (Brouse et al. 2010).

Other than these, a very recent study by Ng and Ng (2015) has shown that motivation, both intrinsic and extrinsic, is affected by other variables such as personality, attitudes of learners and their learning styles; which may also be noted as a limitation of this paper. In another recent study by Jurick et al. (2014), it was found and confirmed that deep-teacher questioning and feedback were other variables contributed to motivation positively and where gender was returned with the same insignificant difference.

On the other hand, knowing the variables in academic motivation is really significant in that it directly affects academic performance (Dogan 2015). However, this doesn’t mean that academic motivation will give an idea about the students’ GPA’s (Cetin 2015).

CONCLUSION

In this paper, it was aimed to determine the types of academic motivation of medical faculty students in terms of the type of university that they study at and their gender. The results indicated that there is no significant difference between the state and private university students’ intrinsic, extrinsic and total motivation levels. In this respect, it can be inferred that motivation is not an important variable in terms of state and private university.

Throughout the pile of research on motivation levels, females have a dominant history of overwhelming males in terms of higher motivation levels. These results haven’t also contradicted the data that have piled up until now in Turkey.

One contradictory finding was that for the extrinsic motivation type, males were found to have more extrinsic motivation than females. The result is that this paper has made some contributions to the previous literature and it is in tune with the previous data in general.

RECOMMENDATIONS

The motivation types of the female and male students were compared in this paper. It may be surveyed whether any differences exist between different classes in the further studies. Also, this paper was conducted among undergraduate students. The researchers may change target population from undergraduate students to graduates or mix both and compare. Moreover, this paper is specific with only one category of academia. It may be surveyed students studying many categories of university in the future.

REFERENCES


