

## The Correlation between the Musical Interest and Achievement Motive

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**ABSTRACT** The purpose of this study is to identify the correlation between the musical interests and achievements motivate of prospective music teachers. The study was designed as a correlative survey. The study was conducted on a total of 829 first, second, third, and fourth grade prospective music teachers who studied during the 2011-2012 academic year in Turkey. The data were collected through the Musical Interest Scale and the Achievement Motive Scale. They were analysed via correlation and regression analyses. The findings suggest an intermediate correlation between the musical interests and achievement motivations of prospective music teachers, suggesting that musical interests play a role in the achievement motivations of prospective music teachers.

### INTRODUCTION

Motive occupies a prominent place in educational psychology (Rutter et al. 2005). Thus, it has been defined by many educationalists and researchers in many different ways. Fedman (1989) defined it as a combination of factors that direct and incite one to action. Motives are commonly categorized as primary-secondary-general, intrinsic-extrinsic, or as situational-continuous. Primary motives are biological motives that are unlearned. Examples include eating, drinking, sexual behaviours and sleeping. In contrast, secondary motives are learned. According to Acikgoz (2003), they are also called social motives. Examples include achievement motive, belonging motive, and status motive. General motives are motives that are not considered either primary or secondary. Like primary motives, they are unlearned; however general motives are not biological. Examples of general motives include curiosity, love, manipulation, and activity.

Motives have also been categorized as intrinsic and extrinsic. Intrinsic motives concern one's internal tendency to direct one's interest in something or to apply one's abilities to their interest, and thus one's attempt to do one's best (Deci and Ryan as cited in Reeve 2001). In contrast, extrinsic motives are environmental causes that encourage one to begin and maintain action (Rogers et al. 1999). The sources of extrinsic motives include external rewards, punishments, or pressures whereas the source of intrinsic motives

stem from internal effects such as interest and curiosity (Acikgoz 2003). As for the classification of motives as situational and continuous, Acikgoz (2003) described situational motives as those motives that are caused by one particular situation whereas permanent motives are motives that are continuous (that is, independent of situation).

According to Duy (2009), motivation is the conscious or unconscious justification for behaviours that incite one's energy towards a particular goal. The meaning of motivation is hidden in the answer to the following questions (Marzano, as cited in Aladag 2007): "Why do some people take pleasure from doing something while they get bored with another or why do some people exert so much energy on something and get preoccupied with it until they finish it whereas others give up early at the beginning and stop being preoccupied with it?" According to Kilbas (2010), one must understand the various theories of motivation in order to better understand motivation.

A literature review suggests that there are different groupings for the theories of motivation. With regard to learning approaches, Moore (as cited in Yazici 2008) grouped theories of motivation under four headings: behavioural, cognitive, humanistic, and social cognitive theories of motivation. Weibelzahl and Kelly (2005) added psychoanalytic theory to Moore's list and emphasized that theories of motivation should be studied under these five headings. Freud pioneered the psychoanalytic theories of motiva-

tion. *Psychoanalytic theories of motivation* explain motivation through instincts or drives (Weibelzahl and Kelly 2005). *Behavioural theories of motivation* deal with motivation in reference to rewards and stimuli, which are both sources of external motivation. In other words, behavioural-theories of motivation argue that motivation is a habit formed as the result of a link between an external behaviour and stimulus (Acat and Yenilmez 2004). This theory is advocated by Pavlov, Thorndike, Skinner, and Hull. *Cognitive theories of motivation* focus on cognition. Behaviours are initiated and controlled with plans, objectives, schemes, and stresses. Individuals develop behaviour not as a result of external effects but as a result of the way they interpret these effects. In this regard, cognitive approach emphasizes intrinsic motivation (Woolfolk 1998). Among the advocates of this theory are Hiedler, Weiner, Vroom, and Kuhl. Like the behaviourists approach, *social cognitive theories of motivation* take into account external effects and the interest in the outcome of the behaviour. In addition, they are similar to cognitive theories in that they take individual beliefs and expectations into consideration (Woolfolk 1998: 377). Social cognitive theory states that expectations are the greatest source of motivation. Bandura is a renowned advocate of this theory. As with the cognitive approach, *humanistic theories of motivation* are marked by sources of intrinsic motivation. One's tendency towards self-actualization is viewed as the primary source of motivation. Maslow, Herzberg, and McClelland are the theorists who use the humanistic approach. McClelland divided human needs into three groups, namely *achievement*, *affiliation*, and *power*. He believed these needs were three basic factors that motivate individuals toward a given behaviour (Rutter et al. 2005). As stated by McClelland, out of these needs or motives, it is *achievement* that has the greatest influence on society. The characteristics of individuals with high achievement motivation include (Johson and Perlow 1992; Lewin and Stephens 1994; Barling and Boswell 1995; Acikgoz 2003):

- ♦ They try to learn for the sake of learning,
- ♦ They stress effort,
- ♦ They try to overcome difficulties,
- ♦ They have an advanced sense of competence,
- ♦ Their ideas and actions are at the center of the road to their development,

- ♦ They dedicate themselves to their goals, and
- ♦ They exhibit great concentration on what they do.

Education plays a pivotal role in the development of societies. One of the most important factors in high quality education is the quality of the teachers. Qualified students can only be taught and schooled by qualified teachers. The above list suggests that individuals with high achievement motive are ambitious, responsible, persistent when faced with adversity, and dedicated. These traits always support development. They provide individuals with high concentration, which enables them to catch up with innovations. All things considered, individuals with higher achievement motivation will likely become highly qualified teachers in the future. In this respect, achievement motive is a key factor in teacher training, as is the case for all aspects of life. Therefore, it is a commonly studied variable in educational research on prospective teachers.

The literature contains multiple definitions of achievement motivation. According to Arik (1996), achievement motivation is a process or chain of processes that initiate, direct, maintain, and stop a series of behaviours. As stated by Genç (2004), in order to be able to motivate people, one should know the factors that motivate them. According to Acikgoz (2003), motives are based on such factors as needs, objectives, interests, values, habits, attitudes, incentives, and expectations. Celik (2006) held that motivated behaviours are marked by interests, constant attention, efforts to finish work, concentration on the subject, and insistence on solutions. In accordance with these definitions, it can be argued that achievement motivation is influenced by interests.

Deniz (2013) describes interest as an internal process in which an individual is both aware and ready to transform to a reaction and behaviour; in this internal process, they pay attention to an object without special effort and maintain this attention for a long time. Super and Crites (1962) reported that Strong started devising the first interest scale in 1916 and defined interest as approaching, alienating from, or being indifferent to a given situation or event. Dewey (1975) maintained that interests, along with actions, passion, efforts, and ideas, present themselves in the form of an identity. According to him, any habit and drive that will activate one's habits

and drives are ultimately turned into interests. Despite this variety, interests are singular. Static and non-developmental sensations represent a series of extraordinary situations, not interests.

As mentioned above, a review of the literature suggests that motives are influenced by interests. Even so, the literature needs further studies to confirm this idea. Thus, the purpose of this study is to identify the correlation between the musical interests and achievement motives of prospective music teachers.

## MATERIALS AND METHODS

### Research Design

This study was designed as a correlative survey. Such designs make an attempt to reveal the existence or extent of covariance between two or more variables.

### Participants

The study was conducted on a total of 829 first, second, third, and fourth grade prospective music teachers who studied during the 2011-2012 academic year. 48 percent of the participants were male and 52 percent were female.

### Instruments

#### *The Musical Interest Scale*

Designed by Bilen (2013), the Musical Interest Scale was used to measure the prospective music teacher's interests. The overall scale had a Cronbach's alpha of .87. The Cronbach's alpha values for the sub-dimensions were as follows: .74 for musical sensitivity, .67 for musical curiosity, .69 for musical creativity, .68 for the relationship of music with other arts, .59 for piece interpretation, and .66 for music teaching.

#### *The Achievement Motive Scale*

Developed by Ellez (2004), the Achievement Motive Scale was used to measure the prospective teacher's achievement motives. The original scale had been designed for sixth, seventh, and eighth grade students. Therefore, informed consent was obtained from Ellez to administer the scale to 250 university students in order to test whether it would be suitable for a population of

university students. The Kaiser Meyer Olkin test and Barlett's test were conducted to test whether the size of the sample was suitable for analysis. While the KMO test yielded a value of .861, the Barlett's test reported a significant value ( $p=.001$ ). The results suggested that the sample was sufficient. The scale was subjected to a factor analysis so that its construct validity could be tested. The analysis showed that item 5 did not belong with any of the other factors therefore it was excluded from the scale. Because all items were accounted for by one factor, there was no need for rotation. Accordingly, the items were divided into sub-dimensions in accordance with learned opinion. The reliability of the scale was tested via Cronbach's alpha. The analysis reported that the scale had a reliability coefficient of .89. The reliability coefficients for the sub-dimensions were as follows: .79 for desire to work, .82 for maintenance of work, .72 for participation, and .80 for endeavouring. The discrimination indices of the items were revealed via analysis of the top and bottom 27 percent, and all the items were found to be discriminating. The item with the lowest-value was item 7 ( $t=4.843$ ;  $p<.05$ ) whereas the one with the highest t-value was item 24 ( $t=27.749$ ;  $p<.05$ ).

### Data Analysis

The scores of the participants in the Musical Interest Scale and Achievement Motive Scale were descriptively expressed with arithmetic mean values and standard deviations. A correlation analysis was conducted to identify the correlation between musical interests and achievement motives. Regression analysis was used to reveal the extent to which musical interests could predict achievement motives. The confidence level was .05.

## FINDINGS

The findings of the study are as follows:

### 1. The Findings of the Descriptive Statistics

As seen in Table 1, the mean values in the sub-dimensions of the Achievement Motive Scale were positive and at the level of "I agree." High mean values were prevalent in all of the sub-dimensions. Whereas the highest mean value was in endeavouring ( $M=4.10$ ), the lowest one

**Table 1: Descriptive statistical findings on the data from the achievement motive and musical interest scales**

|                                             |                                           | <i>Minimum</i> | <i>Maximum</i> | <i>M</i> | <i>SD</i> | <i>Skewness</i> | <i>Kurtosis</i> |
|---------------------------------------------|-------------------------------------------|----------------|----------------|----------|-----------|-----------------|-----------------|
| <i>Sub-dimensions of Achievement Motive</i> | Endeavouring                              | 1.00           | 5.00           | 4.10     | .65       | -.731           | .778            |
|                                             | Participation                             | 1.00           | 5.00           | 3.49     | .72       | -.243           | -.007           |
|                                             | Desire to work                            | 1.00           | 5.00           | 3.50     | .71       | -.254           | -.100           |
|                                             | Maintenance of work                       | 1.00           | 5.00           | 3.93     | .61       | -.522           | .570            |
|                                             | Overall achievement motive                | 1.00           | 5.00           | 3.78     | .56       | -.353           | .350            |
|                                             | Musical sensitivity                       | 1.00           | 5.00           | 3.94     | .71       | -.935           | 2.120           |
|                                             | Musical curiosity                         | 1.00           | 5.00           | 3.65     | .86       | -.588           | .300            |
|                                             | Musical creativity                        | 1.00           | 5.00           | 3.81     | .85       | -.678           | .341            |
|                                             | The relationship of music with other arts | 1.00           | 5.00           | 2.97     | 1.10      | -.071           | -.696           |
|                                             | Music teaching                            | 1.00           | 5.00           | 4.31     | .79       | -1.357          | 2.585           |
|                                             | Piece interpretation                      | 1.00           | 5.00           | 3.46     | .71       | -.189           | .201            |
|                                             | Overall musical interest                  | 1.00           | 5.00           | 3.93     | .65       | -.733           | 1.937           |

n=829

was in desire to work ( $M=3.50$ ). The mean score in the overall scale was  $M=3.78$ , which corresponded to the level “I agree”. Similarly, the mean values in the sub-dimensions of the Musical Interest Scale were positive and at the level of “I agree.” High mean values were prevalent in all the sub-dimensions. Whereas the highest mean value was in music teaching ( $M=4.31$ ), the lowest mean was in the relationship of music with other arts ( $M=2.97$ ). The mean score in the overall scale was 3.93, which corresponded to the level “I agree”.

As seen in Table 2, in the Achievement Motive Scale and its sub-dimensions the highest correlation was between overall achievement motivation and maintenance of work ( $r=.878$ ;  $p<.01$ ). In the Musical Interest Scale and its sub-

dimensions, the highest correlation was between overall musical interest and musical sensitivity ( $r=.658$ ;  $p<.01$ ). Considering the correlation between the participant’s scores in the overall achievement motivation and overall musical interest, the highest correlation was between piece interpretation and overall achievement motivation ( $r=.805$ ;  $p<.05$ ), whereas the lowest correlations were between music teaching and participation ( $r=.196$ ;  $p<.01$ ) and the relationship between music with other arts and endeavouring ( $r=.136$ ;  $p<.01$ ).

As seen in Table 3, at the end of the stepwise regression analysis, the first thing to do was to enter “gender” into the model as the dummy variable so that the achievement motive could be predicted. The variable gender accounted for 2

**Table 2: The correlation coefficients for the overall musical interest and achievement motive scales and their sub-dimensions**

|                                               | <i>1-Overall Achievement Motive</i> | <i>2</i> | <i>3</i> | <i>4</i> | <i>5</i> | <i>6</i> | <i>7</i> | <i>8</i> | <i>9</i> | <i>10</i> | <i>11</i> |
|-----------------------------------------------|-------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-----------|
| 2. Endeavoring                                | .816**                              |          |          |          |          |          |          |          |          |           |           |
| 3. Participation                              | .814**                              | .480**   |          |          |          |          |          |          |          |           |           |
| 4. Desire to work                             | .865**                              | .562**   | .689**   |          |          |          |          |          |          |           |           |
| 5. Maintenance of work                        | .878**                              | .682**   | .595**   | .685**   |          |          |          |          |          |           |           |
| 6. Overall musical interest                   | .376**                              | .286**   | .340**   | .320**   | .323**   |          |          |          |          |           |           |
| 7. Musical sensitivity                        | .390**                              | .265**   | .371**   | .333**   | .352**   | .658**   |          |          |          |           |           |
| 8. Musical curiosity                          | .241**                              | .182**   | .205**   | .212**   | .215**   | .475**   | .297**   |          |          |           |           |
| 9. Musical creativity                         | .245**                              | .181**   | .217**   | .201**   | .226**   | .592**   | .425**   | .246**   |          |           |           |
| 10. The relationship of music with other arts | .239**                              | .136**   | .255**   | .245**   | .176**   | .403**   | .323**   | .159**   | .258**   |           |           |
| 11. Music teaching                            | .273**                              | .246**   | .196**   | .203**   | .272**   | .422**   | .226**   | .200**   | .286**   | .075*     |           |
| 12. Piece interpretation                      | .805**                              | .623**   | .725**   | .681**   | .690**   | .346**   | .346**   | .192**   | .251**   | .204**    | .200**    |

\*\* $p<.01$ ; \* $p<.05$

**Table 3: Regression analysis**

| <i>Model</i> | <i>Variables</i> | <i>B</i> | <i>SE B</i> | $\beta$ | <i>t</i> | <i>R</i> | <i>R<sup>2</sup></i> | <i>R<sup>2</sup> Change</i> | <i>F for Change in R<sup>2</sup></i> |
|--------------|------------------|----------|-------------|---------|----------|----------|----------------------|-----------------------------|--------------------------------------|
| 1            | Constant         | 3.841    | .025        |         | 151.033* |          |                      |                             |                                      |
|              | Gender           | -.152    | .039        | -.134   | -3.885*  | .134     | .018                 | .018                        | 15.092*                              |
| 2            | Constant         | 2.571    | .110        |         | 23.319*  |          |                      |                             |                                      |
|              | Gender           | -.153    | .036        | -.134   | -4.208*  | .399     | .159                 | .141                        | 139.030*                             |
|              | Musical Interest | .323     | .027        | .376    | 11.791*  |          |                      |                             |                                      |

\* $p < .05$ ; dependent variable: achievement motivation

percent of the variance and was significant. Next, the musical interest scores were entered into the model. When gender was held constant, musical interest accounted for 14 percent of the variance in the model and was significant.

### DISCUSSION

The present study attempted to identify the correlation between the musical interests and achievement motives of prospective music teachers. The results suggest an intermediate correlation between the musical interests and achievement motives of prospective music teachers. In other words, musical interests play a role in the achievement motives of prospective music teachers. Although no similar studies currently exist in the literature, research by Sabry and Patrick (2011) and Heinze et al. (2005) supports the positive correlation between interests and achievement motives. The former conducted a study of 503 students to reveal whether academic achievement and interests were correlated with achievement motives and how important achievement objectives were in the process. Heinze studied 500 seventh and eighth grade students to investigate the correlation between their mathematical achievements and mathematical interests.

With regard to the correlation between the participants' scores in the overall achievement motive and overall musical interest, the highest correlations concerned piece interpretation. This finding might be due to the fact that instrument teaching involves more working hours compared to other major area courses, thus prospective teachers naturally focus greater attention on instrument training, which includes piece interpretation. A review of the literature suggests that although there is a study about motivation and instrument training (Burak 2014), there are no additional studies that can support this finding

of the study. To fill the gap in the literature, further studies should investigate what major area courses prospective music teachers tend to study, why they do so, and what effect this has on their professional development.

Considering the participant's scores in the Musical Interest Scale and Achievement Motive Scale, the lowest correlations were between music teaching and participation and the relationship of music with other arts and endeavouring. During their education, prospective music teachers tend to focus on instrument and voice training, and often favor the practical instead of theoretical aspects of music education. These tendencies might have resulted in the low correlation between music teaching and participation. A review of the literature indicates that studies primarily focus on prospective music teacher's attitudes towards the profession of teaching, however only one research study (Ozevin 2010) investigated their attitudes towards the major area courses in the music curriculum. To fill this gap in the literature, further studies should investigate what attitudes prospective music teachers adopt towards major area courses in the music curriculum and practical aspects of music teaching, what differences exist between the two, and the degree of influence of these differences on their professional development.

The low correlation between music's relationship with other arts and endeavouring may be due to the fact that prospective music teachers primarily focus on music and thus fail to develop the broader perspective on the arts that is needed to establish connections between music and other arts. No studies exist that can support the finding. Therefore, it is recommended that further studies should attempt to identify how prospective music teachers view other arts, the underlying reasons behind their views, and how these views might be reflected in their profes-

sional development. If prospective music teachers do not confine themselves to their major area and try to equip themselves with a broader artistic culture, this will have an indirect influence on the music course for primary and secondary schools and enhance the overall quality of the educational process.

Of all the sub-dimensions of the Achievement Motive Scale, maintenance of work had the highest correlation with the overall Achievement Motive Scale score. This finding is fully consistent with the fact that maintaining work for a relatively long time will lead to success. Any interruptions to work might place obstacles in the way of success. On the other hand, of all the sub-dimensions of the Musical Interest Scale, it was musical sensitivity that had the highest correlation with the overall Musical Interest Scale score. This should not be surprising considering the fact that a music teacher with a high musical interest will be sensitive to music.

### CONCLUSION

This study investigated the correlation between the musical interests and achievement motivations of prospective music teachers. The results suggest an intermediate correlation between the musical interests and achievement motivations of prospective music teachers. In other words, musical interests play a role in the achievement motivations of prospective music teachers. Considering the correlation between scores in overall achievement motivation and overall musical interest, the highest correlations concerned piece interpretation. Considering the scores in the Musical Interest Scale and Achievement Motive Scale, the lowest correlations were between music teaching and participation, and the relationship of music with other arts and endeavouring. Of all the sub-dimensions of the Achievement Motive Scale, maintenance of work that had the highest correlation with the scores in the overall scale. Of all the sub-dimensions of the Musical Interest Scale, musical sensitivity that had the highest correlation with the scores in the overall Musical Interest Scale.

### RECOMMENDATIONS

Based on these research findings and discussion, the following recommendations can be made.

1. Further studies might investigate what major area courses prospective music teachers tend to study, why they do so, and what effects this has on their professional development.
2. Further studies should attempt to identify how prospective music teachers view other arts, what the underlying reasons behind their views are, and how these views might be reflected in their professional development.
3. Further studies might investigate what attitudes prospective music teachers adopt towards major area courses in the music curriculum and practical aspects of music teaching, what differences exist between the two, and the degree of influence of these differences on their professional development.

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