The effects of gender, perceived social support and sociometric status on academic success

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Abstract

The purpose of present research is to detect whether gender and family, friend, perceived social support from someone special and sociometric status are meaningful predictors of academic success. 274 students enrolled in five different teacher training programs have participated in the research. In order to collect data, faculty records have been searched and besides “Multi Dimensional Perceived Social Support Scale” and “Sociometric Status” scales have been employed. It has been found out that gender, perceived familial support and sociometric status have predicted 15% of academic success. It has been concluded that perceived friend support and perceived social support from someone special do not predict academic success.

Keywords: Perceived social support; sociometric status; gender; teacher education; academic success.

1. Introduction

The objective of educational institutions is to increase the level of academic success which itself is an indicator of the actualization of educational goals. However the factors that affect academic success levels of students are abundant and diversified. The social support perceived by individual and his/her sociometric status that indicates whether or not s/he is approved or rejected by a particular social group may be regarded as factors influencing academic success.

One of the concepts social change theories agree upon regarding social structure is social interaction. Social interaction constitutes the base of social structure (Kongar 2002, 282). In terms of individual perspective, the place social interaction first takes place is family. As the individual grows and improves, so does his/her social interaction extend towards close environment. During childhood period, next to the family, school environment of the child and his/her interaction with this new social environment gains importance. Parallel to the increase in age, dependency to family and parents lessens. The individual participates in various groups in his/her social environment.

Group is an inseparable part of social life. Each person within society is a member of different social, economic, religious and professional groups the smallest of which is family (Cüceloğlu 1996, 532). The group s/he is a member contributes in meeting this person’s social needs. Social support is defined as the social and psychological support
an individual receives from his or her environment (Yıldırım 1997). The support received from family, friends and others this person interacts with may be motivating, but in cases when social support falls short it may create a negative effect. The person himself and his/her support resources are determiners of the level of social support. Changes emerging in the individual or support resources may change the social support level of individual as well.

In order to comprehend human behavior and development, social relations of individual and the significance of his/her social environment are being emphasized even more (Felmlée 2003). In this context researchers lay emphasis on the roles of other factors in family, social environment and social support system to ensure effective adaptation and development of the individual (Yıldırım 1997). Effective adaptation and development process may be supportive of a student’s academic success.

Sociometric recognition is identified as an indicator of acceptance and love by the other members in the group (Parkhurst and Hopmeyer 1998). Once certain criteria are taken into account, sociometry means numerically detecting who is approved or rejected by whom within a group (Dökmene 1987). Sociometric status is one of the measurements indicating the position of an individual among groups of friends (Kaya and Siyez 2008). Sociometry test designates and measures the relations developed by the members of group due to several reasons such as love, empathy etc. The significance of this determination surfaces as it aids in detecting the conflicts and clashes between sociometric matrix and external social worlds since it is a fact that individuals cannot always be together with the ones they want. The more harmonious external social world and sociometric matrix, the more stable is social reality; conversely as sociometric matrix differs more, social reality gets even tenser (Kongar 2002, 207). Provided that the class of student is taken as a sociometric pattern, the level of satisfaction will be different between the students who are outcast from group and who are popular amongst other students. This satisfaction or dissatisfaction on the other hand may be reflected in different ways on students’ success. As a matter of fact, academic success itself may be the origin of this popularity and rejection.

There are certain studies analyzing the relation between perceived social support and sociometric status and academic success. In a research (Lubber et al. 2006) it has been ascertained that acceptance by peers supports academic success. Szoba (1994) investigated the relation between interpersonal relations and social support while another research (Cutrono, Cole, Colangelo, Assouline and Russel 1994) focused on academic success of students and perceived familial social support. Austin and Drapper (1984) discovered that students who have higher academic success than average are perceived as more sympathetic and popular compared to the ones who are rejected and left alone.

The objective of school is to enable an individual’s learning. One of the indicators of learning is level of academic success. Present research is noteworthy in detecting whether amongst university students gender and family, friend group and perceived social support from someone special and sociometric status that indicate social relations are effective on their academic success level. On the other hand as stated by Yıldırım (1997) the knowledge about the effect of perceived social support on academic success can be employed to analyze students’ social support levels and resources accounting for academic failure; thus assist the students.

The purpose of present research is to detect whether gender and family, friend, perceived social support from someone special and sociometric status are meaningful predictors of academic success.

2. Method

Students registered to Erzincan University Faculty of Education during 2009-2010 education term have participated in the research. Data have been compiled from total 274, 4th year students-144 males and 130 females, studying at Classroom Teaching, Science Teaching, Primary Education Mathematics Teaching, Turkish Teaching and Music Teaching Departments.

Information related to gender and academic success scores of students have been gathered from faculty records. In order to detect the level of perceived social support, 12 Item Multi Dimensional Perceived Social Support Scale obtained from three different resources mainly family, friends and someone special and which examines the efficiency of social support subjectively has been employed. The original scale developed by Zimet et al. (1988) has been adapted into Turkish by Eker, Arkar and Yaldız (2001). Reliability coefficient taken for the dimensions and sub-dimensions of applied scale is given in Table 1. In present application reliability coefficient of the whole scale is found to be .83, for family sub-dimension it has been detected as. 84, for friend sub-dimension as .86 and for someone special sub-dimension as .95.
Table 1. Reliability coefficients of perceived multi-dimensional social support scale

| Scale                  | Original Scale | Present Application |
|------------------------|----------------|---------------------|
| Total                  | .89            | .83                 |
| Family                 | .85            | .84                 |
| Friend                 | .88            | .86                 |
| Someone special        | .92            | .95                 |

To designate sociometric status of students, sociometric status scale has been utilized. In addition to a direction, the scale consists of two separate three-item parts measuring negative and positive status. In the most general terms once certain criteria are taken into account, sociometry means numerically detecting who is approved or rejected by whom within a group (Dökmen 1987). The students were asked to write down the names of three classmates whom they like to spend time the most and the least. The student who was most desired was given 3 points, second one was 2 points, and the third students was given score 1 point. Likewise the students who was desired to spend time the least was given -3 points, second student was given -2 points, third students was given -1 point. Therefore the scores of popularity and rejection which indicated sociometric status of students in class have been prepared. The total of popularity and rejection scores has been used as sociometric status score.

In order to answer research question, multiple linear regression analysis technique has been used. Multiple regression technique is a method that can be used in predicting two or more independent variables as a dependent variable which itself is a measurement variable. Regression analysis focuses on the point concerning the level of effect of the estimation in research (Öztürk 2007). Since gender variable which is accepted to be a predictor variable in regression analysis is a classification variable, dummy variable has been turned into artificial variable and included into the analysis (Büyüköztürk 2006; Alpar 1997, 275).

Table 2. Descriptive statistics related to students participating in research

| Variable                        | N   | Mean  | Std. Deviation |
|---------------------------------|-----|-------|----------------|
| Academic Success Score          | 274 | 2,7993| .43523         |
| Gender                          | 274 | .5255 | .50026         |
| Perceived Social Support – Special person | 274 | 16,6423| 9,80187 |
| Perceived Social Support - Family | 274 | 22,8577| 6,76704 |
| Perceived Social Support - Friend | 274 | 22,4416| 6,57043 |
| Sociometric Status              | 274 | 1,1423| 7,44589 |

3. Findings

Results of multiple regression analysis concerning the prediction of academic success are illustrated in Table 3. It has been discovered that gender, perceived social support and sociometric status predict 15% of academic success (R: .387, R^2: .15). However it has been detected that perceived social support (PSS) from someone special or a friend have no effect over academic success whereas perceived familial support is a predictor of academic success.

Durbin Watson test result (1,939) indicating regression analysis shows that there is no autocorrelation in the model (Öztürk 2007). ANOVA test results prove that regression model is meaningful as a whole (F5-268: 9,426).

As double correlations are examined it surfaces that correlations between academic success score and independent variables are not too high.

According to standardized regression coefficient (β), relative order of significance of predictor variables in academic success is gender, perceived familial support, perceived friend support and sociometric status. Social support perceived from someone special has no effect on academic success. As results of t-test concerning the meaningfulness of regression coefficients are examined, it becomes obvious that gender, perceived familial support
and sociometric status have a meaningful predicting effect on the level of academic success. It has been found out that perceived support from someone special and perceived support from a friend has no noteworthy effects on academic success.

| Variable                  | B    | Standard error | β    | t   | p    | Double r | Partial r |
|---------------------------|------|----------------|------|-----|------|----------|-----------|
| Constant                  | 2.472| .095           | 26.065| .000*| -    | -        | -         |
| Gender                    | .270 | .050           | .310 | 5.443| .000*| .329     | .000      |
| PSS-Special person        | .002 | .003           | .038 | .630 | .529 | .069     | .529      |
| PSS-Family                | .014 | .005           | .223 | 2.730| .007**| .185     | .007      |
| PSS-Friend                | -.008| .006           | -.120| -1.416| .158 | .104     | .158      |
| Sociometric Status        | .007 | .003           | .112 | 1.984| .048***| .143     | .048      |

DW:1.939 R:.387 R²:.15 F(5,268): 9.426 *p < .001 **p < .01 ***p < .05

4. Discussion and Conclusion

While gender, perceived familial support and sociometric status are meaningful predictors of academic success, perceived social support from a friend or someone special are not predictors of academic success.

The academic success variable with the strongest prediction power is gender. This deduction is consistent with research findings indicating that academic success varies according to gender and that female students are more successful than males (Bahar 2006; Duckworth and Seligman 2006; Peker 2003; Pomerantz, Altermatt and Saxon 2002; Mau and Lynn 2001). In this finding the facts that female and male students have dissimilar academic expectations and different out-school activities may have been influential.

Perceived familial support is a meaningful predictor of academic success. A research (Wentzel 1998) revealed that a meaningful relation exists between support perception of students and their academic scores in some lessons. Our research findings are consistent with this deduction. Besides in present research familial support affected academic success positively yet perceived support of a friend of someone special had no meaningful effect on academic success. In Yıldırım’s (2007) study a meaningful relation has been obtained between social support and academic success. Various researches (Eccles 2007; Roeser, Eccles and Sameroff 2000; Wentzel 1998) have proved that, though not directly, social relations still had an indirect supportive effect on academic success. There are certain studies confirming that there is a connection between perceived social support and academic success. In a research (Rosenfeld, Richman and Bowen 2000) it has been found out that secondary education students who have high levels of perceived support from family, friends and teachers are also more successful in lessons.

Sociometric status is a meaningful predictor of academic success yet sociometric status level of predicting academic success is rather low. This deduction is consistent with some research findings putting forth that unsatisfactory peer relations lessen academic success (Chen et al. 2008; Çetin, Bilyay and Kaymak 2003; Lubber et al. 2006). In this higher education institute where the research has been conducted, relative evaluation system is employed. For that reason, students are in a competition with their classmates for academic success. This competition creates a rivalry amongst students and students do not only focus on their own success but also monitor their classmates. This reality has a potential to transform them into ambitious and selfish students who constantly compete with each other to gain academic success. There are studies indicating that popular students have higher academic success (La Fontana and Cillessen 2002) while certain studies put forward that popular ones have low ratios of success (Adler, Kless and Adler 1992; Hopmeyer Gorman, Kim and Schimmelbusch 2002).
5. Recommendation

The reasons underlying the fact that male students are less successful than females can be discussed as the topic of a different research. Besides, further studies can be conducted on how to elevate the perceptions of students that have low perceived familial support.

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