



Working together
www.rcis.ro

Revista de cercetare și intervenție socială

ISSN: 1583-3410 (print), ISSN: 1584-5397 (electronic)

Selected by coverage in Social Sciences Citation Index, ISI databases

POST-GRADUATE STUDENTS' PERCEPTIONS REGARDING EFFECTIVENESS OF MENTORING RELATIONSHIP AT UNIVERSITIES

Turgut KARAKOSE, Ramazan YIRCI, Harun UYGUN, Tuncay Yavuz OZDEMIR

Revista de cercetare și intervenție socială, 2016, vol. 52, pp. 252-264

The online version of this article can be found at:

www.rcis.ro, www.doaj.org and www.scopus.com

Published by:

Expert Projects Publishing House



On behalf of:

„Alexandru Ioan Cuza” University,

Department of Sociology and Social Work

and

Holt Romania Foundation

REVISTA DE CERCETARE SI INTERVENTIE SOCIALA

is indexed by ISI Thomson Reuters - Social Sciences Citation Index

(Sociology and Social Work Domains)



Post-Graduate Students' Perceptions Regarding Effectiveness of Mentoring Relationship at Universities

Turgut KARAKOSE¹, Ramazan YIRCI², Harun UYGUN³,
Tuncay Yavuz OZDEMIR⁴

Abstract

The purpose of this study is to examine the effectiveness of mentoring relationship between faculty members and post-graduate students according to various variables. The sample consists of 99 post-graduate students studying at public universities in Turkey. The Mentoring Effectiveness Scale, developed by Berk, Berg, Mortimer, Walton-Moss, and Yeo (2005) and adapted into Turkish by Yirci, Karakose, Uygun, and Ozdemir (2016) was used as the data collection instrument. According to the study findings, post-graduate students in general find the effectiveness levels of mentoring relationships in universities sufficient. Accordingly, it is suggested that the frequency of mentor and mentee meetings should increase. While the effectiveness of mentoring relationship is not affected by age and gender variables; it is influenced by the frequency of meetings and the meeting method preferred. Study findings also suggest that mentees expect to be appreciated more than the mentors.

Keywords: mentoring effectiveness, postgraduate students, mentor, mentee.

¹ Dumlupinar University, Faculty of Education, TURKEY. E-mail: tkarakose@yahoo.com

² Kahramanmaraş Sutcu Imam University, Faculty of Education, TURKEY. E-mail: ryirci@gmail.com

³ Mersus Group, TURKEY. E-mail: harunuygun@yahoo.com (Corresponding author)

⁴ Firat University, Faculty of Education, TURKEY. E-mail: tyavuz23@gmail.com

Introduction

The origins of the term mentee rest back in the Greek epic poem *Odyssey*. According to the epic, before Odysseus went for the Trojan War, he left his son Telemachus to his friend Mentor to educate and guide him. Mentor educated and raised Telemachus for ten years (Merriam, 1983; Koeppen & McKay, 2000; Villani, 2002; Sullivan, 2004; Campbell, Smith, Dugan, & Komives, 2012). Due to this historical origin, the term mentor is used for people who are characterized as a wise, master, and guide. Mentoring is defined as the action of helping someone out during their learning (Bell, 2002). The mentor enables his student to reach his potential in this learning-teaching relationship which continues throughout a lifetime (Biehl, 1996). The mentor is expected to be older than the student he will furnish, as well as being more experienced, popular, respected, and able to detect opportunities and carry the features to broaden the student's horizons (Merriam, 1983; Gencoglu, Topkaya, Sahin, & Kaya; Yirci, 2009; Kocabas & Yirci, 2011).

There are two different terms used for the individual who is the learner of the process and younger in age in the mentoring relationship. One of these is "protégé" and the other is "mentee". Klasen and Clutterbuck (2002) state that they prefer to use "mentee" instead of "protégé". The term protégé means "protected person" and refers to an unequal relationship between the learner and mentor, whereas Mentee contributes to the mentoring relationship more due its meaning.

The concept of mentoring became more widespread after 1980 (Ozdemir & Boydak-Ozan, 2013). Comprehensive studies on mentoring were pioneered by Levinson, Darrow, Klein, Levinson, and McKee (1978) and reached large masses with studies conducted by Kram (1983). It has become a subject commonly used in areas such as education, medicine and management and each year more and more research is focused on the subject. Sullivan (2004) states that the reason for this is because revealing the potentials of individuals that they carry in this changing world has become more crucial. Satellite dishes, global positioning systems (GPS) and internet shows that information is now more easily accessed. However, it is not very easy to specialize in this area. Whether playing in a sports branch, driving a car, giving a speech or educating others, becoming wholly talented in a field requires practice. It is crucial to first determine the individual's skills areas and then carry out practices to provide a productive teaching-learning environment for adults and students. Excellencing the skills of individuals are best promoted in environments where encouragement and feedback is provided (Sullivan, 2004). Thus, mentoring offers the ideal learning environment and relationship that individuals need as mentees. Due to its responsibilities, the duty of mentoring is complex and requires the skills of a teacher, a supervisor, a friend, a guide, a coach and a colleague. Mentors are special people and have to carry features more than those of a good teacher (Jonson, 2008). Thus, a good mentor:

- (1) Is a skillful teacher;
- (2) Is a good listener;
- (3) Has effective communication

skills; (4) Can enter into strong interpersonal relations; (5) Has standing in a well-respected position; (6) Is willing to learn and teach; (7) Is self-confident; (8) Can show empathy; (9) Is a patient person; (10) Is a good leader; (11) Opens new doors for the mentee; (12) Is the sponsor and protector of the mentee (Schein, 1978; Clutterbuck, 2004; Cinar, 2007; Jonson, 2008)?

The fact that mentors require the above mentioned features necessitates them playing many different roles. Schein (1978) defines these as outstanding characteristic features. Higher education is the educational process provided by universities. Universities are institutions which shape the future, where scientific, artistic and technological activities are carried out and in which students are provided with education, beginning from associate degrees through to a doctoral degree. A university; creates knowledge, teaches it, provides it and distributes it. In our modern world, universities are the main institutions which create knowledge and identity. Thus, universities function on both knowledge and people. Universities require scientists who transfer knowledge and who create knowledge (Delamont, Atkinson, & Parry, 2000; Gunay, 2004; Bakioglu & Yaman, 2004).

The furnished manpower that universities require is obtained through a long and successful academic consultancy process. Universities are responsible for assigning an academic supervisor to each post-graduate student during this legal process. Assigning supervisors during higher education is accepted as the main factor of curriculums. These official curriculums are monitored by institutions. The institute either assigns a supervisor to the post-graduate student or the students can make informal interviews with the tutors of the student program and make an application for the tutor they want as their supervisor, or both of these processes can take place (Seckin, Aypay, & Aypaydin, 2014). Today, in the information era and where having a qualified workforce has become a crucial element for all organizations; the responsibility to nurture qualified employees has come to the fore. Accordingly, the duties and responsibilities of supervisors, in other words mentors, who support post-graduate students in universities, have gained prominence. According to Penner (2001), mentoring in higher education institutions is not just between the supervisor and the student, as it can emerge between experienced and novice faculty members. There can also be a peer mentoring relationship between a senior student of a faculty and a freshman.

The mentoring process in universities requires the mentor and mentee to meet at regular intervals to aid developmental learning, with the transference of new information and skills promoted through these highly interactive meetings. Here, the mentor (who is usually a senior professor) facilitates learning, guides the student and shares information, experience and skills. The traditional mentoring approach is based on the position or the specialized knowledge of the mentor (Mullen & Lick, 1999; Ramesh, 2014). Academic mentoring at universities has several aims. These can be summarized as to; enable the mentee to adapt to the academic culture of the university, help the inexperienced mentee to improve

himself, support the mentee in carrier planning and development, help the mentee throughout the scientific research process, help the mentee develop a sense of belonging to academic society, and to collaborate with the mentee enabling them to conduct new research and academic studies (Ramesh, 2014).

It is obvious that the demand for higher education has increased rapidly in Turkey and in the rest of the world. It can be said that there has been a significant increase in the number of universities in Turkey, parallel with this rapid increase in demand. According to Council of Higher Education (YOK, 2015) data, there was a total of 56 universities in 1994 (Yirci, 2014). However, according to 2015 data, the number of universities in Turkey has increased to 193 (YOK, 2015). This has created an increased need for educated and qualified personnel in universities, but it is both a troublesome and time-consuming process to train academic personnel to work in universities (Yirci, 2014). Thus, academic mentoring has become a subject worthy of attention in the pursuance of training academic personnel and educating post-graduate students.

Recent studies have shown that Turkey has been encountering several problems in academic mentoring. In their study, Ozkalp, Kirel, Sungur, and Cengiz (2006) considered mentoring relationship within the university system. According to their research findings, research assistants perceive the friendship dimension of mentoring less; informal social relationships between mentor and mentee in universities are perceived as weak; and research assistants have high respect for mentors, but are rather less enthusiastic towards them.

Mentoring relationships between research assistants and their supervisors were examined in the study conducted by Guven (2014) on academic mentoring. According to the study, drawbacks encountered during the academic mentoring process in universities can be summarized as: (1) Workloads of university faculty members are too high, and so have difficulty in sparing enough time for research assistants. The biggest problems are experienced by mentees whose supervisors have administrative duties which take up their time; (2) Research assistants either don't have the right to choose their supervisor (mentor) or they just perfunctorily chose one; (3) There are disconnections in the one-to-one relationships between supervisors and research assistants. Because the supervisor and the research assistant don't know each other that well, the mentoring relationships can become weak; (4) Due to their mentoring duties, supervisors expect financial rewards or recognition that would contribute to their academic progress. The results of this study are in line with the universal literature. For example, in the studies that Mee-Lee and Bush (2003) and Cunningham (1999) conducted, they found that mentors cannot spare sufficient time for their mentees due to their extensive workload. There have been many studies in Turkey on academic mentoring, which plays a significant role in the academic career of post-graduate students and

novice academicians. Therefore, this study, which aims at determining the effectiveness of mentoring relationship between faculty members of universities and post-graduate students, is viewed as significant. Because quantitative research methods are used in this study, it is expected to determine the factors affecting mentor-mentee relationships, and the strengths and weaknesses of the mentor-mentee relationship. Whether or not variables such as gender, age, frequency, and method of mentor-mentee meeting causes significant differences on the effectiveness of mentoring relationships in universities was examined throughout the research. Findings of the research can be seen as a guide for policymakers, executors and university administrators in conducting a healthy mentor-mentee relationship in universities.

Methodology

The “Mentoring Relationship Effectiveness Scale”, developed by Berk *et al.* (2005) and adapted into Turkish by Yirci *et al.* (2016) was used as the data collection instrument for this study. There were 12 items in the original scale. Exploratory and confirmatory factor analysis was conducted while adapting the scale into Turkish and one item was deleted from the scale. Cronbach Alpha coefficient of the scale, whose Turkish form consists of 11 items, was found to be $\alpha=0.936$. This value suggests that the scale has a level of reliability. The highest possible score that can be gained from the Likert type scale is 55, and the lowest possible score is 11. High scores from the scale indicate an increase in the effectiveness of mentoring relationship (Yirci *et al.*, 2016). Convenience sampling method was used in the study. The reason for selecting this method for the study is due to the advantages the method offers concerning cost, speed, voluntary participation and accessibility. Convenience sampling method is one of the sampling methods most commonly used by researchers due to these advantages (Gravetter & Forzano, 2015). This study was carried out with 99 students studying at public universities in Turkey, who all volunteered to take part in the study. Of the 99 participants, 45 (45.5%) are male and 54 (54.5%) of them female. Only six (6.0%) participants were registered to doctoral program and the rest of the participants ($n=93$, 94.0%) were taking master’s degree. The age of the participants ranged between 22 and 53. One third (1/3) of the participants were over the age of 40 ($n=33$). This indicates that participants over the age of 40 show great interest towards post-graduate programs.

Results

The frequency of research assistants receiving post-graduate education, seeing their supervisors is given in Table 1. It is evident from Table 1 that the majority of post-graduate students (60.6%) do not see their supervisors very frequently. In order to promote a healthy mentoring relationship between mentor and mentee, it is crucial for mentors and mentees to see each other at regular intervals.

Table 1. Frequency of research assistants seeing their supervisors

Year	Frequency	%
Never	3	3.0
Seldom	12	12.1
Sometimes	60	60.6
Frequently	6	6.1
Very Often	18	18.2
Total	99	100.0

Research findings on the frequency of mentor-mentee meetings resulting as “*sometimes*” level may be due to the excessive workload of mentors. Other studies conducted on this subject suggest that mentors cannot spare much time for mentees due to excessive work and course load (Güven, 2014; Halai, & Karuku, 2013; Mee-Lee & Bush, 2003; Cunningham, 1999). However, one should bear in mind that for a healthy mentor-mentee relationship, the benefit of the meetings for mentor and mentee is as equally important as the frequency of the meetings. Methods that post-graduate students resort to most when seeing their supervisors are given in Table 2.

Table 2. Methods research assistants resort to most when seeing their supervisors

Method	Frequency	%
Telephone	21	21.2
E-mail	21	21.2
Internet (Skype etc.)	3	3.0
Face-to-face	54	54.5
Total	99	100.0

It is evident from Table 2 that participants prefer the face-to-face method most (54.5%). While telephone and e-mail methods were preferred equally, internet (Skype etc.) method was the least preferred meeting method. Research findings suggest that the traditional method was most preferred for mentor-mentee meetings in Turkey. However, resorting mostly to the face-to-face method may reduce the frequency of mentor-mentee meetings due to the mentor’s busy schedule. Before determining the statistical analyses that were to be conducted on the data,

data were observed to see whether or not they were distributed normally. Skewness and Kurtosis values were examined at this point. The Skewness value was -1.083 and Kurtosis value was 0.564. Skewness and kurtosis values between -2 and +2 indicate a normal distribution of data (George & Mallery, 2003; Bachman, 2004; Sencan, 2005). Hereunder, the data of this research were observed to have a normal distribution. Cronbach Alpha coefficient was examined to determine the reliability of the scale and it was found to be $\alpha=.967$. This indicates that the scale is highly reliable. Mean scores and standard deviation values that participants gained from the scale items are listed in Table 3.

Table 3. Mean Scores and Standard Deviation Values of the Scale Items

Item	Mean	SD
1.	4.091	1.060
2.	4.030	1.173
3.	4.030	1.035
4.	3.818	1.198
5.	3.849	1.215
6.	4.000	1.134
7.	3.970	1.199
8.	4.091	1.031
9.	3.727	1.219
10.	3.849	1.289
11.	3.939	1.132

According to the values of Table 3, supervisors display a sufficient level of supervision with regards to mentoring. Items which gained the highest mean scores were observed to be “my supervisor displayed a professionally consistent and open attitude” and “my supervisor gave satisfactory answers to my questions” ($\bar{X}=4.091$). The item which gained the lowest mean score from participant responses was “my supervisor appreciated my contributions/efforts” ($=3.727$). This indicates that post-graduate students expect to be appreciated more. Independent samples *t*-test was conducted in order to determine whether or not scores gained from the Mentoring effectiveness scale differed with regards to the gender variable. Results are given in Table 4.

Table 4. T-test results regarding mentoring effectiveness scale and gender

Gender	n	\bar{x}	SD	t	p	Levene Test	
						f	p
Male	45	3.763	.984	-1.657	.101	.304	.582
Female	54	4.096	1.001				

It is evident from Table 4 that there are no significant difference between the scores gained from the mentoring relationship scale with regards to gender variable ($p=0.101 > 0.05$). This indicates that the gender factor has no statistical effect on the effectiveness of mentoring relationships. This finding is in line with the studies conducted by Yirci *et al.* (2016), Waldeck, Orrego, Plax, and Kearney (1997), and Palepu *et al.* (1998). However, the study conducted by Elliot, Leck, Orser, and Mossop (2006) suggests that the gender factor does have a significant effect on mentoring relationships. One Way Anova Test was conducted to determine whether or not the age factor has any effect on the scores that the participants gained from the mentoring effectiveness scale. Results are given in Table 5.

Table 5. Relationship between mean scores and participant age

Age	n	\bar{x}	SD	F	P
20-30	30	4.2364	.6301	2.036	.136
31-40	36	3.7500	1.082		
41-41+	33	3.8926	1.146		
Total	99	3.9449	1.002		

No findings which indicate a statistically significant difference between the participants' mentor

ing scale scores regarding the age variable were observed ($p=0.136 > 0.05$). This shows that mentors provide an equal mentoring service to all mentees and that they display a professional manner on this issue. One Way Anova Test was conducted to determine whether there is a relationship between frequency of meetings and the scores gained from the scale. Results are given in Table 6.

Table 6. Relationship between the mean scores and meeting frequency

Frequency of meetings	n	\bar{x}	SD	F	P	LSD
Never	19	1.455	.000	12.906	.000	a<b,c,d,e
Seldom	15	3.296	.452			b>a
Sometimes	31	3.932	.900			c>a,b
Frequently	16	4.864	.149			d>a,b,c
Very Often	18	4.530	.888			e>a,b,c
Total	99	3.945	1.002			

It is evident that the scores participants gained from the mentoring effectiveness scale differ according to the frequency of meetings ($p=0.100 >0.05$). LSD results were examined to define between which groups the difference occurred. It was observed that participants' mentoring effectiveness scale scores increased in accordance with the frequency of meetings. In addition, students who see their mentors frequently ($=4.864$) and very often ($= 4.530$) have more effective mentoring relationships. This finding is in line with the literature. Previous studies on this subject suggest that mentor-mentee meetings are crucial for an effective mentoring relationship (Dubois, Holloway, Valentine, & Cooper, 2002; Harrison, Lawson, & Wortley, 2005; Yirci, 2009). One Way Anova Test was carried out in order to determine whether or not post-graduate students' mentoring effectiveness scale scores differ according to the method used for their meetings. Results are given in Table 7.

Table 7. Relationship between the mean scores and meeting methods

Meeting method	n	\bar{X}	SD	F	P	LSD
Telephone	24	3.208	1.136	7.501	.000	a<b,c,d
E-mail	23	4.377	.708			b>a
Internet (Skype etc.)	22	5.000	.000			c>a
Face-to-face	30	4.005	.909			d>a
Total	99	3.945	1.002			

It is evident from Table 7 that participant scores from the scale differ according to the meeting method ($p=0.000 >0.05$). Meeting method with the lowest mean are those conducted by telephone ($= 3.208$). This indicates that when compared to other meeting methods, participants find mentoring meetings by telephone less productive. This may be because of the lack of physical information or feedback interchange between mentor and mentee when meetings are conducted by telephone. These findings are in line with study findings of Smith-Jentsch, Scielzo, Yarbrough, and Rosopa (2008). In their studies, Smith-Jentsch *et al.* (2008) and Ozdemir (2013) found that mentees gain much more support through mentoring by electronic means.

Conclusion

A qualified and effective mentoring process is required for training post-graduate students who are new to academia. Supervisors of post-graduate students offer mentoring to these students due to their position and duties. Accordingly post-graduate students are mentees and their supervisors are mentors. Study findings indicate that post-graduate students find the mentor-mentee relationship

in universities sufficient. However, post-graduate students (mentees) expect more appreciation from their supervisors. Effectiveness of mentoring relationships does not differ according to gender, and no differences were observed in mentoring effectiveness scale scores regarding age. In addition, the frequency of mentor-mentee meetings caused a significant difference in the scores gained from the mentoring effectiveness scale. When post-graduate students met with their supervisors more frequently, the effectiveness of mentoring relationship also increased. However, the number of students who “sometimes” met with their supervisors was more than the others. This indicates that the frequency of supervisor and student meetings should be more often. For this reason, course workloads of faculty members, who are also mentors, should be reduced and they should be given the opportunity to meet with their students more often. When methods for mentor-mentee meetings in universities are examined, it is evident that the traditional face-to-face meeting is the most preferred. This indicates that e-mentoring practices, which provide the technological means and more flexible opportunities for mentor-mentee meetings, should be extended. Research findings suggest that mentor-mentee meetings carried out by telephone are perceived less effective by students (mentees).

In conclusion, this study suggests that the effectiveness level of mentor-mentee relationships between supervisors and students in universities is sufficient. However, this study’s findings suggest that faculty members who undertake the role of mentors should meet with their mentees more frequently. For this, it will be beneficial to reduce the course workload of these mentors, and to offer them more in the way of financial reward for the additional responsibilities of mentoring. In addition, along with the traditional meeting methods, meeting frequencies can be increased through e-mentoring. When they observe progress and success, mentors can appreciate and thus motivate their mentees. Thus, it will be easier to promote an effective and productive mentor-mentee relationship.

References

- Bachman, L. F. (2004). *Statistical Analyses for Language Assessment Book*. Cambridge: Cambridge University Press.
- Bakioglu, A., & Yaman, E. (2004). Career developments of research assistants: obstacles and solutions. *M.U. Atatürk Education Faculty Educational Sciences Journal*, 20, 1-20.
- Bell, C. R. (2002). *Managers as mentors: Building partnerships for learning* (2nd ed.) San Francisco, CA: Berrett-Koehler Publishers.
- Berk, R. A., Berg, J., Mortimer, R., Walton-Moss, B., & Yeo, T. P. (2005). Measuring the effectiveness of faculty mentoring relationships. *Academic Medicine*, 80(1), 66-71.

- Biehl, B. (1996). *Mentoring: Confidence in Finding a Mentor and Becoming One*. Nashville, TN: Broadman and Holman.
- Campbell, C. M., Smith, M., Dugan, J. P., & Komives, S. R. (2012). Mentors and college student leadership outcomes: The importance of position and process. *The Review of Higher Education*, 35(4), 595-625.
- Cinar, Z. (2007). Coaching and Mentoring. *Paradoks: Economics, Sociology and Policy Journal*, 3(1), 1-25.
- Clutterbuck, D. (2004). *Everyone Needs a Mentor* (4. Edition). London: CIPD House.
- Cunningham, S. (1999). The nature of workplace mentoring relationships among faculty members in Christian higher education. *Journal of Higher Education*, 70, 441-463.
- Delamont, S., Atkinson, P., & Parry, O. (2000). *Survival and Success in Graduate School: Disciplines, Disciples and the Doctorate*. London: Falmer Press.
- Dubois, D. L., Holloway, B. E., Valentine, J. C., & Cooper, H. (2002). Effectiveness of mentoring programs for youth: A meta-analytic review. *American Journal of Community Psychology*, 30(2), 157-197.
- Elliot, C., Leck, J. D., Orser, B., & Mossop, C. (2006). An exploration of gender and trust in mentoring relationships. *Journal of Diversity Management*, 1(1), 1-2.
- Gencoglu, C., Topkaya, N., Sahin, E., & Kaya, L. (2016). Attachment Styles as Predictors of Stigma Tendency in Adults. *Educational Process: International Journal*, 5(1), 7-21.
- George, D., & Mallery, P. (2003). *SPSS for Windows step by step: A simple guide and reference*, 4th edition, Boston: Allyn & Bacon.
- Gravetter, F., & Forzano, L. A. (2015). *Research methods for the behavioral sciences*. Fifth Edition, Stamford: Cengage Learning.
- Gunay, D. (2004). *Nature of university, academic freedom, university autonomy, Turkish university*. I. Congress on International University Education. Fatih University, 27-29 May, Istanbul.
- Guvén, E. (2014). *The Evaluation of Relationship between Research Assistants And Consultants in The Frame of Mentoring*, Unpublished Master Thesis, Sakarya University, Educational Sciences Institute Sakarya, Turkey.
- Halai, A., & Karuku, S. (2013). Implementing Language-in-Education Policy in Multilingual Mathematics Classrooms: Pedagogical Implications. *Eurasia Journal of Mathematics, Science & Technology Education*, 9(1), 23-32.
- Harrison, J., Lawson, T., & Wortley, A. (2005). Facilitating the professional learning of new teachers through critical reflection on practice during mentoring meetings. *European Journal of Teacher Education*, 28(3), 267-292.
- Jonson, K. F. (2008). *Being an effective mentor: How to help beginning teachers succeed*. California: Corwin Press.
- Klasen, N., & Clutterbuck, D. (2002). *Implementing Mentoring Schemes*. Oxford: Butterworth Heinemann Publishing.
- Kocabas, I., & Yirci, R. (2011). *Mentoring in Teacher and Administrator Training: Using mentoring in education*. Ankara: Ani Publishing.
- Koeppen, K. E., & McKay, J. W. (2000). Who is Telemachus? Long-term mentoring in education. *Teacher Development*, 4(3), 425-436.

- Kram, K. E. (1983). Phases of the mentor relationship. *Academy of Management Journal*, 26, 608-624
- Levinson, D. J., Darrow, C. N., Klein, E. B., Levinson, M. H., & McKee, B. (1978). *The seasons of a man's life*. New York, NY: Ballantine.
- Mee-Lee, L., & Bush, T. (2003). Student mentoring in higher education: Hong Kong Baptist university. *Mentoring & Tutoring*, 11(3), 263-271.
- Merriam, S. (1983). Mentors and Protégés: A Critical Review of the Literature. *Adult Education Quarterly*, 33, 161-173.
- Mullen, C. A., & Lick, D. W. (1999). *New Directions in Mentoring: Creating a Culture of Synergy*. London: Falmer Press.
- Ozdemir, T. Y. (2013). *E-mentoring model for maintaining the provincial education inspectors and assistant inspectors' professional development*, Unpublished Doctorate Dissertation, Firat University, Elazig, Turkey.
- Ozdemir, T. Y., & Boydak Ozan, M. (2013). The effects of e-mentorship process on mentee achievement. *Bartın University Journal of Faculty of Education*, 2, 170-186.
- Ozkalp, E., Kirel, C., Sungur, Z., & Cengiz, A. A. (2006). The importance of mentoring on organizational socialization of the research assistants in Anadolu University. *Anadolu University Journal of Social Sciences*, 6, 55-70.
- Palepu, A., Friedman, R. H., Barnett, R. C., Carr, P. L., Ash, A. S., Szalacha, L., & Moskowitz, M. A. (1998). Junior faculty members' mentoring relationships and their professional development in US medical schools. *Academic Medicine*, 73(3), 318-323.
- Penner, R. (2001). Mentoring in Higher Education. *Direction*, 30(1), 45-52.
- Ramesh, V. (2014). Academic Mentoring-Need of an Hour. *International Journal of Management and Social Science Research Review*, 1(4), 112-119.
- Schein, E. H. (1978). *Career dynamics: Matching individual and organizational needs*. Reading, Mass: Addison-Wesley Publication.
- Seckin, M., Aypay, A., & Apaydin, C. (2014). The Views of Graduate Students about Academic Mentoring. *Journal of Higher Education & Science*, 4(1), 28-35.
- Sencan, H. (2005). *Reliability and Validity in Social and Behavioral Measurements*. Ankara: Seckin Publishing.
- Smith-Jentsch, K. A., Scielzo, S. A., Yarbrough, C. S., & Rosopa, P. J. (2008). A comparison of face-to-face and electronic peer-mentoring: Interactions with mentor gender. *Journal of Vocational Behavior*, 72(2), 193-206.
- Sullivan, C. G. (2004). *How to mentor in the midst of change*. Alexandria, VA: ASCD Publications.
- Villani, S. (2002). *Mentoring programs for new teachers: Models of induction and support*. London: Corwin Press.
- Waldeck, J. H., Orrego, V. O., Plax, T. G., & Kearney, P. (1997). Graduate student/faculty mentoring relationships: Who gets mentored, how it happens, and to what end. *Communication Quarterly*, 45(3), 93-109.
- Yirci, R. (2009). *The use of Mentoring in Education and a Model Proposal to Train New Principals*. Unpublished Master Thesis, Firat University, Social Sciences Institute, Elazig, Turkey.

- Yirci, R. (2014). *Comparison of Academicians' Perceived Organizational Support, Organizational Commitment Levels and Opinions about Privatization in Higher Education at State and Foundation Universities*. Unpublished Doctorate Dissertation, Firat University, Educational Sciences Institute, Elazig, Turkey.
- Yirci, R., Karakose, T., Uygun, H., & Ozdemir, T. Y. (2016). The Turkish Adaptation of the Mentorship Effectiveness Scale: A validity and Reliability Study. *Eurasia Journal of Mathematics, Science & Technology Education*, 12(4), 821-832.
- YOK. (2015). *The number of the Universities in Turkey*. <http://www.yok.gov.tr/web/guest/universitelerimiz> Accessed on 11.07.2015.