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Expectation of students from their thesis supervisor

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Abstract

In this study, it is aimed “required characteristics of supervisors of graduate students” by scaling study with pairwise comparison to determined. The scale which is developed for this aim was conducted to 270 graduate students. The dependent variable of this research is the score obtained from the scale. The independent variables are graduate student’ sex, graduate level, being an academican or not. According to the findings of this study, “required characteristics of supervisors of graduate student” is sorted from the most desired characteristic to the least desired characteristic, it is determined that the most desired is “Following the plan made with his/her student ” and the least desired characteristic is determined as “being mastery on her/is field”

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1. Introduction

Progresses and alterations in knowledge in nowadays constitute a basis for information societies. It is expected from the individuals in information societies to think all rounds, to examine events in critical way, to be productive and to have high problem solving abilities. Growing up to grade individuals is provided by education. The need for the individuals who adopt themselves, open to change and development in information societies increases gradually to be accepted and to move the society forward. In this sense, individuals tend to increase their levels of education to gain the featured that the society expect from them. Individuals that complete at the level of bachelor’s degree tend to post graduate education. The reason for that is the fact that post graduate education becomes more and more significant.

Post graduate education is an activity the purpose of which is to train scientist and instructors that will meet the

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needs of the developing society and that will contribute to information via researches and that carry towards post graduate degrees (Varış,1972). This process of education that consists of master and doctorate educations is efficient for the raise in individuals that will provide development and alterations in all fields of society. Besides this, it's being the process of raising scientists that play a part in the improvement of the society increases the significance of post graduate education. Researches show that thesis supervisors largely affect the success of post graduate education process (Golde, 2000; Kam, 1997; Marsh et. al., 2002, Heath, 2002).

Thesis supervisor is the person who provide time, expertise and support for graduate student to develop research skills during thesis preparation process; and who is a guide for him/her to prepare a thesis in acceptable standards (Heath, 2002). It has been observed throughout the history of post graduate education that the relationship between thesis supervisor and student has an important role in effecting professional, cognitive and emotional developments and simplification of completion the academic degree of the student (Berelson, 1960; Healy, 1997). Consultancy affects students' completion of their thesis and their career choices in the future (Ellison & Dedrick, 2008). Denicolo (2004) ranked positive supervisor attitudes from the point of students as encouraging, informative, well informed, reliable and sharing. Seagram et. al (1998) stated that supervisors' having positive point of view and expertise also influence the process. Mainhard et. al (2009) emphasised that the qualities such as having good listening skills, supporting discussions on the researched issue when appropriate and providing feedback and support, being caring, intimate and understanding are expected from supervisors. Rose (2003) stated in the research in which the factors affecting the relationship between graduate students and thesis supervisors are studied that the thesis supervisors have a significant effect on graduate students to *providing integrity* extend related to supervisor' virtuous and principled acts, and being role model; *guiding* related to supervisor's belief in students, value greatly as human, seeing the student as its colleague and study academically in regular basis and *communicating* extent including private and intimate aspects as personal problems, social events and world view that remain beyond the faculty relationship. Cohen (1995) expressed that the features that students desire from their supervisors are supporting students, having enabling role and guiding.

Although thesis supervisors have important effects on students from several aspects, Tosun (1997) pointed out that some instructors who conduct thesis supervisor role do not fulfil the qualifications necessary for being thesis supervisor. Within this framework, in the event that the supervisors, who have important positive effect during the process, do not fulfil the qualifications expected from themselves, it is possible that these effects will be in negative way. Hence, it can be said that most of post graduate program students have problem with their supervisors as those do not possess desirable qualifications sufficiently. Some students' discontinuing their education or completion education process in unsatisfied way can be given as examples of this case. Aside from these, students' having anxieties about their capability of the field because of the reasons such as not communicating with supervisors, being alone in case of problem facing during thesis process and not getting feedbacks regarding their studies can also be stated as examples (Acker, Hill, Black, 1994). In this content, it is thought that it is a need to analyse the opinions on the expectations of graduate students and results that are obtained will give significant ideas to supervisors.

The main purpose of this research is to scale the order of precedence of the features that are expected to be in thesis supervisors by asking opinions of post graduate students with the help of paired comparison method. As these can give a chance for supervisors to review the method that they follow up during student follow up process, the determination of what the students expect from the academic supervisors is thought to be important. When the literature is studied, it is remarkable that the studies carried out via paired comparison in the field of scaling in domestic and foreign is limited in numbers. It is considered that this study will contribute to the scaling studies limited in number and give an idea on the expectations of students to the supervisors. The following questions are tried to be answered in this research:

- 1)What is the order of precedence of the features that post graduate students expect from their thesis supervisors?
- 2)Does the order of precedence of academic features change depending on the students' being in master or doctorate degree?
- 3)Does the order of precedence of academic features vary depending on gender?
- 4)Does the order of precedence of academic features vary depending on students' working in university as academician (research assistant or instructor)?

2. Method

The order of features that the post graduate students want that their thesis supervisors have tried to be described in this research with scaling by making paired comparison. In this sense, it is a descriptive research in survey model (Karasar, 2010, s.29).

2.2 The Group For Which The Research Was Done

The study group of the research consist of 270 post graduate students. 53% of the students in study group having post graduate education in faculties of education of universities are in master's degree, 47% doctorate, 61% female and 39% male. 46% of the students is dependent to the university just for post graduate education, and remaining 54% work as academician (research assistant or instructor) in the universities. Some features of the teachers included in study group are given in Table 1.

Table 1. State of education of the students in study group, whether their being research assistant or not and numbers by genders

State of education	Profession	Gender			General total
		Female	Male	Total	
Master	Research assistant	37	27	64	144
	Other	49	31	80	
Doctorate	Research assistant	52	29	81	126
	Other	29	16	45	
Total		167	103	270	

2.3. Development And Application Of Data Collection Tool

“Features of Thesis supervisor” scale developed by researchers is used in data collection. In the phase of preparation of measurement tool, it is requested from five master and five doctorate degree students in different departments selected from volunteer students primarily to list the features that they would like to see in their academic supervisors in open-ended way. Besides this, it is also requested from the students to determine 3 features that they prefer most among the features that they have determined and listed and sort as the most important one shall be the first. The answers given to open-ended questions by 10 students are reviewed and it is tried to determine the common and not common supervisor features. The answers of the students are dealt with content analysis approach and summarized. As a result of this analysis, 7 features that included in the list of all students and are among the top three are transformed to scaling item expressions. Opinions of five assessment and evaluations experts are received in association with the 7 scaling items obtained by transforming the answers of the students and corrections are made on two item expressions within the direction of the suggestions of the experts and then 8-items scale is obtained by adding one more items. Opinions of the 12 post graduate students reached by researcher on the 8 items in the scale are received before the application and it is controlled whether the items render service to targeted purpose, that is; the feature that is to be questioned in the item is understood by the respondents clearly or not. “Features of Thesis supervisor” scale is structured in a way that it is comprised of two sections. The items that are used to collect data on the demographic features of the students such as university, department, gender, state of education (master or doctorate), and profession (working as academician /other) are included in the first section. 8 items regarding the features thought to be expected from thesis supervisors are included in the second section. It is requested from the respondent to compare items dyadically during application and a directive on how to do it is given. The features are given both in columns and lines to prevent respondent's making mistakes and presented as 2-dimensional table. As the table is symmetrical as per main diagonal, it is arranged in a way that the respondents only use lower part of the diagonal to prevent respondents' falling into error.

2.4. Analysis Of Data

Scaling method with V. state of scaling method together with paired comparisons is used in the analysis of the data in this study. First of all, frequency matrix constitutes of frequency values of each feature is established. Then, matrix of proportions is obtained by dividing frequency (F) matrix to total number of people in each cell. After that, (Z) standard values that are equalled to cell value in matrix of proportions (P) are determined and thus unit normal deviations matrix is obtained. In the end of this matrix, a line that shows the total of values of each column is

established and each Z cell value in this line throughout the columns are averaged and thus scale value is calculated. Scale values (S) are sorted by scrolling the beginning of the axis (O point) to the least of average Z values in these lines. In this scrolling; if the least value is negative, the absolute value of this value is added to all values. If the least value is positive, this value is deducted from all values. As a result of this, scale value of each feature is determined on numerical axis. It is necessary to know the contradictory triple number in paired comparisons; otherwise, the scaling will give false result. In this case, contradictory triples constitute basis for the error and this also affects the reliability of the proceeding done. 0-1 grade matrix is established from the answers of each student and it is checked whether the students run into triple contradiction or not. As triple contradictory number may decrease the reliability, the scales of the ones who run into contradictions more than 3 are not taken into analysis. For this reason, despite the fact that 307 people is reached in data collection phase, 37 students with high numbers of triple contradiction are excluded from the study group.

3. Findings And Comments

In this part of the research, findings that are obtained from the analysis of the data are given by being supported with tables. The order in the questions of research is used in findings and comments. Firstly,

3.1 What is the order of precedence of the features that post graduate students expect from their thesis supervisors?

Paired comparison results of scale items of students are analysed. As a result of the analysis, scale values of these 8 items are given in Table 2.

Table 2. Scale values and stimulant orders of supervisor features

Features of supervisor	Scale values	Stimulant orders
(1)Being problem solving in academic studies	0,78	7
(2)Having comprehensive knowledge of its field	1,043	8
(3)Having comprehensive knowledge of research methods and techniques	0,608	6
(4)Easy to be communicated with	0,598	5
(5)Abiding by plan made with student	0,000	1
(6)Giving feedback to the studies of the student on time	0,230	4
(7)Not limiting student in his/her comments and opinions	0,126	2
(8)Encouraging academic studies of the student	0,174	3

When Table 2 is analysed, if we are to make an order from the most desired feature to the least desired feature among the features of supervisor; it can be seen that “Abiding by plan made with student” is in the first rank among the features of supervisor. This feature is followed by not limiting student in his/her comments and opinions, encouraging academic studies of the student, giving feedback to the studies of the student on time, easy to be communicated with, having comprehensive knowledge of research methods and techniques, being problem solving in academic studies respectively. Having comprehensive knowledge on its field is the last one among these features. The remarkable finding is that the feature of “having comprehensive knowledge on its field” is in the last row. Similarly, having comprehensive knowledge on research methods and techniques is also preferred less. It can be said that the most preferred feature of the supervisor is related to using time effectively.

3.2 Does the order of precedence of academic features change depending on the students’ being in master or doctorate degree?

Paired comparison results of scale items of students are separately analysed for doctorate and master students. As a result of the analysis, scale values of these 8 items are given in Table 3.

Table 3. Scale values and Stimulant orders of features of supervisor by state of education

Features of supervisor	Master		Doctorate	
	Scale values	Stimulant orders	Scale values	Stimulant orders
(1)Being problem solving in academic studies	0,604	6	1,303	8
(2)Having comprehensive knowledge of its field	0,851	8	0,001	2
(3)Having comprehensive knowledge of research methods and techniques	0,539	5	1,015	7
(4)Easy to be communicated with	0,651	7	0,115	3

(5)Abiding by plan made with student	0,000	1	0,325	4
(6) Giving feedback to the studies of the student on time	0,153	3	0,549	5
(7) Not limiting student in his/her comments and opinions	0,137	2	0,700	6
(8)Encouraging academic studies of the student	0,313	4	0,000	1

When Table 3 is analysed, it can be observed that when order from the most desired feature to the least desired feature by master students among the features of supervisor is made, academic supervisors' abiding by plan made with student is placed on the top. The features such as not limiting student in his/her comments and opinions, giving feedback to the studies of the student on time, encouraging academic studies of the student, Having comprehensive knowledge of research methods and techniques, being problem solving in academic studies, easy to be communicated with, follow this first rank and the last one is having comprehensive knowledge of its field. As it is observed from the Table 3 that the feature desired most by doctorate students is encouraging academic studies of the student. The other features are ranked as having comprehensive knowledge of its field, easy to be communicated with, abiding by plan made with student, giving feedback to the studies of the student on time, not limiting student in his/her comments and opinions, being problem solving in academic studies. Rank differences correlation among scale values regarding expectations of master and doctorate students from supervisor is calculated as $-0,16$. This case can be interpreted as there are differences between the expectations of master and doctorate students or there is not a certain relationship. Thus, being in master and doctorate phase affects the order of preference of the features expected from the thesis supervisor. Hence, master students choose abiding by plan made with student to place on the top, while doctorate students expect from their supervisors to support their academic studies. Another spectacular finding is that the feature of "having comprehensive knowledge on its field" is placed among front rows by doctorate students, while it is placed in last row by master students. When the findings are compared with the results summarized in Table 1 that is analyzed without separating students as master and doctorate students within the scope of state of education, it can be said that the expectations of master students are more compatible with the expectations of the whole group. Hence, the order of preference of 2, 5 and 7th items is the same; whereas the order of preference of doctorate students is not the same as the order of whole group.

3.3 Does the order of precedence of academic features vary depending on gender?

Paired comparison results of scale items of students are separately analysed for female and male students. As a result of the analysis, scale values of these 8 items are given in Table 4.

Table 4. Scale values and Stimulant orders of features of supervisor by genders

Features of supervisor	Male		Female	
	Scale values	Stimulant orders	Scale values	Stimulant orders
(1)Being problem solving in academic studies	0,592	7	0,911	7
(2)Having comprehensive knowledge of its field	0,881	8	1,154	8
(3)Having comprehensive knowledge of research methods and techniques	0,357	5	0,776	6
(4)Easy to be communicated with	0,451	6	0,697	5
(5)Abiding by plan made with student	-0,004	1	-0,001	1
(6)Giving feedback to the studies of the student on time	0,104	4	0,313	4
(7)Not limiting student in his/her comments and opinions	0,084	2	0,155	2
(8)Encouraging academic studies of the student	0,091	3	0,230	3

When Table 4 is analysed, it can be observed that when order from the most desired feature to the least desired feature by male students is made, "Academic Supervisors' abiding by plan made with student" is placed in the first rank. Not limiting student in his/her comments and opinions, encouraging academic studies of the student, giving feedback to the studies of the student on time, Having comprehensive knowledge of research methods and techniques, easy to be communicated with, being problem solving in academic studies follow this first rank and the last one is having comprehensive knowledge of its field. When order from the most desired feature to the least desired feature by female students is made "Academic Supervisors' abiding by plan made with student" is placed in the first rank. Not limiting student in his/her comments and opinions, encouraging academic studies of the student, giving feedback to the studies of the student on time, easy to be communicated with, having comprehensive knowledge of research methods and techniques, being problem solving in academic studies follow this first rank and the last one is having

comprehensive knowledge of its field. Rank differences correlation among scale values regarding expectations of female and male students from supervisor is calculated as 0,976. This case can be interpreted as there is positive and strong relationship between the expectations of female and male students from their supervisor. Thus it is observed that there is a slight difference between the orderings of expectations from academic supervisors by genders. The only difference in the ordering is in the order of 5th and 6th items. Male students prefer having comprehensive knowledge on research techniques to easy communication and female students vice versa. When the findings are compared with the results summarized in Table 1 that is analysed without separating students by genders within the scope of state of education, it is observed that the expectations of female students are the same as the whole group. It can be said on the basis of findings that gender does not have a distinctive function for the study group.

3.4. Does the order of precedence of academic features vary depending on students' working in university as academician (research assistant or instructor)?

Paired comparison results of scale items of students are separately analysed for female and male students. As a result of the analysis, scale values of these 8 items are given in Table 5.

Table 5. Scale values and Stimulant orders of features of supervisor by professions

Features of supervisor	Research asst./instructor		other	
	Scale values	Stimulant orders	Scale values	Stimulant orders
(1)Being problem solving in academic studies	0,732	7	0,856	6
(2)Having comprehensive knowledge of its field	1,008	8	1,099	8
(3)Having comprehensive knowledge of research methods and techniques	0,540	6	0,627	5
(4)Easy to be communicated with	0,382	5	0,944	7
(5)Abiding by plan made with student	0,109	3	0,000	1
(6)Giving feedback to the studies of the student on time	0,180	4	0,343	3
(7)Not limiting student in his/her comments and opinions	0,000	1	0,411	4
(8)Encouraging academic studies of the student	0,105	2	0,203	2

When Table 5 is analysed, it can be observed that when order from the most desired feature to the least desired feature by academician students is made, Not limiting student in his/her comments and opinions is placed in the first rank. The second one is encouraging academic studies of the student; third one is abiding by the plan, fourth is giving feedback on time. These features are followed by easy to be communicated with, having comprehensive knowledge of methods, being problem solving, having comprehensive knowledge of its field. In consideration of the findings in Table 5, abiding by plan made with student is placed in the first rank by students not working as academician or not working among the features expected from supervisors. The other features as ranked as encouraging academic studies of the student, giving feedback to the studies of the student on time, not limiting student in his/her comments and opinions, being problem solving, easy to be communicated with, having comprehensive knowledge of research methods and techniques, and the last one is having comprehensive knowledge of its field. Rank differences correlation among scale values regarding expectations of academician students and others from supervisor is calculated as 0,762. This case can be interpreted as there is positive and above medium level relationship between the expectations of female and male students from their supervisor. Thus it is observed that there is a partial difference between the orderings of expectations from academic supervisors by professions. The first expectation of the ones working as academician is to think freely and others place abiding by the plan in the first rank. This case can be based on the fact that the ones working in other professions have less time for their education. The ordering judgement of both groups is the same on having comprehensive knowledge on the field and encouraging academic studies. The reason for the ones that are not academicians' preferring being problem solving in the upper rows may be that they face more problematic cases. When the findings are compared with the results summarized in Table 2 that is analyzed without separating students by their professions (academician or not) within the scope of state of education, it is observed that the expectations of academician students are more coincide with the total ordering in the group.

4. Conclusion And Suggestions

Determination of the preference order by using scaling method with paired comparison of the features to be desired by students from thesis supervisors is aimed in this research. As per findings of the research, the features of

supervisor that the post graduate students most desire from their academic supervisors is supervisors' abiding by plan made with student. This feature is followed respectively by not limiting student in his/her comments and opinions, encouraging academic studies of the student, giving feedback to the studies of the student on time, easy to be communicated with, having comprehensive knowledge of research methods and techniques, being problem solving in academic studies. The least desired feature is having comprehensive knowledge of its field. When the result of this research is taken into consideration, it can be deduced that a qualified supervisor shall be organized primarily. A plan that is well-prepared before the study is commenced is supposed as being a guide for staff what to do, when, how much and how to carry out things (Gelbal & Keecioğlu, 2007).

Besides this, features such as making it possible for students to think freely, encouraging their studies are also essential. Giving feedback concerning the studies of the students on time follows aforementioned features. It can be said that students' paying most attention to supervisors' being organized, giving feedbacks to students on time and easy to be communicated with show that students expect from their supervisors to make use of time efficiently. The underlying reason for this case can be students' taking responsibilities apart from education during post graduate education process and thus their need for using time efficiently. The preference of the items on the necessity of having knowledge of research methods and techniques and having comprehensive knowledge of its field in the last rows is unexpected case; however, this can point out that post graduate students consider supervisors' being a guide rather than getting literal from supervisors. It can be considered that students in this phase of education can reach knowledge themselves and possess research techniques and thus only want from supervisors to assume the guide role. In the open-ended questions directed to the students during the determination of scale items, students emphasised the importance of supervisors' enabling them to think freely and studying in compliance with the plans and include having comprehensive knowledge on the field; however, it was observed that when they sorted the three items, they did not write the feature of having comprehensive knowledge.

Students' being in master or doctorate phase has changed the order of preferences of the features expected from the supervisors. It is acquired in the analysis that supervisors' having comprehensive knowledge on their fields and research methods and techniques are placed at the front rows by doctorate students. This finding can be based on the fact that the students in this phase try to be specialized on certain fields, need to make fewer mistakes and need supervisors having comprehensive knowledge and being qualified on their fields. Hence, the mistakes made in doctorate thesis phase create more reactions than the mistakes made during the preparation of master thesis. It is observed that there are not any essential differences in the order of preferences of the students on features of supervisor by genders. And this is the expected result actually; it is thought that the individuals are assessed with their academic features independent from their genders in academic area. Another factor that creates difference in the order is based on students' working in university or working outside. The first expectation of the ones working as academician is on freethinking, whereas the expectation of ones in other group is supervisors' abiding by the plan. This case can be based on the fact that the ones in other professions have lesser time for their education. Both groups have the same order regarding the features of having comprehensive knowledge on field and supporting academic studies. The reason for the ones that are not academicians' preferring being problem solving in the upper rows may be that they face more problematic cases.

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