THE UNIVERSITY STUDENTS' AWARENESS AND SATISFACTION WITH THE RELATIVE EVALUATION SYSTEM AND ITS RESEARCH BY RIDIT ANALYSIS

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Abstract

As of 2012, the relative evaluation system has been put into practice in most of the state and private universities in our country. In relative evaluation system; the success of a student is being evaluated with the success level of the other students in his / her class. In this system, for each course a student performance is being formulated. In this study; it is tried to find out whether the students from the Kafkas University, Faculty of Economics and Administrative Sciences including 1st to 4th classes from the different departments have sufficient knowledge about the functional evaluation system or not and also they are satisfied or dissatisfied with the program which is being applied to them.

Keywords: Categorical Data, Relative Evaluation System, Ridit Analysis.

JEL Classification Codes: C12, C14, C15

Üniversite Öğrencilerinin Farkındalık ve Bağıl Değerlendirmeye Dayalı Memnuniyetleri ve Ridit Analizine Göre Araştırılması

Öz

2012 yılı itibariyle ülkemizdeki devlet ve vakıf üniversitelerinin büyük bir çoğunluğunda bağıl değerlendirme sistemine geçilmiş bulunmaktadır. Bağıl değerlendirme sisteminde bir öğrencinin başarısı, o öğrencinin eğitim gördüğü sınıfta bulunan diğer öğrencilerin başarı düzeyleri ile bağlantılı bir şekilde değerlendirilmektedir. Bu sistemde her bir ders için öğrenci performansı belirlenir. Bu çalışmada 2011-2012 eğitim öğretim yılında Kafkas Üniversitesi İktisadi ve İdari Bilimler Fakültesinde eğitim gören işletme, iktisat ve siyaset bilimi ve kamu yönetimi bölümleri birinci, ikinci, üçüncü ve dördüncü sınıf öğrencilerinin Kafkas Üniversitesinde uygulanan bağıl değerlendirme sistemi hakkında yeterli bilgiye sahip olup olmadıkları ve bu sistemden memnun olup olmadıkları araştırılmıştır.

Anahtar Kelimeler: Kategorik Veri, Bağıl Değerlendirme Sistemi, Ridit Analizi.

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Introduction

In the educational process when the success of the student is requested to be converted to a grade following an evaluation, different measures and basing on such measures different evaluations are made. These evaluation types are absolute evaluation and relative evaluation systems. Relative evaluation, traditional evaluation and absolute evaluation comes along as an alternative evaluation system (Duman, 2010). The evaluation done as per an absolute measure is "absolute evaluation" and the evaluation made as per a relative measure is names as "Relative Evaluation" (Tekin, 2008). The absolute evaluation system is a measure which is assumed to classify the students in details by means of the number grades between 0-100 and therefore it is known as a system widely used at our schools. The measure, which evaluates the students success in relation to the successes of the other students in the same class and consequently that evaluates the success no as per the numerical grades awarded over 100 but converts the success into a relative grade as per the performance of the student among that group, is called the relative evaluation system (Temel, 2010). To this extent the success of a student in the relative evaluation system is valuated in relation to the success of the student in that group (Keskin and Ertan, 2001). In the relative evaluation system the individual potential of the student is significant. The important thing is the position of the student among the other students in the class (Tatar and Oktay, 2008). In the relative evaluation system the students are in competition with the other students for each course for a limited number of grades (CTL, 2001).

The Universities decide by themselves if they will prefer relative evaluation system or absolute evaluation system. The Associate degree and License and Educational regulations prepared by the Senates of the Universities are put in effect after their publication on official gazette and accordingly the enrolment, education, training and examination procedures and principles are regulated for the associate degree and license programs to faculties, state conservatories, colleges and vocational higher schools.

In recent years national and international equivalency between the universities is gaining more importance. Soon, when the equivalency comes into question, application of a relative evaluation system at any one of the universities will provide an important advantage for that university. The relative evaluation system introduces many significant innovations both for students, instructors and also for he administrative structure. The fundamental purpose of these innovations is the modernization of the education and training of the universities, maintaining the information always up-to-date in education, making the students feel themselves in an scientific environment for the whole term of the education, making them have a better dialog with their instructors and to support to provide the necessary infrastructure required for producing science. These innovations introduced by the relative evaluation system will play an important role for our universities to maintain their respected position among other universities in the world and more important of all in making our universities go further in 2000 years which will be the stage of many developments and changes. One of the most important innovations introduced by the relative evaluation system it to provide that the grades of the students are evaluated much

fairly. Together with this, this system, with the education and the examination systems used in the courses, would cause significant changes also in the contents. An ideal relative evaluation system requires that the instructors review and renew their own courses, the method of studying, measurement modes and methods with a critical point of view. This system provides that the students attend the courses much effectively and consequently, the quality and the content of the courses and most important of all the motivation of the students are led to get developed (Battal, Yıldız, Alim and Susam, 2010).

Ridit Analysis

The ridit analysis was used in 1958 for the first time by an American Biostatistician Bross, and it was gained by the statistics literature and it is an analysis technique providing much convenient results that variable analysis, chi-square and student-t tests where the variables are measured by an ordinal scale (Bilgin, 2003). Ridit analysis is a nonparametric statistical method used for comparing a sample group with a group which was previously defined as the reference group (Ploured and Hassler, 1982). The Ridit word is constituted by the first letters of the expression "Relative to an Identified Distribution". Ridits have an observable empiric distribution (Doyle and Dorling, 2002). Ridit analysis, social sciences and humanities being ahead are used frequently in the fields of health sciences and sciences such as econometrics, socio-metrics, psychometrics, biometrics, medicine, dentistry and zootechnics (Bross, 1978; Fleiss, Chilton and Wallenstein, 1979; Agresti, 1984; Davidson, 1984; Donaldson, 1998; Doyle and Dorling, 2002; Bilgin, 2003; Doğan, Saraçlı and Kaygısız, 2005; Kurt, 2007).

Ridits in addition to being able to be used to determine the behavior changes of the variables that are measured with ordinal scales such as satisfaction, preference, coherence, violence, attitude, perception or acceptance levels; they also be used to compare the responding groups and the variables (Kurt, 2007). In ridit analysis the ridits are calculated for the ordinal classes. Ridits represent a possibility measure relatively to any reference distribution. Being able to select the reference distribution is a powerful feature of the ridit analysis (Bilgin, 2003). Ridit values are easily understandable, statistically explainable and are values which may be obtained with the help of a calculator by means of using only the frequencies in the prepared schedule. In experimental data, when the reference group is not determined however when one of the existing groups may be selected as a reference group, even though the selection is done only by preference the differences in between a previously determined group and other groups in parallel to the study, are calculated by basing on the ridit ratios of the reference group (Donaldson, 1998).

Ridits, additionally represent a possibility measure as per the selected reference distribution. The researcher, depending on the purpose of the research, determines the distribution himself (Kurt, 2007). The reference group, *n* order to make the ridits constant should be selected sufficiently big. In ridit analysis, there are almost no need for other assumptions than that the classes represent a consecutive intervals on an ordinal scale which exist fundamentally but which is not observable. Moreover, there is not an assumption also stating normality about the shape of the distributions (Bilgin, 2003).

In the ridit values table which is calculated for the reference group given in the application section of the study, on the first column, in parallel to the responses of the participant student to the survey, it shows the values assigned to the variable levels that is the frequencies. By taking the half of these values in the first column the values on the second column are obtained. On the third column provided to have furthered a class downwards (the value of the first class is taken as zero) the cumulative total of the values in the first column are taken. The values on the forth column are constituted by the total of the values taking place in the second and in the third columns. The values on the forth columns are divided by the total number of observations and thereby the values on the fifth and on the last column are obtained. These values calculated on the fifth column are named as the ridit values belonging to each category.

The average ridit $(\bar{r}_T)$ belonging on any comparison group, is calculated by multiplying the frequency values observed for each group with the ridit values calculated for the reference group and by adding these multiplication values and by dividing them with the total frequency belonging to the comparison group. The average ridit value is obtained in order to make a comparison between two groups and these values may be interpreted as a possibility. The average ridit belonging to the comparison group is the possibility that an individual which is randomly selected from a group may have a value that is greater or smaller than the value of an individual again selected randomly from the reference group (Kurt, 2007). If this possibility value is 0,50 for the comparison group it is concluded that this does not have a tendency to be greater or smaller comparing to the reference group. An important particular which must be known at this point it that the average ridit of the reference group should also be 0,50. This means that if two random individuals are selected from the same population, the possibility is equal for the second individual to have a value greater or smaller than that of the first one and that it is 0,50. If the ridit value is greater than 0,50 for any comparison group, this is the possibility that the value of an individual randomly selected from this comparison group is greater than that of an individual which is again selected randomly from the reference group. From here, it is concluded that the comparison group has the tendency of having a greater value than that of the reference group. If the average ridit of a comparison group is smaller than 0,50; in this case it will be understood that the individuals of this group have the tendency of having smaller values comparing to that of the reference group (Bilgin, 2003).

The standard error of the average ridit which was calculated is obtained by using the formula [1] (Bross, 1958).

$$[1] \quad s.e.\left(\bar{r}_T\right) = \frac{1}{2\sqrt{3N}}$$

N value in the formula shows the total frequency of the comparison group. By taking the standard error obtained from the formula [1] with the average ridit value; the Z statistics formula is obtained in order to test the importance of the difference with the standard value of 0,50.

$$[2] \quad z = \frac{0,5 - \overline{r}_T}{s.e.(\overline{r}_T)} \text{ or } z = \frac{\overline{r}_T - 0,5}{s.e.(\overline{r}_T)}$$

Z value which is obtained by using the Formula [2] is evaluated by regarding the level of importance which will be used in the study. If the Z value which is found is a value between the positive and negative signs of the value obtained in the normal distribution schedule in the mentioned importance level, then, the zero hypothesis cannot be rejected; consequently it is concluded that the frequency difference between the reference group and comparison group are not important; in other works it is concluded that the distributions are not different from one another. If the Z value, which is found, is smaller than the negative value or greater than the positive value that is obtained from the standard normal distribution schedule of the mentioned importance level, in this case the zero hypothesis is rejected and it is concluded that the difference between the frequencies of the reference and comparison group are important, in other words it is concluded that the distributions are different from one another.

When two different groups having the same reference groups are requested to be compared, ridit point used to test the difference in between them is calculated with the standard error of this average ridit and the test statistics are respectively calculated with formula [3], formula [4] and formula [5] (Fleiss, 1973).

$$[3] \qquad \overline{r} = \left(\overline{r}_2 - \overline{r}_1 \right) + 0,5$$

$$[4] \quad s.e.(\overline{r}_2 - \overline{r}_1) = \frac{\sqrt{N_1 + N_2}}{2\sqrt{3N_1 N_2}}$$

$$[5] \qquad z = \frac{\overline{r}_2 - \overline{r}_1}{s.e.(\overline{r}_2 - \overline{r}_1)}$$

N_1 and N_2 value in the formula [4] shows the total frequency of the compared groups. The Z value is calculated by using formula [5], by regarding the importance level to be used in the study and by comparing the table value of the standard normal distribution, the distributions of two different comparison groups having the same reference group are interpreted statistically.

Application

In the application section of the study, in the 2011-2012 Educational Year, it was examined with the ridit analysis if 500 students randomly selected among the 1534 students continuing their education at Kafkas University Faculty of Economics and Administrative Sciences at classes 1,2, 3 and 4 at Business Administration, Economics, Political Sciences and Public Administration Departments, have sufficient information

about the relative evaluation system being applied at Kafkas University and if they are content with this system or not.

The data that are befitted from in the application section are obtained by means of the surveys performed with the students in spring term. In the study, the purpose is to determine if the students have sufficient information about the relative grade evaluation system which is being applied and if they are content with the system or not.

In the survey used in the study the students are directed 5 questions to determine the reference and comparison groups and 7 questions in order to determine the participation to the suggestions directed to the students and totally 35 ridit analysis are done. One of the performed analysis are announced and the results of the other analysis are presented in a table.

The sample analysis, according to if the students have read the relative evaluation system regulation; is done regarding the opinion that the relative evaluation system avoids the unjust competition between the universities in postgraduate studies and in scholarship applications.

The hypotheses are set forth as follows for the sample analysis:

H_0: The relative evaluation system between the reference group and comparison group does not hold a meaningful difference as per the opinion that the relative evaluation system avoids the unjust competition between the universities in postgraduate studies and in scholarship applications.

H_1: The relative evaluation system between the reference group and comparison group holds a meaningful difference as per the opinion that the relative evaluation system avoids the unjust competition between the universities in postgraduate studies and in scholarship applications.

The data obtained from the surveys for the sample analysis is shown in Table 1.

Table 1: Data Obtained From The Surveys For The Sample Analysis

		Have you read the relative evaluation system regulation that is being applied at our university?		Total
		Yes	No	
I believe that the relative evaluation system avoids the unjust competition between the universities in postgraduate studies and in scholarship applications.	I do not agree at all	27	66	93
	I do not agree	29	74	103
	Undecided	35	126	161
	I agree	26	66	92
	I absolutely agree	17	21	38
	Total	**134**	**353**	**487**
		X^2	*df*	p
		7,142	4	0,129

487 students out of 500 students who have participated in the survey have answered to this question. As the result of the chi-square test made in order to determine if there is a relation between the variable taking place in Table 1; p value is found as 0,129 and as $p>0,05$; in between the variable of having read or not having read the evaluation regulation a statistically meaningful relation at the level of 5% could not be found. Consequently, H_0 hypothesis cannot be rejected and it is concluded that there is not a meaningful difference between the opinions of the students that the relative evaluation system avoids the unjust competition between the universities in postgraduate studies and in scholarship applications and if they have read or not have read the evaluation regulation.

The relations between the handled variables are examined with the ridit analysis in Table 2 and Table 3.

Table 2: Ridit Values Calculated For the Reference Group

Have you read the relative evaluation system regulation that is being applied at our university?		f_{yes}	$\dfrac{f_{yes}}{N_{yes}}$	Cumulative	Total	Ridit $\dfrac{Total}{N_{yes}}$
I believe that the relative evaluation system avoids the unjust competition between the universities in postgraduate studies and in scholarship applications.	I do not agree at all	27	13,50	0,00	13,50	0,101
	I do not agree	29	14,50	27,00	41,50	0,310
	Undecided	35	17,50	56,00	73,50	0,549
	I agree	26	13,00	91,00	104,00	0,776
	I absolutely agree	17	8,50	117,00	125,50	0,937
		N_{yes}				$\overline{r}_{ref}$
		134				**0,534**

Note: The header spans "Reference Group" over "Yes" columns and "Ridit".

Among the students who participated in the survey those who have read the relative evaluation regulation were elected as the reference group and the ridit values of the students were calculated as explained in the ridit analysis section of the study. As the result of the performed calculation, the average ridit value for the reference group is calculated to be $\overline{r}_{ref} = 0,534$.

The average ridit value for those students who have not read the relative evaluation regulation and who were elected as the comparison group, as it is viewed in Table 3; is calculated by diving the multiplication values by the total number of students in this group; that multiplication values which were obtained by multiplying ridit values calculated for the reference group with the frequency values of the student opinions in the comparison group.

According to the results which are obtained this way, the average ridit value is found to be:

$$[6] \quad \overline{r}_{comp} = \frac{\sum product}{N_{no}} = \frac{169,571}{534} = 0,480$$

Table 3: Ridit Values Calculated For the Comparison Group

Have you read the relative evaluation system regulation that is being applied at our university?		Comparison Group		
		Ridit $\dfrac{Total}{N_{yes}}$	No f_{no}	Product
I believe that the relative evaluation system avoids the unjust competition between the universities in postgraduate studies and in scholarship applications.	I do not agree at all	0,101	66	6,649
	I do not agree	0,310	74	22,918
	Undecided	0,549	126	69,112
	I agree	0,776	66	51,224
	I absolutely agree	0,937	21	19,668
		$\overline{r}_{ref}$	N_{no}	$\sum product$
		0,534	**353**	**169,571**

As the calculated $\overline{r}_{ref}$ value 0,480, when observation is done in both of the groups; the observation done for the students who have read the relative evaluation system regulation shall have a smaller acceptability score with the possibility of 0,480 from the observation done for the students who have not read the relative evaluation system regulation; that is, the opinion of the students who have read the relative evaluation system regulation that the relative evaluation system avoids the unjust competition between the universities in postgraduate studies and in scholarship applications, shows that according to the students who have not read the regulation it has a tendency towards the option "I absolutely agree".

The standard error of this ridit value which was calculated will be calculated as follows:

$$[7] \quad s.e.(r_{comp}) = \frac{1}{2\sqrt{3N}} = \frac{1}{2\sqrt{3 \cdot 353}} = 0,015$$

According to these results, if t is to be determined if the difference between the reference group and comparison group is statistically meaningful; the following is obtained:

$$[8] \quad z = \frac{r_{comp} - 0{,}5}{s.e.\left(r_{comp}\right)} = \frac{0{,}480 - 0{,}5}{0{,}015} = -1{,}278$$

All of the results obtained in the sample analysis are shown in Table 4.

Table 4: The Calculation Values Obtained As The Result Of The Analysis Steps.

X^2	df	p
7,142	4	0,129
$\overline{r}_{comp}$	$s.e.\left(\overline{r}_{comp}\right)$	z
0,480	0,015	-1,278

The -1,278 value which is found in order to determine if the difference between the reference and comparison group is meaningful, as shown in Figure 1, is between the $\pm 1{,}96$ values that is the Z table value at the 5% meaningfulness level and therefore the H_0 hypothesis cannot be rejected.

Figure 1: Presentation of z Value in the Standard Normal Curve Field.
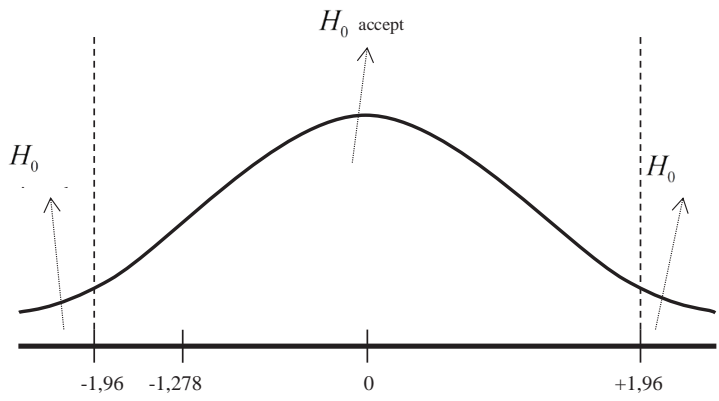
To this extent, at the 5% meaningfulness level and statistically, it is concluded that there is not a meaningful difference regarding the opinions that the relative evaluation system avoids the unjust competition between the universities in postgraduate studies and in scholarship applications.

The process steps followed for the sample analysis were applied to the other survey questions; particularly by determining the reference and comparison groups, taking the path from these groups the participation levels of the students were calculated regarding the suggestions directed to the students about the relative evaluation system. As the result

of the analysis it was detected if there were meaningful differences between reference and comparison groups and the data obtained from the study were presented in form of tables.

When the responses having "yes" and "no" answers to the agreement level with the opinion that "I have sufficient information about the relative evaluation system" are determined respectively as reference and comparison groups, the ridit values that are calculated are shown in Table 5. As per the ridit value taking place in Table 5, it is observed that there is a meaningful difference at the meaningfulness level of 5% between the opinions of the reference group and comparison group.

Table 5: Ridit Analysis as Per the Survey Questions for the Agreement Level to the Opinion That "I Have Sufficient Information about the Relative Evaluation System".

I have sufficient information about the relative evaluation system	Yes $\overline{r}_{ref}$	No $\overline{r}_{comp}$	$s.e.(\overline{r}_{ref})$	z	H_0
Have you read the relative evaluation system regulation being applied at our university?	0,434	0,293	0,015	-13,501	Rejected
Have you gained sufficient information from the instructors that perform consultancy for you?	0,401	0,273	0,014	-15,841	Rejected
Have you gained information about the relative evaluation system as per your own efforts?	0,511	0,322	0,021	-8,408	Rejected
Do you think that the students of our university generally have sufficient information about the relative evaluation system?	0,400	0,301	0,013	-14,857	Rejected
Are you content with the relative evaluation system being applied at our university?	0,472	0,339	0,016	-10,082	Rejected

When the responses having "yes" and "no" answers to the agreement level with the opinion that "I believe that the relative evaluation system is an application providing advantage to the students in passing classes" (conditional pass, being able to take high letter grade with a low grade) are determined respectively as reference and comparison groups, the ridit values that are calculated are shown in Table 6. As per the ridit value taking place in Table 6, it is observed that there is a meaningful difference at the meaningfulness level of 5% between the opinions of the reference group and comparison group.

Table 6: Ridit Analysis As Per The Responses To The Survey Questions Of The Agreement Level To The Opinion "I Believe That The Relative Evaluation System Is An Application Providing Advantage To The Students In Passing Classes" (Conditional Pass, Being Able To Take Highletter Grade With A Low Grade).

"I believe that the relative evaluation system is an application providing advantage to the students in passing classes" (conditional pass, being able to take high letter grade with a low grade).	Yes $\overline{r}_{ref}$	No $\overline{r}_{comp}$	$s.e.(\overline{r}_{ref})$	z	H_0
Have you read the relative evaluation system regulation being applied at our university?	0,436	0,439	0,015	-3,960	Rejected
Have you gained sufficient information from the instructors that perform consultancy for you?	0,430	0,439	0,014	-4,258	Rejected
Have you gained information about the relative evaluation system as per your own efforts?	0,436	0,396	0,021	-4,937	Rejected
Do you think that the students of our university generally have sufficient information about the relative evaluation system?	0,331	0,337	0,013	-12,142	Rejected
Are you content with the relative evaluation system being applied at our university?	0,300	0,230	0,016	-16,875	Rejected

When the responses having "yes" and "no" answers to the agreement level with the opinion that "I believe that the relative evaluation system induces students to study harder my motivating them" are determined respectively as reference and comparison groups, the ridit values that are calculated are shown in Table 7. As per the ridit value taking place in Table 7, it is observed that there is not a meaningful difference at the meaningfulness level of 5% between the opinions of the reference group, which is established as per the responses given to the question "Have you read the relative evaluation system regulation being applied at our university" and the comparison group. It is concluded that there is a meaningful difference at the level of 5% between the comparison group and the reference group established as per the other questions in Table 7.

Table 7: Ridit Analysis as Per the Survey Questions Regarding The Agreement Level to the Opinion "I Believe That The Relative Evaluation System Induces Students To Study Harder My Motivating Them"

I believe that the relative evaluation system induces students to study harder my motivating them	Yes $\overline{r}_{ref}$	No $\overline{r}_{comp}$	$s.e.(\overline{r}_{ref})$	z	H_0
Have you read the relative evaluation system regulation being applied at our university?	0,492	0,500	0,025	0,000	Accepted
Have you gained sufficient information from the instructors that perform consultancy for you?	0,502	0,470	0,014	-2,095	Rejected
Have you gained information about the relative evaluation system as per your own efforts?	0,505	0,442	0,021	-2,750	Rejected
Do you think that the students of our university generally have sufficient information about the relative evaluation system?	0,415	0,377	0,013	-9,145	Rejected
Are you content with the relative evaluation system being applied at our university?	0,419	0,334	0,016	-10,323	Rejected

When the responses having "yes" and "no" answers to the agreement level with the opinion that "to "I believe that the relative evaluation system provides a rightful grade distribution" are determined respectively as reference and comparison groups, the ridit values that are calculated are shown in Table 8. When the values in Table 8 are examined it is observed that there is not a statistically meaningful difference at the meaningfulness level of 5% between the opinions of the reference group, which is established as per the responses given to the question "Have you read the relative evaluation system regulation being applied at our university" and "Have you taken sufficient information from your consultant instructor about the relative evaluation system?". It is concluded that there is a meaningful difference at the level of 5% between the comparison group and the reference group established as per the other questions in Table 8.

Table 8: Ridit Analysis as Per the Survey Questions Regarding the Agreement Level to "I Believe That the Relative Evaluation System Provides a Rightful Grade Distribution"

I believe that the relative evaluation system provides a rightful grade distribution"	Yes $\overline{r}_{ref}$	No $\overline{r}_{comp}$	$s.e.(\overline{r}_{ref})$	z	H_0
Have you read the relative evaluation system regulation being applied at our university?	0,590	0,503	0,015	0,205	Accepted
Have you gained sufficient information from the instructors that perform consultancy for you?	0,586	0,500	0,014	-0,020	Accepted
Have you gained information about the relative evaluation system as per your own efforts?	0,581	0,474	0,021	-1,208	Accepted
Do you think that the students of our university generally have sufficient information about the relative evaluation system?	0,477	0,378	0,013	-9,067	Rejected
Are you content with the relative evaluation system being applied at our university?	0,475	0,314	0,016	-11,548	Rejected

When the responses having "yes" and "no" answers to the agreement level with the opinion that "I believe that the relative evaluation system avoids the unjust competition between the universities in postgraduate studies and in scholarship applications" are determined respectively as reference and comparison groups, the ridit values that are calculated are shown in Table 9. When the ridit values in table 9 are examined; it is concluded that there is not a statistically meaningful difference at the meaningfulness level of 5% between the opinions of the reference group, which is established as per the responses given to the question "Have you read the relative evaluation system regulation being applied at our university" and Have you taken sufficient information from your consultant instructor about the relative evaluation system?" and the comparison group. It is concluded that there is a meaningful difference at the level of 5% between the opinions of the comparison group and the reference group established as per the other questions in Table 9.

Table 9: Ridit Analysis As Per The Survey Questions Regarding The Agreement Level To The Opinion That "I Believe That The Relative Evaluation System Avoids The Unjust Competition Between The Universities In Postgraduate Studies And In Scholarship Applications"

"I believe that the relative evaluation system avoids the unjust competition between the universities in postgraduate studies and in scholarship applications"	Yes $\overline{r}_{ref}$	No $\overline{r}_{comp}$	$s.e.(\overline{r}_{ref})$	z	H_0
Have you read the relative evaluation system regulation being applied at our university?	0,534	0,480	0,015	-1,278	Accepted
Have you gained sufficient information from the instructors that perform consultancy for you?	0,563	0,523	0,014	1,577	Accepted
Have you gained information about the relative evaluation system as per your own efforts?	0,541	0,477	0,021	-1,062	Accepted
Do you think that the students of our university generally have sufficient information about the relative evaluation system?	0,423	0,341	0,013	-11,845	Rejected
Are you content with the relative evaluation system being applied at our university?	0,469	0,360	0,016	-8,735	Rejected

When the responses having "yes" and "no" answers to the agreement level with the opinion that "I believe that the relative evaluation system has a negative impact in friendship relations by putting emphasis on the individuality" are determined respectively as reference and comparison groups, the ridit values that are calculated are shown in Table 10. When the ridit values in Table 10 are examined; it is concluded that there is a statistically meaningful difference at the meaningfulness at the level of 5% between the opinions of the reference group, which is established as per the responses given to the question "Have you read the relative evaluation system regulation being applied at our university" and "Have you taken sufficient information from yourconsultant instructor about the relative evaluation system?" and " Have you gainedinformation about the related relative evaluation system as per your individual efforts? and the comparison group. It is concluded that there is not a statistically meaningful difference at the level of 5% between the opinions of the comparison group and the reference group established as per the other questions in Table 10.

Table 10: Ridit Analysis As Per The Survey Questions Regarding The Agreement Level With The Opinion That "I Believe That The Relative Evaluation System Has A Negative Impact In Friendship Relations By Putting Emphasis On The Individuality"

I believe that the relative evaluation system has a negative impact in friendship relations by putting emphasis on the individuality	Yes $\overline{r}_{ref}$	No $\overline{r}_{comp}$	$s.e.(\overline{r}_{ref})$	z	H_0
Have you read the relative evaluation system regulation being applied at our university?	0,368	0,451	0,015	-3,207	Rejected
Have you gained sufficient information from the instructors that perform consultancy for you?	0,339	0,423	0,014	-5,344	Rejected
Have you gained information about the relative evaluation system as per your own efforts?	0,360	0,398	0,021	-4,781	Rejected
Do you think that the students of our university generally have sufficient information about the relative evaluation system?	0,377	0,481	0,013	-1,396	Accepted
Are you content with the relative evaluation system being applied at our university?	0,406	0,518	0,016	1,094	Accepted

When the responses having "yes" and "no" answers to the agreement level with the opinion that "I believe that the relative evaluation system applied at our university presents problems sourcing from its implementation" are determined respectively as reference and comparison groups, the ridit values that are calculated are shown in Table 11. As per the ridit values taking place in Table 11, it is concluded that there is a statistically meaningful difference at the meaningfulness level of 5% between the opinions of the reference group and the comparison group.

Table 11: Ridit Analysis as Per the Survey Questions Regarding the Agreement Level to the Opinion That "I Believe That the Relative Evaluation System Applied At Our University Presents Problems Sourcing From Its Implementation"

I believe that the relative evaluation system applied at our university presents problems sourcing from its implementation	Yes $\overline{r}_{ref}$	No $\overline{r}_{comp}$	$s.e.(\overline{r}_{ref})$	z	H_0
Have you read the relative evaluation system regulation being applied at our university?	0,341	0,430	0,015	-4,541	Rejected
Have you gained sufficient information from the instructors that perform consultancy for you?	0,340	0,439	0,014	-4,239	Rejected
Have you gained information about the relative evaluation system as per your own efforts?	0,362	0,448	0,021	-2,419	Rejected
Do you think that the students of our university generally have sufficient information about the relative evaluation system?	0,408	0,531	0,013	2,296	Rejected
Are you content with the relative evaluation system being applied at our university?	0,390	0,533	0,016	2,038	Rejected

Discussion and Conclusion

Ridit analysis is a statistical method used for the ordinal scales and it compares the distribution of different groups. Ridit analysis which is an alternative to chi-square, *t* test and variance analysis, presents great advantages comparing to these methods both from the point of being able to be calculated and regarding its precision in interpretations.

In this study it is examined by means of ridit analysis if the students continuing their educations in 2011-2012 at the Kafkas University's Business Department, Political Sciences and Public Administration Departments of Economics and Administrative Sciences Faculty, have sufficient information about the relative evaluation system being applied at Kafkas University and if they are content or not content about this system.

The relative evaluation system is an evaluation system that evaluates the success of a student in relation to the success levels of other students in the same class and that covert the position of a student into a grade by determining how low or how high is the student's grade as per the class average for each course. This system, in addition to presenting a much rightful grade distribution, provides that the students attend to the classes more effectively and thereby increases both the quality of the course and the motivation of the students towards the course. In addition and besides these advantages, the greatest handicaps of the relative evaluation system are the constraints sourcing from the wrong implementation of the relative evaluation system, the fact that the system is not perceived well by the students and sufficient information could not be provided to the students about the system.

References

Agresti, A. (1984). *Analysis Of Categorical Data*. New York: Wiley.

Battal, N., Susam, E., Yıldız, H. and Alim, F. (2010). *İnönü Üniversitesi Bağıl Değerlendirme Sistemi Taslak Çalışması*, Malatya.

Bilgin, Ö.C. (2003). "Ridit Analizi ve Uygulaması". *Atatürk Üniversitesi Ziraat Fakültesi Dergisi*, 34 (2): 135-138.

Bross, I.D.J. (1958). "How To Use Ridit Analysis". *Biometrics*, 14: 18-38.

Bross, I. D. J. (1978). "Comment on Ridit Analysis by Dr. Bross. (Letter to the editor)". *Amer. J. Epidemiol*, 107: 263-264.

CTL, (2001). "Teaching at Carolina". Center for Teaching and Learning, University of North Carolina at Chapel Hill. http://ctl.unc.edu/he2.html (09.07.2012).

Davidson, R.C. (1984). "Dissatisfaction Of Women Family Practice Residents". *Family Medicine*, 16: 10-12.

Doğan, İ., Saraçlı, S and Kaygısız, Z. (2005). "Üniversiteye Yerleşen Öğrencilerin Bölüm Memnuniyetlerinin Ridit Analizi ile İncelenmesi ve Osmangazi Üniversitesi İ.İ.B.F. Birinci Sınıf Öğrencileri Üzerine Bir Uygulama", *Eskişehir Osmangazi Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 6(2): 175–183.

Donaldson, G.W. (1998). "Ridit Scores for Analysis and Interpretation of Ordinal Pain Data". *European Journal of Pain*, 2: 221-227.

Doyle, M. and Dorling, S. (2002). "Visibility Trends in The UK 1950-1997". *Atmospheric Environment*, 36: 3161-3172.

Duman, B. (2010). "Sınıf Öğretmeni Adaylarının Bağıl Değerlendirmeye İlişkin Görüşleri". *Fırat Üniversitesi. Sosyal Bilimler Enstitüsü 9. Ulusal Sınıf Öğretmenliği Eğitimi Sempozyumu*. 20-22 Mayıs.

Fleiss, J.L. (1973). *Statistical Methods for Rates And Proportions*. New York: Jon Wiley & Sons.

Fleiss, J.L., Chilton, N.W. and Wallenstein, S. (1979). "Ridit Analysis İn Dental Clinical Studies". *J. Dental Research*, 58: 2080-2084.

Keskin, M. and Ertan, H. (2001). *İstanbul Üniversitesi'nin Bağıl Değerlendirme Sistemi*, İstanbul.

Kurt, G. (2007). "Ridit Analizi ve Üniversite Öğrencilerinin Gelecek Kaygılarının İncelenmesi Üzerine Bir Uygulama". *Eskişehir Osmangazi Üniversitesi Sosyal Bilimler Dergisi*, 8(2): 193-206.

Ploured, P.J. and Hassler, A.A. (1982). "Ridit". Catholic University of America. (Online erişim adresi http://pdp-10.trailing-edge.com/decuslib10- 11/01/43,50532/ridit.rnh.html).

Tatar, E. and Oktay, M. (2008). "Relative Evaluation System as an Obstacle to Cooperative Learning: The Views of Lecturers in a Science Education Department". *International Journal of Environmental & Science Education*, 3(2): 67-73.

Tekin, H. (2008). *Eğitimde Ölçme ve Değerlendirme*. Ankara: Yargı Yayınevi.

Temel, A. (2010). *Eğitimde Ölçme ve Değerlendirme*. Maltepe Üniversitesi Yayınları.