

# Service Quality Measurement of the Student Counseling Center Using SERVQUAL Model

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## Abstract

**Background:** The services that student counseling center present play an important role in students' psychological health. Therefore, measurement of services quality can contribute to a higher quality of these services.

**Objectives:** This study was conducted in order to measure service quality of student counseling center at the university of Bojnord.

**Methods:** In this cross-sectional descriptive research participated 253 students who referred to student counseling center at the university of Bojnord from March to June 2015. A questionnaire adapted to SERVQUAL model was used to collect the data. Wilcoxon signed-rank test was used to analyze the data.

**Results:** The result of this study showed that there were some differences between students' perceptions and their expectations of counseling services quality ( $Z = -12.91$ ;  $P < 0.0001$ ). The result also indicated that there were significant differences between students' perceptions and expectations in all of the five dimensions of SERVQUAL model. The most significant gap was related to the tangibles and the less significant one was related to sympathy dimension.

**Conclusions:** By studying the gap between perceptions and expectations of students from counseling services, we can provide the base for developing appropriate programs for the improvement of counseling services.

**Keywords:** Student Counseling Center, Service Quality, SERVQUAL Model

## 1. Background

Although delivering student counseling service does not have long history, during this short period of time there have been significant changes in roles, considerations, and novel challenges on student counseling. As an example, current roles in student counseling services are not limited to clinical problems, hereby this is of most importance, but in comparison a movement has been used by counselors from applying clinical documents to health-oriented documents. Today, the most significant challenge of student counseling center is to make students ready to engage in a successful reality-based life not to treat a disorder. Also, entering to problematic life of 21 century has introduced a new challenge to student counseling center among which the most important question is that if student counseling is useful? Providing answer to such a kind of question opens a new window for student counseling center to think more on measuring student counseling (1).

Although the empirical evidences support the point that student counseling if to some extent an useful practice, the point in the area of mental health is that there

are some differences between to be significant statistically or clinically (2). The way to fill the gap is to highlight the neglected role of student counseling called measurement and responsiveness (3). One of the most applicable questions in the area of measurement and responsiveness is that whether the student counseling service is of high quality (4). Although some models are going to introduce to measure student counseling services (5), introducing different service quality measurement model in majors related to management are increasingly get more attention and applications in measuring service quality rendered in mental health center. Accordingly, more than 40 studies applied SERVQUAL model to measure health care service quality (6). SERVQUAL is one of the most authentic and considerable models to measure service quality. In the model, it is supposed that we can probe the depth of service quality whenever the distance between delivered service and expected one is very short (7). Therefore, the main point in quality measurement is to study the gap between received and expected services (8).

Student counseling is considered as delivery service type. Each student counseling service should offer three

main roles in delivering service to students. The most significant one is to render counseling and clinical service to the students encountered to personal adaptations and also professional, developmental and psychological difficulties which deserved to receive specific care. The second role is prevention; it means to help students to know themselves and to learn some skills that support them to achieve their educational purposes and life ideals. The third one is to support and to promote student health quality through consulting and finding problems. Accordingly, a student counseling center is supposed to offer programs, applications and services such as educational counseling, occupational counseling, personal counseling, administering mental tests, to do monitoring and training, conducting research, professional promotion, teaching and official affairs (9). In competitive environment, quality is considered as determinative factor to achieve success and any kind of reduction in customer satisfaction due to weak quality is issue of importance (10).

In the studies conducted in Iran focused on youth mental health, especially Iranian students, there has been an emphasis on expansion of mental disorders in them. Based on a country-wide study on investigation of mental health in students, it has been understood that 16 percent of students are at risk of mental disorders (11).

A study carried out with title "educational quality of private center in Malaysia using SERVQUAL model". All 431 students who were studying in the private center in Malaysian universities were invited to participate in the study. SERVQUAL questionnaire has been used to collect the data. According to the results, in appearance and facilities there has been no gap observed. But, some gaps have been found between students' perceptions and expectations (12).

A study conducted titled "Quality of services in university application using SERVQUAL model". Samples were 300 postgraduate students. SERVQUAL questionnaire and interview have been applied to collect the quantitative and qualitative data, respectively. The results have shown that there were some gaps between student's perceptions and expectation in all five dimensions of SERVQUAL model. The biggest gap was related to sympathy and the smallest one was related to appearance and facilities (13).

Analyzing the quality of educational services from students' point of view in Ghazvin University of Medical Sciences during the year of 2011, it has been found that, in all five dimensions of educational services, there was a negative gap in terms of quality. Therefore, students' expectations were higher than their perceptions about the existing conditions. And none of their expectation has been qualified (14).

A study carried out on educational service quality from

students' point of view using SERVQUAL has shown that students' expectations were higher than real conditions. And, none of their expectations in terms of educational services have been qualified. Also, in order to improve quality of educational services, all dimensions, especially sympathy, should get enough attention (15).

In a related study on services quality of higher educational center in Tabriz, it has been shown that the center had different levels of gap in all the dimensions and could not satisfy the expectations of the students who were considered as their main clients. The results showed that the main gap (1.21%) was observed in terms of sympathy and the least amount of difference (0.76%) was related to assurance. Also, the results related to prioritizing five dimensions indicated that they could be ranked in students' point of view as follow: sympathy, trust ability, assurance, superficial factors and organization facilities. In the other words, the understudied centers showed the main gap in sympathy which in turn was selected as the most important dimension (16). The results obtained by study which was titled "the relationship between service quality and its clinical consequence and carried out on health care centers" showed that there is a kind of significant relationship between service quality and clinical consequences in such a way that the higher the quality, the better the clinical consequences will be achieved (17).

In addition, the findings of a study entitled "patient satisfaction from service quality in Saudi Arabia's' hospital" using SERVQUAL model" indicated that some factors such as gender, training, income and career were statistically influential in patient's satisfaction (18).

Moreover, the results of a study related to applying service quality measurement in measuring mental health services using SERVQUAL model in daily care association showed that the model is applicable to measure mental health service quality and it can be used to measure service quality rendered in these associations. Also, some points related to the limitations of the model in measuring service quality in terms of mental health were presented (19).

Furthermore, in a study carried out with the title of "the role of attitude and knowledge of students about psychological problems and services on referring to student counseling center", 150 male and female students from Shahed and Amir Kabir universities in years 2005 - 2006 participated in 3 groups: students referring to student counseling centers, students with problems in field of mental health and non-referring and healthy students. The results showed that the non-referring group had lower mental health and less knowledge and more negative attitude about mental health problems. Also, referring group to counseling centers had positive attitude and more knowledge than the other two groups. In addition,

the female students had more positive attitude about mental health problems than the male students (20).

In another study in the field of mental health entitled as “evaluating educational programs of mental health education and counseling center of Isfahan’s university of medical sciences”, the participants consisted of those individuals who had taken part in training periods of counseling center from April 2001 to August 2003. The findings indicated that mental health education and counseling center association with determining mild mental problems of clients acted successfully. According to the criterion given for evaluating educational programs of the center, educations of the center has been partially successful in improving clients’ knowledge and performance (21).

The increasing number of students are challenging with severe psychological problems. Some rare problems in the past including mood disorder, anxiety and depression are more common than past (1). Therefore, not only offering student counseling services are important and essential but also measuring service quality level are important and essential. The questions developed for this study are as follow:

Are there any differences between dimensions of students’ perceived and expected counseling service quality in student counseling center?

Are there any differences between appearance and students’ perceived and expected facilities in student counseling center?

Are there any differences between students’ perceived and expected reliability in student counseling center?

Are there any differences between students’ perceived and expected level of responsiveness in student counseling center?

Are there any differences between students’ perceived and expected assurance in student counseling center?

## 2. Objectives

The purpose of this study was services quality measurement of the student counseling center in university of Bojnord using SERVQUAL model.

## 3. Methods

According to the purpose, this is an applied research. Because the study aimed to promote and adapt SERVQUAL as model to measure service quality offered in student counseling center, therefore, the study tried to introduce new application to measure student counseling service quality. With respect to data collection procedure, this

is a cross-sectional descriptive research, because the purpose behind the study was to evaluate, describe and analyze the present conditions on offering student counseling services’ quality in the university of Bojnord.

Total number of population was exactly consisted of 253 students. In one hand, to do sampling necessitate having list of population in the other hand, to have the list of population (the students who wanted to refer student counseling center during 4 February to 6 July) was not feasible before conducting the research, therefore, the questionnaire has been distributed among all the students who referred the student counseling center as client from April to July. So, sampling was done completely and exactly on the basis of number of population (22). To construct a questionnaire for measuring quality of rendered services in student counseling center based on SERVQUAL model, a bank of questions was developed at the beginning. Because there was no questionnaire developed to measure service quality offered in student counseling center based on SERVQUAL model in the literature, first of all, the existed questionnaire used to measure service quality in banking and mental health were provided to be used as basis for extracting some questions that had some commonalities with student counseling center. Afterward, preliminary questionnaire developed by experts were collected and, then, in a meeting with supervisor and advisor, the last version of questionnaire consisted of 37 questions including five dimension (11 questions assigned to tangibility, 7 questions to reliability, 6 questions to responsiveness, 5 questions to assurance and 8 questions to sympathy) by using 7 scale ranged from totally agreed to totally disagreed. Finally, a questionnaire including 37 questions was distributed among 50 persons of students who referred counseling center. Data analysis has shown that the correlation between all the questions with whole test was higher than 0.30 which in turn was considered as an acceptable discrimination index. Therefore, no question has been removed from the questionnaire in this step and the final version was used as research instrument. Content validity affirmation was done by 10 field experts working on counseling and psychology. Also, reliability of the questions obtained by using Cranach’s alpha and split-half coefficients was ranged from 0.70 to 0.91, respectively. Questionnaires were given to and filled out by students with the consent of all of the participants. They were assured that the responses would be kept confidential. To analyze the data, Wilcoxon signed-rank test was applied. Since the number of questions in each dimension was different, for the purpose of comparison, the range of scores was equalized in all dimensions from zero to one hundred.

#### 4. Results

Out of 253 students who participated in the study, 198 students (78.3%) were male and 55 students (21.7%) were female. Also, 248 students (98%) were studying in bachelor degree and 5 students (2%) in master degree. Among the participants, 210 students (83%) were single and 43 (17%) other students were married. Among all the participants, 145 (57.3%) students referred the center just for once, 61 students (24.1%) referred the center twice, 36 students (14.2%) referred there three times, 7 students (2.8%) referred there four times and 4 students (1.6%) referred there five times or more and all of them were benefited from student counseling services. Test of normality of score distribution using Kolmogorov-Smirnov, showed that all the dimensions except service quality ( $Z = -0.04$  and  $P > 0.20$ ) were not normal. Therefore, in order to investigate the probable gap between perceptions and expectation factors in all the dimensions of SERVQUAL model and also service quality, due to the violation of normality assumption, Wilcoxon signed-rank test has been used.

The results presented in the Table 1 indicate that the gap between perceived and expected service quality is equal to -64.20 which in turn is an indicator of existed gap between students' perceptions and expectations. As seen in Table 1, the gap is statistically significant ( $Z = -12.91$  and  $P < 0.0001$ ). Therefore, it can be concluded that there is a significant gap between the quality which the student expect and what they receive from counseling services. The mean gap between perceived and expected tangibility was equal to -22.96 which in turn was an indicator of existing negative gap between students' perceptions and expectations in terms of tangibility. According to the Wilcoxon test results, this gap is statistically significant ( $Z = -12.76$  and  $P < 0.0001$ ). Thus, it can be concluded that there is a significant gap between students' perceptions and expectations about tangibility. The average gap between perceived and expected reliability was equal to -11.92 through which the existence of negative gap between student perceptions and expectation on reliability was evident. According to Wilcoxon test results, the gap is statistically significant ( $Z = -12.92$  and  $P < 0.0001$ ). So, it can be stated that there is a significant gap between students' perceptions and their expectations on reliability. The average gap between perceived and expected responsiveness was equal to -10.45 which in turn indicated that there is negative gap between students' perceptions and expectations of responsiveness. With respect to Wilcoxon test results, the gap is statistically significant ( $Z = -12.45$  and  $P < 0.0001$ ). Accordingly, it can be concluded that there is a significant gap between what students expected and what they perceived. The average gap between perceived and expected assur-

ance was equal to -7.79 which in turn indicated that there was a negative gap between students' perceptions and expectations of assurance. The Wilcoxon test results showed that the gap was statistically significant ( $Z = -12.26$  and  $P < 0.0001$ ). Therefore, it might be concluded that there is a significant gap between what the students expected and what they perceived of assurance.

The average gap between perceived and expected sympathy was equal to -11.07 which indicated that there was a negative gap between students' perceptions and expectations about sympathy. With respect to Wilcoxon test results, the gap is statistically significant ( $Z = -12.18$  and  $P < 0.0001$ ). According to the radar chart, the largest gap is related to the dimension tangibility and smallest one was related to the dimension sympathy.

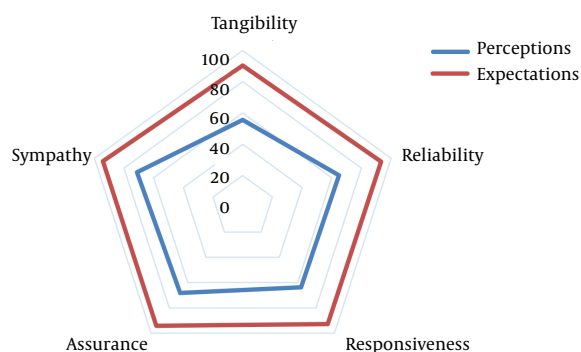


Figure 1. The Gap of Perceptions and Expectations in Five Dimensions of SERVQUAL

#### 5. Discussion

Entering to current century, counselors, especially student counselors are facing with increasing number of challenges. Knowing students' needs and expectations for receiving main counseling services is one of them (5). Therefore, the study of probable gap between rendered and optimized services in the students' point of view is a necessity. The present study also aims to study the probable gap between existed and students' expected services in terms of student counseling. Accordingly, all the 253 students who referred student counseling center from April to July completed the adapted SERVQUAL questionnaire used for measuring student counseling services. The results showed that there are statistically significant gap between students perceived and expected service quality in all five dimensions of SERVQUAL model namely tangibility, reliability, responsiveness, assurance and sympathy. Also, the results demonstrated by radar chart showed that the

**Table 1.** The Comparison of Perceptions and Expectations in Dimensions of SERVQUAL

Variable	Perceptions M $\pm$ SD	Expectations M $\pm$ SD	Gap M $\pm$ SD	Wilcoxon St	P Value
Service quality	178.54 $\pm$ 37.95	242.75 $\pm$ 28.06	-64.20 $\pm$ 45.05	-12.91	0.0001
Tangibility	47.70 $\pm$ 11.35	70.66 $\pm$ 9.46	-22.96 $\pm$ 14.74	-12.76	0.0001
Reliability	34.26 $\pm$ 9.14	46.19 $\pm$ 5.68	-11.92 $\pm$ 10.17	-12.92	0.0001
Responsiveness	28.93 $\pm$ 8.78	39.38 $\pm$ 6.46	-10.45 $\pm$ 10.38	-12.45	0.0001
Assurance	25.45 $\pm$ 6.74	33.25 $\pm$ 4.13	-7.79 $\pm$ 7.54	-12.26	0.0001
Sympathy	42.18 $\pm$ 10.35	53.25 $\pm$ 6.16	-11.07 $\pm$ 11.59	-12.18	0.0001

largest gap is related to tangibility and smallest gap is related to sympathy. To interpret the data some points are worth mentioning: discussing service quality can be developed when service-rendering organizations revolutionize themselves in order to overcome some preliminary challenges such as essence of service offering, ways to offer services, space used to offer services and its exert human resources employed in the organization. Therefore, when the organization or service-offering entity is engaged with some preliminary affairs such as establishing service offering, recruiting, training, providing equipment and etc., the organization is not worried about measuring service quality. In fact, reflecting on the measurement of service quality is achieved when the organization is able to pass some preliminary steps in organization improvement (23).

The second issue is related to the adaptation between services offering with needs of customers who received the services. They also introduced it as an important issue in interpreting gap in SERVQUAL model. They believed that the fundamental reason behind the existence of gap between expectations and perceptions is related to lack of knowledge before organization about costumers' needs (24).

The next point about services is whether they are governmental and non-governmental? According to the study, insurance organization, private banks, private housing and even open universities offer better services than governmental centers, even though services offered by governmental centers are cheaper and more economic. Accordingly, American students' health community (2008) state that with respect to challenges in assigning health services to private section, results obtained from such assignment in private section is more hopeful than in public section. Therefore, assigning health services to private section can be regarded as offering better services. The other key point is related to an issue, known as stability in management. In some texts related to service quality it is consistently stated that some organizations that benefit from stability in strategic decision making process have more satis-

fied customers. Accordingly, some strategic positions including selling section, advertisement section and attracting investment or investors benefit from long lasting managers in order to have more satisfied customers. According to these findings, the results obtained in health care center in hospitals have showed that when the managers last for at least five years, then some quality-enhancing programs will be realized. They believed that after passing five years the manager benefit from some managerial experiences which, as a result, direct them from instability in organization management to offer more optimized services (25).

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### Footnote

**Authors' Contribution:** This paper is based on an MA thesis. The first author is Arezoo Zarebi. The second co-author is Hadi Abbassi. The third co-author is Ahmad Heydarnia.

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