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## **Research Article**

# A Study of Factors Affecting Acceptance of Counseling Service System: Service Users' Perspective

Hsiu-Hao Liu

The Ph.D. Program in Business and Operations Management, College of Management, Chang Jung Christian University, No.1, Changda Rd., Gueiren District, Tainan City, 711301, Taiwan

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#### **ABSTRACT**

As the most important case management system in school counseling works, the counseling service system must meet the needs and expectations of the school teacher-counselors (the main users). Semi-structured interviews were used to interview school teacher-counselors who have experience in using the system in Tainan. The data are recorded and semantically analyzed after the interview, and the critical factors that affect the system acceptance of the school teacher-counselors are summarized. The conclusion was to discuss the implications of this research and to suggest several future research issues.

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## 1. Introduction

Case management is a work method or process for providing the services that clients need in an integrated, effective and efficient manner [1]. The counseling service system is the most important case management tool for school counseling works. In addition to daily counseling affairs, the school teacher-counselors use the system to record the background information, counseling records, referrals, and other operations of the case. However, the system design at this stage cannot be recognized by most of the teacher-counselors, so it does not give the expected help to the counseling works [2], and also goes against the original intention of the system design.

Researchers have used self-made questionnaires in the previous studies to understand the current status of teacher-counselors' use of the counseling service system [2]. Obtained the result that the teacher-counselors have low system satisfaction and system

usage intention under different background changes. Through further analysis, it is found that the two aspects, perceived usefulness and usage attitude, affect the system usage intention.

Based on the research background mentioned above, it shows that the viewpoints between system designers and users are very different, and user experience is one of the important factors affecting system design [3]. Therefore, this research aims to explore the critical factors that affect the system acceptance of teacher-counselors by qualitative research methods, and provide suggestions for relevant agencies to improve the system.

## 2. Background

The school teacher-counselors collects case data in the school, and the obtained information can be input into the system and then managed by the Tainan Students Guidance and Counseling Center. The functional connection planning is as Figure 1.

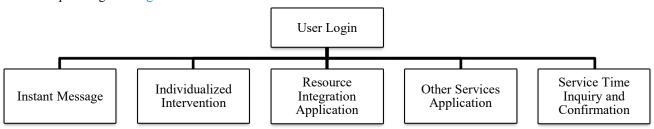


Figure 1 The main functional items of the counseling service system (Teacher-counselors)

The Technology Acceptance Model (TAM) is a validated model that can effectively explain the relationship between usage attitudes and usage intention [4,5]. Referring to previous studies, the usage intention of the counseling service system could be effectively predicted by perceived usefulness and usage attitudes, but it was also found that system quality and perceived ease of use also have a high positive correlation with usage intention [2]. Therefore, this study uses five dimensions of system quality, system response time, perceived usefulness, perceived ease of use, and usage attitude to compile a semi-structured questionnaire, for a more in-depth exploration of the actual use experience of the teacher-counselors.

# 3. Research Methods

# 3.1 Research Design

The structure of qualitative interview questions can be divided into: 1. Structured interviews, also known as standardized interviews, refer to the interview content and questions prepared in advance; 2. Unstructured interviews, also known as non-standardized interviews, refer to the undeveloped interview topics, from the focus of the research participants. Questions are asked according to the needs of the interview situation; 3. Semi-structured interviews stand between structured and unstructured ones. The interview content is prepared in advance, and adjusted according to the subsequent situations [6,7].

The present study adopts semi-structured face-to-face formal interviews. Through one-to-one in-depth interviews with research participants, the content and data of the interviews are analyzed, reviewed, aggregated, and summarized to determine the dimensions of critical factors that affect the system acceptance.

# 3.2 Participant

In the present study, purposive sampling was adopted, and "information-rich cases" were selected as research participants. A total of four "information-rich cases" were selected.

The selection criteria for the participants in this study are as follows:

- Who are full-time teachers in Tainan Elementary Schools (including public and private).
- Who have consulting-related backgrounds and still using the counseling service system.
- Who are willing to share personal experiences related to research topics.

The researcher contacted the potential participants through his workplace, and a total of four current full-time school teacher-counselors who meet the selection criteria and are willing to accept the interviews were invited. Their seniority ranged from three to five years. The researcher completed the interviews in November 2020.

### 3.3 Research Tools

Based on the researcher's previous questionnaire, the present study focuses on an in-depth exploration of the critical factors of the system acceptance of the teacher-counselors.

The interview content is divided into two parts as below:

- Explore the main motivations and functions of using the system.
- Explore the attraction and resistance factors of using the system.

## 3.4 Data analysis

Ahead of the interview, an interview outline should be drawn up according to the research question and the purpose of the study. The researcher sends the interview outline to the participants to discuss the direction and the content of the interview firstly.

After the interview, the recording files of each participant were compiled into a verbatim manuscript, the key points were sorted out and analyzed, and the elements and the core themes were summarized. Finally, the interview interpretation was written, and the interview interpretation was sent to the participants. In addition. the "Research Participant Interview Interpretation Confirmation Reply Form" was attached. The participants were asked to check the correction of the researcher's interpretation of the interview content, and to correct any doubtful points for further discussion and clarification.

For the purpose of interpreting the experience and the information of the participants, the original interviews were interspersed with the description of the thesis when writing the paper. When quoting the content of the interview, if the entire conversation is quoted, it will be framed with quotation mark. The source of the interview content is marked after the quoted paragraph, such as A001: the first English letter is the respondent code, and the last three numbers are the paragraph number of the interviewed content.

In quoting the entire conversation, to make the theme clearer, ellipsis will be used when some interview sentences are deleted. In order to facilitate the smooth reading of the quotation, it will be indicated by parentheses as the text added by the researcher [6,8].

## 4. Research Results

The main purpose of the study is to explore the critical factors of the system acceptance of teacher-counselors. First of all, it can be known from the interview content that the main reasons of the participants using the system are due to the requirements or regulations. The system is only used without choice, and the case records are passively registered when the cases needs to be referred.

"It was because the Student Counseling Center asked us to attend a meeting, and then announced that from now on we will use and fill in the online record form." (A001) "...Because the incident itself was a crisis at that time, we had to ask for the tertiary prevention psychiatrist,

which is the part of emergency intervention in school services. Then, (the psychiatrist in the school) he reminded us that we must enter the system, and then make such an application." (B001)

"If you want to transfer the secondary prevention case to the tertiary prevention. (the Student Counseling Center) They stipulate that there must be a record which is uploaded." (C002)

Secondly, the background variables of the teachercounselors are also one of the factors that affect the intention of using the system. Three of the participants thought that the usage frequency and the average time of each using the system would affect the usage intention because they may become more proficient or unsatisfied as they learn more about the functions of the system.

"The reason of the frequency of using the system is more relevant to the reason of the average time of using the system. Those who use it more frequently should know more about the advantages and disadvantages of it. If there are many disadvantages, the users will be less satisfied. On the contrary, if there are many advantages, the users will be more satisfied." (A005)

Moreover, two of the participants believed that age or seniority is also one of the factors that affect the usage intention. Senior or elder teachers may be less familiar with operating information systems.

"In contrast to myself filling in (the system), our senior director or team leader may be less familiar with using computer and it will take them more time to do that." (D002)

Finally, we will discuss the participants' positive and negative opinions on the system. As for the attraction factor, two of the participants suggest that the use of systems would help their work. This is a Perceived Usefulness dimension.

"In order to write more detailed information down, you must spend more time to do some case review before you upload it (the Case Record). I think this is helpful for self-organizing and the case." (B005)

Another participant indicates that the system responded smoothly, which is the system response time dimension. For the resistance factor, three of the participants said that the review mechanism of the system is suspicious. One of the participants reflected the inconvenience of the countdown design and the lack of pre-teaching and post-assistance in the system. All of the above can be summarized in the system quality dimension.

"...These team leaders, directors, and principals are able to read and reached those cases (records), ..., I just think why the director, group leader, and principal were also able to see it. If it's just a review, then what is the purpose of seeing these things, and what is the purpose of these case records and case conceptualizations?" (D010)

"I think the countdown timer is very unfriendly, ..., Then again, for the teacher who uses this system for the first time, I think he is also relatively unfriendly because he only introduced the system to the teacher-counselors and tell us how to use the system at the beginning, and then I reviewed it again. He actually put a teaching manual on it, but the content is trivial and complicated." The four participants agreed that the system cannot protect the safety of case data and that the uploading

behavior may cause personal information leakage. This is the usage attitudes dimension.

"As far as I know, this system is no longer specifically managed by certain protection, especially his database for storing data. I heard that there is no specific person manages it. Then how do we know that after we fill in the information of these case, this will not be leaked? Or it will not be used?" (A009)

"As for the confidentiality of this (case records), it should be the unit that requires us to report. They must be themselves, and they must be ethically confidential and protected. Since they have designed this (system), there should be a mechanism." (D012)

## 5. Discussions and Suggestions

Based on the above, the researcher sorted out the critical factors of the system acceptance of the teacher-counselors. There are five main dimensions and eleven criteria (Table 1)

Dimensions	Demographic Characteristics	System Quality	System Response Time	Perceived Usefulness	Usage Attitudes
Criteria	<ol> <li>Age and Seniority</li> <li>System Using Frequency</li> <li>The Average Using Time</li> </ol>	<ol> <li>Ensure that the audit mechanism is reasonable and confidential</li> <li>Provide sufficient time to fill in</li> <li>Provide adequate pre-training and post-event assistance</li> </ol>	1. Smooth system response	<ol> <li>Provide a unified file format</li> <li>Contribute to case analysis</li> </ol>	<ol> <li>Have a good management authority design</li> <li>Ensure the confidentiality of case information and counselling records</li> </ol>

Table 1 The structure of the critical factors for the counseling service system acceptance

Compared with the results of previous questionnaire surveys, the usage attitude has been mentioned all the time. Research conducted in the past also confirm that there is a positive correlation between the usage attitude and the usage intention [9,10]. It shows that the usage attitude dimension require highly attention.

In the future, this study will continue to extend the scope of research to practitioners in different backgrounds, such as junior and high school teacher-counselors, and counseling psychologists, to enrich the five dimensions. Finally, during the interview, many participants mentioned their concerns about participating in this study. Compared with other teachers, the teacher-counselors form a more closed group. If the upper-level authorities use this study to investigate the identity of the participants, it may affect the rights of many teachers. Therefore, it is recommended that researchers pay more attention to the research description and confidentiality when conducting closed group interviews so that participants can express their feelings without scruples.

#### **Conflicts of Interest**

The author declares no conflicts of interest.

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#### **Authors Introduction**

Mr. Hsiu-Hao Liu



counseling.

He received his Master's degree from the Department of Psychology, National Chung Cheng University, Taiwan in 2015. He is currently a Doctoral course student in Chang Jung Christian University, Taiwan. His research interests include the application of information technology to education and

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