

Relationship between Job Satisfaction, Critical Thinking Disposition and Clinical Competence of Dental Hygienists

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Abstract. This study was a descriptive correlation study to increase understanding of, and relationship among job satisfaction, critical thinking disposition and clinical competence of dental hygienists. Survey were undertaken by dental hygienists working at the dental clinics located in B City from May 2012 to January 2013. A total of 176 questionnaires, excluding 24 incomplete ones, were analyzed. The influencing factors on clinical competence of dental hygienists, it appeared that there were positive correlations between critical thinking, job satisfaction. It appeared that the higher the critical thinking, the higher the decision making ability, and the higher the job satisfaction, the more those factors affected the clinical competence. The result of this study indicate confirm that critical thinking and job satisfaction should be considered in order to improve the clinical competence of dental hygienists, This study suggests an attempt at intergrated education for the qualitative improvement of clinical dental hygiene services and the revitalization of such a program.

Keywords: Clinical Competence, Critical Thinking, Job Satisfaction, Dental Hygienist

1 Introduction

With changes to the internal and external dental and medical environment, such as the development of dentistry technology, improvement of people's dental knowledge, and changes in their desire for oral health, there is a need for high-level specialization and qualitative improvement of subdivided dental care services. Highly professional clinical competence by dental hygienists is required for the qualitative improvement of dental care services. Therefore, in clinical practice, dental hygienists need to judge patients' conditions correctly, predicting and coping with problems that may occur. High-level job performance capabilities are required by dental hygienists, who are the resources for creating knowledge and value in the field of oral health services.

In order to increase the work ability of dental hygienists, it is necessary to establish a suitable dental hygiene plan that is based on the analysis results of the individual characteristics required to perform the position. Clinical performance is a basic condition of clinical practice and may be related to various factors. Most previous studies only involved a single variable and few holistic approaches include a variety

of factors. As such, there are currently few studies on the factors that affect the clinical competence of dental hygienists.

This study aims to assist in the improvement of dental hygienists' clinical competence by identifying the relevant and analyzing the factors that affect their clinical competence.

2 Subjects and Method

2.1 Research Subjects

Surveys were undertaken by dental hygienists working at the dental clinics located in B City from May 2012 to January 2013. A total of 176 questionnaires, excluding 24 incomplete ones, were analyzed.

Table 1. Reliability Analysis.

Variables ¹⁾	Mean±SD	Cronbach's α
Clinical Competence	3.45±0.46	0.936
Critical Thinking	3.18±0.26	0.798
Job Satisfaction	3.04±0.29	0.803

2.2 Research Methods

Clinical Competence :The clinical competence tool developed by Won-hee Lee et al. and the modification by Hyun-young Choi was used. A higher score represented a higher clinical competence.

Critical Thinking: This involved an individual's ability to make judgments for himself or herself in order to undertake problem solving and decision making within personal and professional work. The California Critical Thinking Disposition Inventory (CCTDI), which was modified and supplemented by Ji-won Hwang, was used and a higher score represented a higher critical thinking disposition.

Job Satisfaction:This involved the favorable attitude toward his or her job, and the positive psychological state that occurred with different job characteristics and clear work requirements. This study used the tool developed by Slavitt et al. that was modified and supplemented by Geum-hye Won. A higher score represented higher job satisfaction.

2.3 Statistical Analysis

The questionnaire's scores were statistically analyzed using SPSS Statistics 2.0 and the level of significance was 0.05. The general subject characteristics were presented as a number and a percentage. The differences in critical thinking disposition, clinical competence, job satisfaction, decision making ability, and autonomy according to the subjects' general characteristics were analyzed using t-tests and ANOVA. Pearson's correlation coefficient was used to analyze the relevance between clinical competence, critical thinking, job satisfaction, and autonomy. Multiple regression analysis was used to analyze the affecting factors.

3 Results

Of the subjects, the percentage of those who were 26–35 years old was 59.7% with an average age of 30.07. The three-year college graduates accounted for 58.0%. The most common period of work experience was less than 1–5 years (47.2%) and 69.3% of these were working in the consulting rooms.

As a result of analyzing clinical competence, critical thinking, job satisfaction, according to the general characteristics, the score of university and college graduates was higher than that of graduate school graduates ($p = .02$), showing a significant difference.

As a result of investigating the relevance between clinical competence and critical thinking, job satisfaction, decision making ability, and autonomy, it appeared that there were positive correlations between critical thinking ($r = .467$, $p = .000$), job satisfaction ($r = .312$, $p = .000$).

It appeared that the higher the critical thinking ($\beta = .325$, $p = .000$) and the higher the job satisfaction ($\beta = .167$, $p = .008$), the more those factors affected the clinical competence.

4 Conclusion

Taking into account that clinical competence is very important to dental hygienists, this study conducted descriptive analysis to investigate the effects on the clinical competence via a survey for the dental hygienists who were working at the dental clinics located in B City from May 2012 to January 2013. The purpose of this was to use it as baseline data for ensuring the excellence of dental hygiene work and expanding the specialized area. Overall, 176 persons agreed to participate in the study for the final analysis the purpose of the study was explained to them.

The clinical competence of dental hygienists is an essential requirement for dental hygienists to provide patients with a safe and qualitative dental hygiene process, and its evaluation is very important as it is closely related to the efficient human resource management of dental clinics. The difference in clinical competence according to the general characteristics was high for 26–35 years old, higher education, work experience of less than one year and more than eleven years, and consulting room

work; however, there was no significant difference. In Jin-a Park's study, with participants who were older than 36 years, there were statistically significant differences in the clinical competence scores of the groups who had clinical experience of less than 5–10 years and more than 10 years compared to other groups. Mi-hye Sung and Ok-bong Um reported that there were significant differences in role, age, clinical career, current position, and department. As the acquisition of knowledge and technology is an important element in improving clinical competence, the improvement of the working environment in dental clinics and the conditions for increasing satisfaction of work will need to be provided. Overall, critical thinking, job satisfaction of dental hygienists, which are the factors affecting the clinical competence of dental hygienists, were similar in level to other professionals, and it could be seen that the higher these factors, the higher the clinical competence.

However, there are some limitations in conducting studies when they are directly compared with the previous studies because there are insufficient studies about the effects on clinical competence for the dental hygienists. It is thought that the studies to increase the clinical competence of dental hygienists and in-depth studies on the factors that affect it are needed, and the studies and education on the various factors that can increase the professional and efficient clinical competence of dental hygienists need to be made.

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