



Ethical Propensity, Self-esteem, and Satisfaction of Dental Hygiene Students in South Korea

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Dear Editor in Chief

Dental hygienists communicate with patients in person and often have to make ethical judgments during the course of treatment. As the decisions made based on these judgments exert a direct influence on the oral health of patients, ethics education geared for dental hygienists is important. This study examined the ethical propensity of undergraduate students of dental hygiene and its relationship to self-esteem and level of satisfaction with the choice of specialization.

From the 87 colleges across the nation that had dental hygiene departments, 28 colleges were randomly selected for the survey and 1,803 students answered the questionnaire that included the Ethics Perception Questionnaire (EPQ) and an adapted version of the Cooper Smith Self-Esteem Inventory (CSEI). The responses from 1,789 students provided complete and non-ambiguous responses were statistically analyzed.

The absolutists had the highest levels of satisfaction (3.95) followed by situationists (3.89), and subjectivists (3.63). The exceptionists scored the lowest (3.44) and this difference was statistically significant ($P < 0.001$). The differences in self-esteem were not statistically significant ($P > 0.05$) (Table 1). To determine the factors independently linked to level of satisfaction with choice of field,

multinomial logistic regression analysis was performed with satisfaction levels as dependent variable, and the socio-demographic characteristics, ethical propensity subtype, and self-esteem as independent variables (Table 2). The students from three-year school programs were likely to be 15% less satisfied than the students from four-year school programs were. The absolutists and the relativists were 4.13-fold and 2.13-fold more satisfied respectively than the exceptionists. The group with self-esteem scores above 2.76 was 1.25-fold more satisfied than the group with scores less than 2.75.

The differences in self-esteem were not statistically significant ($P > 0.05$). Satisfaction levels had a significant positive correlation with idealistic propensity, relativistic propensity, general self-esteem, and academic self-esteem. In one study, argued that students would be able to build up their ethics when appropriate ethics education is provided (1). Ethics education enables students to make the right judgment when they are confronted with an ethical problem (2). However, ethics education is not routinely provided in many countries including South Korea, where it is provided in select colleges only (3).

Table 1: Major suitability by the ethical-type and self-esteem (n: 1789)

Characteristics	n (%)	Mean±SD	P-value
Ethical-type			< 0.001
Absolutists	301 (16.8)	3.95±0.53 ^a	
Situationists	678 (37.9)	3.89±0.60 ^{ab}	
Subjectivists	429 (24.0)	3.63±0.57 ^b	
Exceptionists	381 (21.3)	3.44±0.53 ^c	
Self-Esteem			0.140
<2.76 points	865 (48.4)	3.72±0.66	
≥2.76 points	924 (51.6)	3.76±0.54	

P-values obtained from t-test or one-way ANOVA.

^{a,b,c}The same characters was not significant by Bonferroni's multiple comparison at $\alpha=0.05$.

Table 2: Multivariable logistic regression about associated factors of the major suitability

Independent variables	Major Suitability †	
	OR(95% CI)*	P-value**
District of residence		
Seoul, Gyeonggi	1.88(1.25-2.94)	0.005
Gangwon	1.29(0.84-1.98)	0.232
Gwangju, Jeolla	1.91(1.22-2.99)	0.005
Daejeon, Chungcheong	1.44(0.93-2.23)	0.096
Daegu, Busan, Gyeongsang	Ref	
School system		
3-year course	0.85(0.67-1.98)	0.003
4-year course	Ref	
Grade		
1 grader	1.10(0.73-1.67)	0.621
2 grader	1.35(0.87-2.08)	0.170
3 grader	1.32(0.86-2.03)	0.202
4 grader	Ref	
Number of sibling		
Only child	0.89(0.47-1.71)	0.748
1 person	0.95(0.59-1.53)	0.839
2 persons	1.10(0.67-1.81)	0.700
3 or more persons	Ref	
Religion		
Christianity	0.86(0.67-1.11)	0.263
Catholic	0.77(0.55-1.07)	0.124
Buddhism	1.15(0.74-1.79)	0.522
Others	Ref	
Ethical-type		
Absolutists	4.13(3.31-5.45)	<0.001
Situationists	2.13(1.65-2.74)	<0.001
Subjectivists	0.93(0.69-1.26)	0.679
Exceptionists	Ref	
Self-Esteem		
<2.76 points	1.25(1.02-1.53)	0.027
≥2.75 points	Ref	

*: OR: odds ratio, CI: confidence interval./ **: by multivariable logistic regression analysis.

†Major Suitability: Wald chi-square test. Model chi-square=201.33, df =18, pseudo R-square=14.4% (Nagelkerke), $P<0.001$.

Our study also shows significant inter-relationships across the suitability of choice of field, ethical propensity, and self-esteem. The finding that the students from the three-year school systems were less likely to be satisfied with their choice of field than their four-yr counterparts, along with the predisposition of specific school systems to be geographically oriented, indicates a possibility of a relationship between these two variables. In addition, the subtype of ethical propensity was also found to affect satisfaction with choice of field.

The absolutists, whose idealistic propensity was strong and relativistic propensity was weak were more satisfied than the exceptionists, whose idealistic propensity and relativistic propensity were both weak; the situationists, whose idealistic propensity and relativistic propensity were both strong were also more satisfied than the exceptionists were. This denotes that satisfaction with choice of dental hygiene as a field of specialization is more positively affected by idealistic propensity than by relativistic propensity. The finding that absolutism is characterized by a stronger ethical propensity and is correlated with satisfaction levels, suggests that the change in ethical propensity could exercise an influence on level of satisfaction with choice of field.

An individual's moral values depend on his/her environments and level of knowledge (4). This signifies the need to provide ethics education programs geared toward boosting idealistic propensity as part of the dental hygiene curriculum. Positive self-esteem has an impact on cognitive interpretation of satisfaction with choice of field

(5). As the participants were randomly selected through convenience sampling, their regional variability may limit the generalizability of the study findings. Nonetheless, the findings of the study that satisfaction with choice of field and self-esteem were closely correlated with ethical propensity in a sizeable sample of dental hygiene students from across the nation indicates the need to include ethics education as part of the dental hygiene curriculum.

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