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Quality of College Life of Dental Students in a Private Dental Faculty in Thailand

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Abstract
Quality of college life (QCL) has been a topic of increasing studies in health education administration. QCL tends to relate to students' satisfaction and academic achievement. Measuring QCL could provide valuable information for improving the curriculum, instructions, students' activities, and university services to respond to the needs and wants of the students. This survey research aimed to examine and compare the QCL of dental students at a private dental faculty in Thailand in 5 aspects: (a) academic life, (b) social life, (c) housing, (d) student friendship, and (e) student services. Data were collected by distributing self-administrative questionnaires to 478 dental students in a private university in Thailand. Descriptive statistics were used to analyze the data of the subjects in general, their perspectives on the study, and QCL while T-test and ANOVA with Sheffe's method were used for multiple comparisons in order to compare differences in QCL between demographic and study variables. The study results reveal that the overall QCL was at a moderate level (M = 3.49, SD = 0.33). The respondents rated their QCL in student friendship at the highest (M = 3.91, SD = 0.43), followed by housing (M = 3.68, SD = 0.49), and academic life (M = 3.53, SD = 0.50). There was a statistical significance at $p <$ 0.05 in the overall QCL among gender, period of study, GPAC, and experience in repeating a class. The findings of this study could improve the curriculum administration, including the curriculum design, instruction, student activities, development, and learning environment and facility arrangement.

***Keywords**: Quality of College Life, Dental Students, Private Dental Faculty*

1. Introduction

Dental education, like other fields of health profession education, aims to produce healthcare providers who can serve as change agents in healthcare services. The graduates are expected to be capable of addressing diverse contextual changes in the health system in the 21st century; namely, the aging society, the epidemiological transition, the shortage of health workforce, and the globalization challenges (Birch et al., 2021; Frenk et al., 2010). In 2021, the Ministry of Higher Education, Science, Research and Innovation of Thailand initiated the framework for educational quality development, aiming to provide educational institutions with a management approach to develop educational resources, education management, teaching and learning, and the outcomes of education administration which are student-centered (Ministry of Higher Education Science Research and Innovation, 2021). This is because the satisfaction of students, linked to their happiness, and their sense of belonging to their institution (Tian, Zhang, Zhou & Wu, 2021), was strongly associated with students' engagement (Elshami et al., 2021).

Since the Faculty of Dentistry was established at Chulalongkorn University in 1943, the education of dentists in Thailand has been mainly dominated by the public sector and for the public sector (Komabayashi, Srisilapanan, Korwanich & Bird, 2007).

The government subsidized the budget for producing dentists to work in rural areas. Similar to students admitted to the Doctor of Medicine and Bachelor of Pharmacy programs, the Ministry of Public Health required that those admitted to the Doctor of Dentistry program in a public higher education institution sign the contracts to work in any government agencies for at least three years after graduation. These policies have been implemented in 3 stages: (1) increase production of new dentists, (2) allocation of newly dental graduates to public hospitals, and (3) provide benefits for working in public hospitals. However, it may not completely resolve the oral health inequalities because the dentist retention rate in public hospitals depends on multi-dimensional considerations (Arunratanothai, Booncharoen, Suwankomolkul & Limpuangthip, 2022).

Free Trade Area (FTA) in healthcare services was a catalyst for the government to formulate the strategy of "Thailand the Medical Hub of Asia" as well as a health service system that responded to the need for the mobility of healthcare services (Marohabutr, 2020). The education of dentists by private universities was initiated in 2005 by establishing the Faculty of Dental Medicine at Rangsit University, which designed the curriculum as a bilingual to prepare the dental graduates for the mobility of healthcare services and studying abroad. After that, private universities have conducted Doctor of Dentistry curriculums, including the public universities offering international and bilingual programs. Most of the programs were separated into three periods of study which are (a) basic science and general education, (b) pre-clinic dental science, and (c) clinical practice in actual patients. The Thai Dental Council is a professional body that plays an essential role in regulating the education of dentists by defining the various domains of educational management, including the examination for registration as a dental professional (Thai Dental Council, 2012).

Studying the quality of life of the students in health science has gained widespread interest, especially in the education of dentists. (Al-Shibani & Al-Kattan, 2019; Andre, Pierre & McAndrew, 2017). Previous studies found an association between quality of life and dental students' stress level (Elani et al., 2014; Meira et al., 2022). In comparison to the general population, dental students were shown to be under high stress, anxiety, and burnout (Jiménez-Ortiz et al., 2019). There were factors related to dental students' stress levels, such as tight curriculum, high pressure of teaching and learning, the amount of work assigned, lack of time to relax, and relationships with peers and teachers, which were quality of academic life (Alhajj et al., 2018). Furthermore, the overall quality of life was related to physical health, psychological domain, social relationship, environmental domain (Al-Shibani & Al-Kattan, 2019), and the motivation to learn (Henning, Hawken, Krägeloh, Zhao & Doherty, 2011; Henning, Krägeloh, et al., 2011). Therefore, improving the QCL is essentially an integral part in raising student life satisfaction. In Thai, there have been several articles on QCL, including medical students' QCL. (Poomjan, 2017; Sithai & Jangboon, 2019) and nursing students (Sinsawad & Pittard, 2014; Tongsawang, 2017). The findings of those research have helped educational administrators at both the faculty and university levels enhance their students' QCL by altering the curriculum, learning and instruction, extracurricular activities, educational environment, and university services to meet their demands.

Although there were many studies associated with the quality of life and mental health of dental students in Thailand and international (Alhajj et al., 2018; Elani et al., 2014; Kaewsutha, Laosrisin & Visalseth, 2014; Weeraarchakun & Weeraarchakun, 2018), the study of QCL of dental students in Thailand was not present. This study aimed

to analyze and compare the QCL of dental students in a private dental faculty in Thailand in various variables, which were gender, accommodation during the study, monthly money allowance, period of study, cumulative grade point average (GPAC) , the experience of repeating a class. This study will provide program administrators with valuable information for adjusting the educational program administration to meet the demands of dental students.

2. Research Objectives

1) To examine the QCL of dental students in a private dental faculty in Thailand.

2) To compare the QCL of dental students in a private dental faculty in Thailand, classified by demographic and study data.

3. Research Questions

1) What level of QCL do dental students in a private dental faculty in Thailand have?

2) Which factors were associated with the QCL of dental students in a private dental faculty in Thailand?

4. Literature Review

Hendershott, Wright and Handerson (1992) studied the factors related to the quality of college life (QCL) by analyzing the relationship between college students' general data and the psychological assessment of college life. The QCL is divided into five domains (Hendershott, Wright & Henderson, 1992; Sirgy, Grzeskowiak & Rahtz, 2007)

Domain 1 Academic life included course offering, course content, level of difficulty of coursework, the teaching of courses, academic ability of other students, and availability of quiet areas.

Domain 2 Student social life included school-sponsored activities, concerts and plays, lectures/ speakers, dating, athletic events, off-campus clubs and bars, and on-campus apartment parties.

Domain 3 Housing included space limitations, lack of privacy, lack of freedom (university rules and regulations), and unsatisfactory maintenance and repair.

Domain 4 Students friendships: Students become integrated into a college community by separating from past communities (high school friends, family) and learning the values and expectations of the new community).

Domain 5 Student services: Variables within this domain include housing, food, public safety, counseling, health, religious center, and international student services.

5. Research Methodology

This survey research has been approved by the Ethical Committee of Rangsit University with reference number RSUERB2019-62 as a full board review. The questionnaires related to the survey were distributed to 508 dental students. Informed consent was obtained from all respondents, and all the respondents were assured of the confidentiality of personal information.

5.1 Population and sample

The study population comprised 656 dental students who enrolled from 1st year to 6th year in the College of Dental Medicine Rangsit University in the academic year 2019, with a sample size of 508 dental students calculated using Yamane's method for the representativeness of the dental students in each period of study (Yamane, 1973). Table 1

displays the population and sample size calculation. The sample was obtained by the multi-stage sampling technique. The quota was assigned to the year of study then the dental students were numbered in the order of students' ID. Statistical software was used to select the dental student numbers randomly. The dental students with the chosen numbers were asked to complete the questionnaires.

Table 1. Population and Sample

Year	Population	Calculated sample size	The 20% reserved sample size
Basic science and GE	243	151	181
Year 1	106		
Year 2	137		
Pre-clinic	200	133	160
Year 3	100		
Year 4	100		
Clinic	213	139	167
Year 5	98		
Year 6	115		
Total	656	423	508

5.2 Data collection tools

A self-administrative questionnaire was used to collect the data. The questionnaire constructed by reviewing the literature about QCL, was comprised of three parts: (a) general data, (b) study data, and (c) perceiving the QCL dental students. The QCL was composed of five aspects - academic life, student social life, housing, student friendship, and student services. Each of the questions was rated on five levels Likert scale, with a higher score signifying better QCL. To ensure content validity, the Item Objective Congruence (IOC) Index was evaluated by three experts. A pilot study was conducted on 30 dental students to assess the reliability of the questionnaire. The Cronbach's alpha coefficient was 0.87, ensuring the high reliability (Cronbach, 1990).

5.3 Data collection

Data collection was conducted from January to March 2020. The researchers explained the purposed and nature of the study to all dental students after the lecture times. They were given the questionnaires and asked to fill them out. Prior to entering the data, the data was cleansed.

5.4 Statistical analysis

All statistical analyses were conducted using the IBM Statistical Package for the Social Sciences (SPSS), version 24 (IBM Corp., Armonk, NY, USA). The characteristics and QCL domains of the respondents were summarized using descriptive analysis (frequencies, percentages, minimums, maximums, ranges, means, and standard deviations). The QCL of dental students was compared using the independent t-test and ANOVA using Scheffe's method of multiple comparisons.

6. Results and Discussion

6.1 General and study data of the respondents

Four hundred seventy-eight respondents participated in this cross-sectional study with an overall response rate of 94.09%. Table 2 demonstrates the general and study data of the respondents.

Table 2. General and Study Data of the Respondents

Variable	N (%)			
	Basic science and GE (175)	**Pre-clinic (146)**	**Clinic (157)**	**Total (478)**
Gender				
Male	51 (29.14)	35 (23.97)	49 (31.21)	135 (28.24)
Female	124 (70.86)	111 (70.03)	108 (68.79)	343 (71.76)
Accommodation during study				
Stay with family	18 (10.28)	12 (8.22)	23 (14.65)	53 (11.09)
Rented house	7 (4.00)	15 (10.27)	4 (2.55)	26 (5.44)
Private dormitory	83 (47.43)	65 (44.52)	75 (47.77)	223 (46.65)
Campus dormitory	67 (38.29)	54 (36.99)	55 (35.03)	176 (36.82)
Monthly money allowance				
Less than 7,500	31 (17.71)	19 (13.01)	11 (7.01)	61 (12.76)
7,501 – 12,500	98 (56.00)	72 (49.32)	58 (36.94)	228 (47.70)
12,501 – 15,000	25 (14.29)	26 (17.81)	37 (23.57)	88 (18.41)
15,001 – 20,000	19 (10.86)	18 (12.33)	32 (20.38)	69 (14.44)
More than 20,000	2 (1.14)	11 (7.53)	19 (12.10)	32 (6.69)
GPAC				
Less than 2.50	2 (1.14)	7 (4.79)	25 (15.92)	34 (7.11)
2.51 – 3.00	9 (5.14)	32 (21.92)	53 (33.76)	94 (19.67)
3.01 – 3.50	32 (18.29)	81 (55.48)	54 (34.40)	167 (34.94)
More than 3.50	132 (75.43)	26 (17.81)	25 (15.92)	183 (38.28)
Experience of repeating a class				
No	174 (99.43)	109 (74.66)	108 (68.79)	391 (81.80)
Yes	1 (0.57)	37 (25.34)	49 (31.21)	87 (18.20)

6.2 QCL of dental students at a private dental faculty

The overall QCL of dental students was moderate ($M = 3.49$, $SD = 0.33$). The respondents rated their QCL in student friendship at the first rank ($M = 3.91$, $SD = 0.33$), followed by housing ($M = 3.68$, $SD = 0.49$), and academic life ($M = 3.53$, $SD = 0.50$). The interpretation of the mean score of QCL in those aspects was high, whereas the mean score of QCL in student services ($M = 3.15$, $SD = 0.49$) and student social life ($M = 3.07$, $SD = 0.57$) were moderate. The QCL in various variables is presented in Table 3.

Table 3. QCL of Dental Students at a Private Dental School in Thailand

Variable	Quality of college life					
	Academic life	**Student social life**	**Housing**	**Student friendship**	**Student services**	**Overall**
Gender	$t = 2.74$ $p = .006$	$t = 3.77$ $p = .000$	$t = -0.28$ $p = .978$	$t = -4.45$ $p = .000$	$t = 0.52$ $p = .600$	$t = 0.86$ $p = .008$
Male	3.63 (0.53) *High* [3]	3.22 (0.59) *Moderate* [4]	3.68 (0.57) *High* [2]	3.78 (0.48) *High* [1]	3.17 (0.52) *Moderate* [5]	3.52 (0.39) *High*
Female	3.49 (0.48) *Moderate* [3]	3.01 (0.55) *Moderate* [5]	3.68 (0.46) *High* [2]	3.97 (0.39) *High* [1]	3.14 (0.46) *Moderate* [4]	3.49 (0.31) *Moderate*
Accommodation during study	$F = 0.24$ $p = .870$	$F = 0.16$ $p = .922$	$F = 13.32$ $p = .000$	$F = 1.40$ $p = .241$	$F = 0.22$ $p = .883$	$F = 0.78$ $p = .506$
Stay with family	3.53 (0.46) *High* [3]	3.08 (0.63) *Moderate* [5]	4.04 (0.49) *High* [1]	3.92 (0.47) *High* [2]	3.16 (0.49) *Moderate* [4]	3.56 (0.37) *High*
Rented house	3.48 (0.39) *Moderate* [3]	3.01 (0.54) *Moderate* [5]	3.72 (0.43) *High* [2]	3.80 (0.43) *High* [1]	3.20 (0.45) *Moderate* [4]	3.46 (0.27) *Moderate*
Private dormitory	3.53 (0.51) *High* [3]	3.06 (0.56) *Moderate* [5]	3.69 (0.45) *High* [2]	3.89 (0.43) *High* [1]	3.13 (0.50) *Moderate* [4]	3.49 (0.35) *Moderate*
Campus dormitory	3.56 (0.50) *High* [3]	3.08 (0.56) *Moderate* [5]	3.57 (0.50) *High* [2]	3.96 (0.42) *High* [1]	3.16 (0.44) *Moderate* [4]	3.50 (0.32) *Moderate*
Monthly allowance	$F = 1.25$ $p = .288$	$F = 1.35$ $p = .250$	$F = 2.15$ $p = .073$	$F = 0.12$ $p = .974$	$F = 0.82$ $p = .514$	$F = 1.00$ $p = .405$
Less than 7500	3.55 (0.50) *High* [3]	3.06 (0.56) *Moderate* [5]	3.81 (0.52) *High* [2]	3.92 (0.38) *High* [1]	3.12 (0.45) *Moderate* [4]	3.52 (0.28) *High*
7501–12500	3.51 (0.54) *High* [3]	3.10 (0.56) *Moderate* [5]	3.64 (0.45) *High* [2]	3.90 (0.40) *High* [1]	3.12 (0.46) *Moderate* [4]	3.48 (0.33) *Moderate*
12501–15000	3.50 (0.54) *Moderate* [3]	2.95 (0.59) *Moderate* [5]	3.66 (0.48) *High* [2]	3.91 (0.51) *High* [1]	3.14 (0.49) *Moderate* [4]	3.46 (0.37) *Moderate*

Variable	Quality of college life					
	Academic life	**Student social life**	**Housing**	**Student friendship**	**Student services**	**Overall**
15001–20000	3.65 (0.42) *High* [3]	3.12 (0.54) *Moderate* [5]	3.77 (0.49) *High* [2]	3.90 (0.48) *High* [1]	3.24 (0.51) *Moderate* [4]	3.56 (0.34) *High*
More than 20000	3.48 (0.51) *Moderate* [3]	3.06 (0.63) *Moderate* [5]	3.61 (0.66) *High* [2]	3.96 (0.39) *High* [1]	3.18 (0.48) *Moderate* [4]	3.49 (0.49) *Moderate*
Period of study	$F = 23.22$ $p = .000$	$F = 27.16$ $p = .000$	$F = 0.30$ $p = .743$	$F = 4.36$ $p = .013$	$F = 4.74$ $p = .009$	$F = 19.01$ $p = .000$
Basic science and GE	3.72 (0.46) *High* [2]	3.28 (0.54) *Moderate* [4]	3.68 (0.50) *High* [3]	3.99 (0.38) *High* [1]	3.20 (0.50) *Moderate* [5]	3.60 (0.33) *Moderate*
Pre-clinic	3.39 (0.45) *Moderate* [3]	2.83 (0.52) *Moderate* [5]	3.66 (0.44) *High* [2]	3.85 (0.41) *High* [1]	3.05 (0.36) *Moderate* [4]	3.38 (0.28) *Moderate*
Clinic	3.46 (0.50) *Moderate* [3]	3.05 (0.55) *Moderate* [5]	3.70 (0.50) *High* [2]	3.89 (0.49) *High* [1]	3.18 (0.52) *Moderate* [4]	3.48 (0.36) *Moderate*
GPAC	$F = 18.19$ $p = .000$	$F = 8.85$ $p = .000$	$F = 1.32$ $p = .267$	$F = 3.53$ $p = .015$	$F = 1.40$ $p = .241$	$F = 11.50$ $p = .000$
Less than 2.50	3.34 (0.64) *Moderate* [3]	3.08 (0.68) *Moderate* [5]	3.75 (0.70) *High* [2]	3.81 (0.63) *High* [1]	3.13 (0.68) *Moderate* [4]	3.43 (0.52) *Moderate*
2.51 – 3.00	3.36 (0.44) *Moderate* [3]	2.96 (0.53) *Moderate* [5]	3.61 (0.51) *High* [2]	3.83 (0.44) *High* [1]	3.12 (0.41) *Moderate* [4]	3.40 (0.29) *Moderate*
3.01 – 3.50	3.46 (0.48) *Moderate* [3]	2.95 (0.53) *Moderate* [5]	3.67 (0.45) *High* [2]	3.90 (0.41) *High* [1]	3.10 (0.44) *Moderate* [4]	3.44 (0.30) *Moderate*
More than 3.50	3.73 (0.44) *High* [2]	3.23 (0.56) *Moderate* [4]	3.72 (0.46) *High* [3]	3.99 (0.38) *High* [1]	3.20 (0.48) *Moderate* [5]	3.60 (0.32) *High*
Experience of repeating the class	$t = 4.28$ $p = .000$	$t = 2.30$ $p = .020$	$t = -1.72$ $p = .086$	$t = 2.10$ $p = .036$	$t = -0.13$ $p = .896$	$t = 2.39$ $p = .017$
No	3.58 (0.49) *High* [3]	3.09 (0.57) *Moderate* [5]	3.67 (0.49) *High* [2)	3.93 (0.43) *High* [1]	3.15 (0.48) *Moderate* [4]	3.51 (0.34) *High*
Yes	3.33 (0.47) *Moderate* [3]	2.94 (0.54) *Moderate* [5]	3.77(0.48) *High* [2)	3.82 (0.41) *High* [1]	3.15 (0.48) *Moderate* [4]	3.41 (0.29) *Moderate*
Overall QCL	3.53 (0.50) *High* [3]	3.07 (0.57) *Moderate* [5]	3.68 (0.49) *High* [2]	3.91 (0.43) *High* [1]	3.15 (0.47) *Moderate* [4]	3.49 (0.33) *Moderate*

In terms of the overall QCL of dental students at a private dental faculty, it was found that male students had a high overall QCL ($M = 3.52$, $SD = 0.39$), whereas females had a moderate overall QCL ($M = 3.49$, $SD = 0.31$). When the overall QCL and domain-specific QCL were evaluated. There was a statistically significant difference between gender at the $p < .05$ level. Academic life ($p = .006$), student social life ($p = .000$), and student friendship ($p = .000$) indicated statistically significant differences.

Regarding students' accommodation, there was no statistical difference in overall QCL, academic life, student social life, student friendship, and student services. Students who stayed with their families had the highest mean QCL score ($M = 3.56$, $SD = 0.37$), followed by those who rented houses, lived in private dormitories, or stayed on campus ($M = 3.46$, $SD = 0.27$; $M = 3.49$, $SD = 0.35$; $M = 3.50$, $SD = 0.32$). Although no statistically significant difference in mean score was found between respondents who lived in campus dormitories and those who did not, the mean score for respondents who lived in campus dormitories was slightly higher than for the other groups.

The comparison between the period of study, the overall QCL of students studying in basic science and GE period, pre-clinical science period, and clinic practice period was modest ($M = 3.60$, $SD = 0.33$; $M = 3.38$, $SD = 0.28$; and $M = 3.48$, $SD = 0.36$). The ANOVA test found a significant difference between the period of basic science and GE, pre-clinical science, and clinical practice ($p = .000$). The multiple comparisons reveal significant differences between the basic science and GE period and pre-clinical science period ($p = .000$), basic science and GE and clinical practice ($p = .002$), and pre-clinical science and clinical practice ($p = .046$). There were statistical differences in the period of study in academic life, student social life, student friendship,

and student services. Additionally, each QCL domain of pre-clinical science was rated the lowest compared with basic science and GE, and clinical practice. Table 4 reveals the multiple comparisons of variables.

Table 4. Multiple Comparisons

Variable		Quality of college life					
		Academic life	**Student social life**	**Housing**	**Student friendship**	**Student services**	**Overall**
Period of study							
Basic science and GE	Pre-clinic	.000	.000	.929	.021	.014	.000
Basic science and GE	Clinic	.000	.001	.918	.096	.846	.002
Pre-clinic	Clinic	.404	.002	.743	.815	.069	.046
GPAC							
Less than 2.50	2.51–3.00	.999	.744	.594	.995	1.000	.960
Less than 2.50	3.01–3.50	.650	.652	.879	.798	.990	.999
Less than 2.50	More than 3.50	.000	.579	.996	.197	.893	.051
2.51–3.00	3.01–3.50	.424	.999	.829	.774	.992	.786
2.51–3.00	More than 3.50	.000	.002	.351	.055	.620	.000
3.01–3.50	More than 3.50	.000	.000	.764	.258	.283	.000
Accommodation during study							
Stay with family	Rented house	.981	.968	.050	.713	.987	.709
Stay with family	Private dormitory	1.000	.993	.000	.981	.988	.558
Stay with family	Campus dormitory	.992	1.000	.000	.959	1.000	.723
Rented house	Private dormitory	.982	.987	.991	.782	.924	.993
Rented house	Campus dormitory	.917	.952	.521	.385	.981	.972
Private dormitory	Campus dormitory	.941	.975	.110	.521	.963	.984

In GPAC, the overall QCL in students with the GPAC of more than 3.50 was the highest (M = 3.60, SD = 0.32), followed by those with 3.01-3.50, with less than 2.51, and with 2.51-3.00 (M = 3.44, SD = 0.30; M = 3.43, SD = 0.52; M = 3.40, SD = 0.29). A statistical difference was found among the GPAC of dental students. The multiple comparisons found the statistical difference between the students those with the GPAC of 2.51-3.00 and more than 3.50, and those with 3.01-3.50 and more than 3.50. Moreover, the statistical difference was found in academic life, student social life, and student friendship.

According to the curriculum regulations, dental students with an F grade must enroll in that subject or course that subject again for re-grading and repeating the course. In this study, eighty-seven respondents (18.20%) had the experience of repeating the course. The overall QCL of the respondents who had the experience of repeating the class was slightly lower than those who did not. The independent t-test compared overall QCL and each aspect of QCL found the statistical differences in overall QCL (p = .017), academic life (p = .000), student social life (p = .020), and student friendship (p = .036).

Table 5 shows the three highest and three lowest score of questions in the QCL questionnaire.

Table 5. List of the Three Highest and the Three Lowest Score of the QCL of the Dental Students

The three highest score of QCL		The three lowest score of QCL	
Issue	***M* (*SD*)**	**Issue**	***M* (*SD*)**
Academic life			
-Family support to study in dentistry	4.50 (0.70)	-Appropriate weekly class schedule	3.23 (1.03)
-Gained knowledge from subjects.	4.23 (0.76)	-Appropriate assignment related to credit	3.22 (0.90)
-Developed ability of self from studying.	4.03 (0.78)	-Bored with the subject.†	2.94 (0.96)
Student social life			
-spend free time on favorite activities.	3.31 (1.12)	-You will not join the training or academic activities in the university.†	2.63 (1.13)
-Satisfy in participation in a dental student club.	3.34 (0.96)	-You have never been chosen to be the representative of a group in any activities.†	2.53 (1.08)
-When you feel stress, you will find relief by doing a hobby.	4.09 (0.92)	-You have joined in university sports day.	2.50 (1.50)
Housing			
-Residential communities provide complete utility services (electricity, water, telephone, internet).	4.39 (0.94)	-Neighboring residents are friendly and considerate.	3.77 (1.05)
-There is no crime problem in the neighborhood or accommodation.	4.29 (0.94)	-No privacy at home or accommodation.†	2.24 (1.29)
-Getting from home to university is comfortable.	4.21 (0.91)	-It takes a lot of time to come to the university. †	2.03 (1.28)
Student friendship			
-Family member took care of you when you were in sickness	4.60 (0.71)	-Always receive gifts for special occasions from close people.	3.86 (0.95)
-Family members understand and accept your decision.	4.58 (0.70)	-There is a feeling that no one understands and empathy.†	2.27 (1.17)
-Parent takes care of your academic performance and is encouraged when you have any problems.	4.50 (0.85)	-Parent often complains about your friendships.†	1.96 (1.24)
Student services			
-There are adequate sources of scholarships for students in the university.	3.98 (1.21)	-There is clean and sufficient food that meets the needs of the students in the university cafeteria.	2.95 (1.09)
-Get comfortable with the services provided by the dental faculty.	3.25 (1.00)	-There are not enough learning materials in the dental faculty.†	2.85 (1.11)
-The restaurants on campus provide quality food at a reasonable price.	3.16 (0.97)	-The library has poor quality books and learning materials.†	2.70 (1.14)

Note. † = The negative question that was adjusted the score to the opposite direction.

6.3 Discussion

In this study, the overall QCL of the dental students in a private dental faculty was at a moderate level. When the overall QCL was compared in terms of gender, it was discovered that the male students tend to have slightly higher QCL than their female counterparts. This is consistent with a study on QCL of pre-clinical medical students and clinical medical students at Siriraj Hospital which indicated that the QCL of males was higher than females (Poomjan, 2017), while the QCL of the pre-clinical medical students was higher than clinical students (Sithai & Jangboon, 2019). Additionally, the findings correspond with previous studies conducted by Al-Shibani and Al-Kattan, (2019) and Malibary et al. (2019) that the students' QCL tends to improve by the progressive years of study (Al-Shibani & Al-Kattan, 2019; Malibary, Zagzoog, Banjari, Bamashmous, & Omer, 2019). The QCL of pre-clinical dental students was the lowest in the current study. It could be due to the differences in pre-clinical and clinical teaching and learning between medical and dental faculties. Students in pre-clinical dental practice in dental

laboratories and simulation clinics, which simulate the patient dental care in actual situations. Dental students should polish their hand skills in a variety of assignments, including prosthetics, tooth filling, and root canal treatment. Moreover, the assignments which are detailed, elaborated require patience.

In the academic life domain, dental students have a high QCL. In comparison to pre-clinical science and clinical practice, dental students studying basic science and GE have the greatest QCL during study period. Students enrolled in 18-20 credits courses per semester or took 20-25 hours courses in basic science and General Education per week. In pre-clinical dental science, on the other hand, the class schedule has been changed to 30-35 hours per week. The students take both lecture and laboratory classes, with the laboratory being much more advanced than basic science at the time. They spend time in class and sometimes at home or in dormitories practicing prosthodontic lab work. In clinical practice, the students not only put their efforts into learning and practicing with patients, but they must also manage the appointment with their patients. Practicing treatment of patients, the students must give the treatment with care and attempt to complete the minimum requirements set by the Thai Dental Council and the graduation criteria. The study on stress found that clinical students might feel more stressful than pre-clinical students (Chongkonsatit, 2021) and this stress is associated with the quality of life (Ribeiro et al., 2018).

The academic rigor usually reduces the students' free time, especially in the pre-clinical and clinical periods. Implementing dentistry programs in private institutions, adjunct lecturers who are full-time lecturers in public universities are invited to teach many courses. Therefore, students need to take the pre-clinical and clinical classes on weekends. It is not uncommon for students to attend 6-7 days of classes per week. As a result, they have less free time to relax than those studying in other universities. This could affect the QCL of dental students. Their QCL is found to be lower than those studying basic science and GE in terms of overall QCL, academic life, student social life, student friendship, and student services. This can be clearly seen in the items under the academic life concerning the appropriate weekly class schedule and appropriate assignment related to credit, which are rated the lowest. Since QCL relates to students' performance, engagement, and future recommendations, it is therefore important to improve the QCL (Pedro, Leitão, & Alves, 2016).

GPAC was found to be linked to overall QCL, academic life, student social life, and student friendship in the current study. The previous study, on the other hand, found substantial links between quality of life and motivation to learn. According to the study conducted by Henning, Hawken, et al (2011), students with drives usually achieve high grades (Henning, Hawken, et al., 2011). The study of Quality of Life (QoL) medical students in Saudi Arabia found that the students with the lowest GPAC have higher psychological health and social relationships scores. (Malibary et al., 2019).

Additionally, a study on pre-clinical medical students identified a direct relationship between academic performance and their quality of life (Shareef et al., 2015). Repetition of the class was related to the QCL in academic life. Additionally, a few studies discover that academic life and the fear of repeating a course were the primary sources of stress for dental students (Alhajj et al., 2018).

Studying dentistry is found to be related to stress. Students appear to prefer seeking support from their peers ahead of their more comprehensive group of friends, with nearly two-thirds of students reporting that they had sought permission from other students on their course (Johnson, Jenkins & Ginley, 2020). Additionally, a study of pre-clinical medical students discovered a direct correlation between academic achievement and life satisfaction (Shareef et al., 2015). Repetition of the class was related to the QCL in academic life. Additionally, a few studies discovered that academic life and the fear of repeating a class were the primary sources of stress for dental students (Ahmad, Md Yusoff & Abdul Razak, 2011; Alhajj et al., 2018). Comprehensive group of friends, with nearly two-thirds of students reporting that they had sought permission from other students on their course (Johnson et al., 2020). A study in Thai found the relationship between family support was related to the QCL (Sinsawad & Pittard, 2014). Moreover, support from instructors, family, and peers positively affected QCL (Thongsook & Peng sa-ium, 2018). A study in India revealed that the students who joined dentistry due to parental pressure show more significant stress than those who make their own choice (Acharya, 2003).

Concerning the housing, compared with students with other housing arrangements, the students who live with their parents have the highest QCL. In contrast, the students who stay in campus dormitory are found to have the lowest QCL. The students' accommodation during the study, therefore, is strongly related to their QCL. The quality of the residents' utilities and facilities is the most crucial dimension to the students (Nimako & Bondinuba, 2013). Bowman and Partin conducted a study to determine a significant difference between students' academic achievement that lived on-campus and their off-campus counterparts, as measured by grade point average (GPA). There were no statistically significant differences in students' grade point averages regardless of accommodation (Bowman & Partin, 1993).

QCL in student services was moderate. The research findings reveal that the dental students were not satisfied with university accommodations such as the library, cafeteria, parking lodge, and education media. A previous study found that dissatisfaction can be related to students' stress to the students' stress (Nuallaong, 2012). Moreover, the educational environment is related to the students' achievement. Institutional self-evaluation is becoming increasingly pertinent as the student population becomes diversified and higher education institutions become more customer-focused (Audin, Davy & Barkham, 2003).

7. Conclusion

The overall QCL of dental students in a private dental faculty in Thailand was moderate, with the highest domain being student friendship, followed by housing, academic life, student services, and social life. The factors associated with the overall QCL are gender, period of study, GPAC, and the experience of repeating the class. The findings of this research contribute to improving the curriculum administration, including the program design, learning and instruction method, student activities and development, and learning environment and facility arrangement. Education administration should be concerned with the QCL of the students by monitoring various aspects of QCL. The QCL of dental students should be continuously improved so that the quality of dental students will be higher in the future. This study, however, has been conducted in one private university in Thailand, the generalization of the findings may be somewhat limited. More

studies on QCL of dental students should be conducted in other private or public universities in order to compare or extend the research findings.

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