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# A Cross-Sectional Study of University Nursing Students Construal Level and Core Values in Learning English as Foreign Language in Taiwan

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Abstract: Professional nursing core values are important for nursing education and clinical practice. Among the core values, communication is a crucial one, and learning languages is especially beneficial to this skill. However, core values in learning a language are rarely discussed in the field. This study attempts to explore the core values perceived by university nursing students when learning English as a foreign language. A cross-sectional survey of students' construal levels and perceptions of their core values was designed. Two instruments of Behavior Identification Form and English Learning Construal Scale were used to collect data. Descriptive statistics and content analysis were conducted to analyze quantitative and qualitative data respectively. In total, 200 participants were randomly recruited from a nursing university in Taiwan. The results show the BIF (M = 15.02; SD = 4.02) corresponded to the previous research, although the scores implied an improvement opportunity. Four themes—career development, university studies, self-responsibly, and personal well-beings—were illustrated, and 13 codes of core values of learning English were further categorized. An alternative perspective of high vs. low construal levels was suggested to view the professional core values. Teaching implications were then discussed.

**Keywords:** core values; construal level theory; Behavior Identification Form; English teaching and learning; nursing education



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## 1. Introduction

Professional nursing values have recently been a prominent issue. As the main duty of nursing staff is to take good care of patients, they are improving the quality and effectiveness of nursing care and establishing social value and status continuously [1]. To respond the evolution of the healthcare industry, nursing education is gradually moving from vocational workforce practice to professional experts training. A crucial characteristic of professional workers is that they perceive specific values and beliefs rooted in expertise. They make decisions after thinking and judging from scientific theory and evidence, and then further strengthen professional values through reflections and feedback [2]. Following the change of time and the expansion of the nursing profession, the requirements of core competence and values also need to be redefined and updated. Only then can professionals maintain competitiveness in the fast-paced healthcare industry [3].

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In Taiwan, the authority—the Nursing Accreditation Council—proposed eight core values for the education of university nursing students (UNS) that reflect the needs of multilevel clinical contexts. These values include: (a) critical thinking and reasoning, (b) general clinical skills, (c) basic biomedical science, (d) communication and teamwork capability, (e) caring, (f) ethics, (g) accountability, and (h) lifelong learning [4]. The aim of these core values is to set a norm and guide the institutions in designing their own syllabus and clinical practices. Nursing researchers suggest that teaching ethics and professional values to students may help increase their autonomous ethical decision-making. Studies have shown that education causes differences in the formation of professional values, and that nursing educators have a significant influence on the stimulation of professional values [1]. However, discussion of core values is so far limited in the nursing and medical subjects but does not yet extend to the other courses taught by the department of general education. For example, the English as Foreign Language (EFL) teaching and learning, which is closely related to the core value of "communication", is rarely studied.

In the medical and nursing context, English language proficiency is crucial for UNS. Not only in the university do UNS need to acquire professional knowledge through textbooks and/or journal articles, but also in clinical settings, they are required to comprehend and/or write medical records in the English language. These medical records include, for instance, patients' histories, shift reports, doctors' orders, medication labels, etc., that are mainly expressed in the English language in current medical context. Moreover, to get a promotion and rise position in teaching hospitals, nurses are encouraged to conduct relevant research to generate case reports and/or evidence-based articles, and thus, a broader review of the international literature has gradually become essential. Moreover, the trend of globalization provides overseas opportunities for UNS such as being exchange students, visiting alliances universities, working holidays, studying advanced degrees, working as registered nurses, and volunteering medical services for developing countries. The better the UNS' English proficiency, the more future possibilities they may have and experience.

The most relevant discussions about core values of EFL may be the issues of learning motivation [5]. Research examined the relationships between the learners' psychological traits and their learning motivations and outcomes [6]. These psychological theories include, for instance, social learning theory and self-efficacy [7], attribution theory [8], teacher efficacy [9], intrinsic vs. extrinsic motivation [10], learning anxiety and performance [11], success oriented vs. failure avoidance [12], learning interests and expectations [13], and learning strategies [14]. Investigations regarding these psychological traits provide the language teachers' insight with the learners' learning core values, progresses, and processes. However, although the significance of core values (motivations) teaching and learning is addressed, the theoretical framework and psychological mechanism behind it is seldom explored.

A contemporary theory developed by a stream of social psychologists called the "self-control theory" [15] has been especially noticed and discussed in the past decade. The theory suggests an individual's self-control is closely related to his/her performance in undergoing activities. A key feature of the ability is the analogy of the muscle: it can be trained through practices, feel exhausted after being used, become depleted if overused; yet it can be rehabilitated through some mechanisms such as the treatment of "self-affirmation" [16]. The psychological strength of the self-control ability can even be monitored and measured by a physiological indicator of the blood glucose.

Furthermore, the strength of the self-control may be categorized as the "construal level", dichotomized as high-level construal and low-level construal [17]. Those who perceive high-level construal beliefs are equipped with better self-control, which thus may assist them to persistently achieve long-term and/or abstract goals like learning, invention, career development, and dream actualization. On the contrary, low-level construal is related to those short-term physiological and psychological responses such as emotion control, violence suppress, and hungry endurance [18].

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The notion of "psychological distance" of an event may assist in understanding the concept of the construal level theory [15]. The most direct and the shortest psychological distance is the so-called "direct experience" [19]. Therefore, at the time of facing these occurrences, there is no need to have much abstract thinking or delaying time to make judgments and decisions, and outcomes are immediately satisfied. This psychological status is categorized as "low-level construal" [19]. Conversely, too many occurrences cannot be achieved or succeed nothing but depend on the short-sighted visions or direct experiences if observing happenings around us. Incidents such as family management, academic performance, and career achievement require more cognitive abstractions, social distal stimuli, and are filled with a number of unknown factors [15]. To manage these complex occasions, prospection, endurance, persistence, more efforts, and the process of decomposition, rearrangement, and reconstruction of the direct experiences are requisite. Construction of these latent traits is more likely to the high-level construal. Although no literature to date connected the relationship between higher construal level and core values, both are trying to evoke students' distant expectation rather than immediate satisfaction. To stress the core values of learning, a difficult subject may stimulate the UNSs' high construal and thus increase their self-control ability.

However, the discussion of construal level theory and self-control theory are currently applied to the psychological profession, not into English language teaching and learning. The trend of studying the theories of construal level and self-control may have opened an optional insight into investigating the learners' minds and mental processes from a different standpoint. In addition, as the application of construal level theory into nursing education is rarely seen in the literature, this study started from preliminary research to attempt to investigate the possibly core values/high-level construal extracted from the context.

Therefore, the aim of this study was to investigate core values/high-level construal perceived by UNS when learning the English language. The two research questions are: (1) What is the construal level of the UNS? (2) What are the core values of learning English for the UNS?

## 2. Methods

This cross-sectional study [20], a type of observational research, collected data from utilizing self-expression questionnaires to investigate participants' opinions without any implementation of intervention.

## 2.1. Settings

In 2020, there were 59,358 nursing students studying in various levels of education institutions [21]. The University of Science and Technology (UST) system plays a crucial role in serving for the healthcare system, as nursing students in the other two systems—general universities and junior colleges—usually opted for further education or other industries [22]. Table 1 shows a brief structure of the nursing education system in Taiwan [21].

Table 1. Nursing education system in Taiwan (year 2020).

Nationwide Clinical Nurses (Registered Nurses = 179,445)				
Registered Nurse License Examination (Attendee = 14,234; Qualified = 7782; Pass rate = 54.3%)				
General University-4 years (N = 6849; G = 1554)	University of Science and Technology (UST) $(N = 21,709; G^{**} = 7137)$		5 years Junior College	
	4 years UST	2 years UST		
Senior High School * (N = 311,804; G = 102,330)	Vocational High School * (N = 244,492; G = 81,534)	(N = 30,803; G = 5753)		

Note: \* The number of students is an overall figure but not nursing specified. \*\* G–Graduates. Data retrieved from the government websites of statistics [21].

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As for the research context, it is the largest nursing university, training almost a quarter of the nurses for the healthcare system. It belongs to the largest medical group consisting of 12 hospitals and 9 nursing homes across the country with more than 30,000 employers and 14,000 hospital beds and serving over 40,000 patients daily [23]. According to the statistics of the year 2020, this university accommodated 4699 UNS (21.6% of UNS; 7.9% of nation), 1709 graduates (23.9% of UNS; 11.8% of nation), 1538 RNs (43.3% of UNS; 19.8% of nation) who passed the license examination, and over 92% of its graduates worked in the healthcare industries [24]. In the past 40 years, this nursing university has trained more than 45,000 nurses (25.1% of RNs in practice) [24]. Briefly, the research context of this nursing university may have represented and given insight into the nursing education in Taiwan to a certain extent.

## 2.2. Participants

In total, 200 UNS, randomly selected from 6 classrooms, were recruited from a nursing university consisting of two campuses—the main one is located in the northern part (4 classes) and a branch in the southern part (two classes) of Taiwan. They were also equally sampled according to the University of Science and Technology (UST) system: two classes were from the fourth year, another two from the second year day school, and the other two from the night school.

Regarding their EFL learning experiences, the third year UNS had studied EFL for at least 6 years, 3 years in junior high and the other 3 years in the senior/vocational high schools. The second year UST students had studied EFL for 3 years in junior high schools and 3–4 years in the 5-year Junior Colleges, depending on the individual institute. Among the 3 fundamental systems, only senior high schools are academic-oriented and pay much attention to the enhancement of students' EFL competences. The other two vocational systems, on the other hand, focus on the students' professional skills development.

## 2.3. Data Collections

This study combined quantitative with qualitative surveys conducted between September and November in 2018. The instruments were distributed and claimed back by a trained research assistant who was fully aware of the ethical guidelines. A convenient sampling strategy was employed, and 8 language teachers were reached to ask for help distributing questionnaires. Four of them agreed, and 6 classes with total 286 students were invited to participate in the study. A total of 200 returned the survey so that the response rate was 70%. No missing data were found in the BIF instrument. The sensitivity analysis showed an effect size of d=0.26.

## 2.4. Measures

The demographic information of the UNS was recorded in the questionnaires. Quantitatively, the construal level of the UNS was probed through BIF—a psychological inventory. Qualitatively, core values perceived by the UNS were elicited through a self-designed questionnaire.

The first instrument, "Behavioural Identification Form" (BIF), measures the preferred levels of mental construal proposed by Vallacher and Wegner's [25]. The BIF presented 25 behaviours and asked participants to choose either description they prefer to describe each behaviour. One was at a low level, and the other was at a high level of construal. For example, participants chose between "Locking a door" to best describe "Securing the house" (high level, scored 1) or "Putting a key in the lock" (low level, scored 0). The number of high-level descriptions chosen by the participants (sum scores out of total 25 points) served as the dependent measure. The higher the BIF scores, the higher the construal level the UNS perceived.

The second instrument, "English learning construal scale" (ELCS), is a semi-structured scale designed by the author which asked participants to respond to open-ended questions. The purpose was to explore the UNS' core values for learning English from 4 possible

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perspectives: study in the university, future career development in health care professions, personal well-being, and intrinsic motivation. The rationale for choosing the four dimensions was to judge the UNS' probable top concerns according to the researcher's working experiences.

Participants were asked to tick one and offer up to four reasons for their selections. The mixed 4-point Likert scale in addition to the open-ended questions attempt to provide quantitative data that can be calculated when necessary; for example, the students with similar patterns can be grouped according to their statistical outcomes. To examine whether this is a feasible instrument, a pilot study was conducted prior to the formal investigation. Fifteen students who had just finished their first year of study were asked to answer the scale in the Chinese language for their ease of understanding. The initial result indicated a feasible instrument of this scale.

## 2.5. Data Analysis

Quantitative data were analysed through descriptive statistics and an item-total correlation analysis using SPSS software [26], whist qualitative data were handled with the content analysis method [27]. The purpose of content analysis is to classify and encode a large amount of text data. Analysis steps are as follows: first to read the original text file carefully to ensure the meanings of the participants were fully understood. Then, to mark out some special places or texts with similar meanings that appeared repeatedly to form a code. The codes that showed common features were encoded as a theme. The relevance of each theme had to be cautiously examined to ensure each theme was independent, which had no repetition with any other. The whole process was reviewed again to evaluate whether the classification answered the research questions.

Three coding experts were invited to get involved in analysing the qualitative data collected in the process. A moderation meeting was held first, and the analysers coded the data on their own. The coding results were discussed and integrated afterwards. This triangulation process helped increase the trustworthiness and credibility of this research qualitatively.

# 3. Results

#### 3.1. Diagram of the Professional Nursing Values Survey

Figure 1 shown below demonstrates the structure, sections, themes, codes, and data types of the survey result on the form of a diagram.

# 3.2. Demographic Data

Most of the participants were females aged from 21 to 25, although the majority were 21 years old. Both UST systems were included: three classes were from the fourth year studies and the other three were from two-years to generalize the population. Table 2 shows the demographic information of the participants.

## 3.3. Construal Level of the UNS

The mean score of the total 25 items of the BIF scale is 15.02 (SD = 4.02; min = 4; max = 25), which corresponds to the previous study in which the mean was from 14.98 to 16.62 [28], and demonstrates a satisfactory reliability (Cronbach Alpha = 0.71). To further examine each item, Table 3 shows the mean and item-total correlation of the BIF scale. The item-total correlation ranged from 0.04 to 0.43, indicating a poorer internal consistency compared with the previous study of ranging from 0.28 to 0.48.

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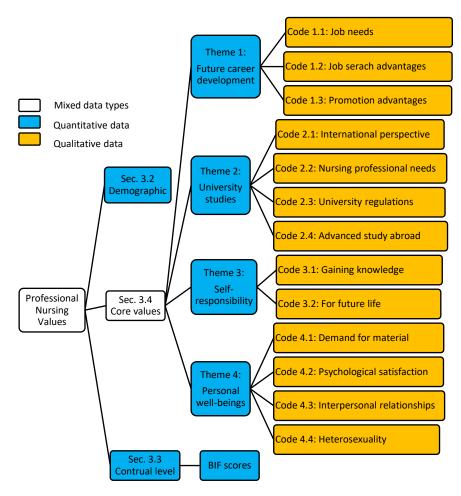


Figure 1. Survey result of the professional nursing values shown in a diagram.

Table 2. Demographic data of the participants.

Age (y/o)	Male (N)	Female (N)	Total
21	5	116	121
22	0	0	0
23	1	44	45
24	3	30	33
25	0	1	1
Total	9	191	200

# 3.4. Four Themes of the Core Values

UNS perceived a higher degree of recognition of the four core values that are relevant to their EFL learning motivation. Generally, the average scores of the four core values were between "strongly agree (4 point)" to "agree (3 point)". Table 4 demonstrates the descriptive statistics of the construal scale and codes categorised in the four themes from qualitative data. To further illustrate the data, a preliminary interpretation of the four themes and their codes is presented in Sections 3.4.1–3.4.4. A more comprehensive discussion of the survey is shown in Section 4.

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**Table 3.** The Behavior Identification Form.

No.	Item	M	Item-Total r	No.	Item	M	Item-Total r
1	Making a list	0.49	0.32	14	Traveling by car	0.63	0.43
2	Resisting temptation	0.66	0.25	15	Cleaning the house	0.79	0.23
3	Reading	0.57	0.04	16	Climbing a tree	0.94	0.21
4	Eating	0.80	0.26	17	Painting a room	0.70	0.12
5	Joining the Army	0.68	0.26	18	Greeting someone	0.62	0.36
6	Talking to a child	0.50	0.40	19	Paying the rent	0.15	0.15
7	Washing clothes	0.40	0.21	20	Taking a test	0.71	0.39
8	Pushing a doorbell	0.61	0.26	21	Caring for houseplants	0.69	0.15
9	Picking an apple	0.59	0.41	22	Tooth brushing	0.73	0.19
10	Having a cavity filled	0.54	0.26	23	Locking a door	0.48	0.33
11	Chopping down a tree	0.13	0.21	24	Filling out a personality test	0.49	0.13
12	Growing a garden	0.85	0.31	25	Voting	0.82	0.34
13	Measuring a room for carpeting	0.50	0.20		G		

**Table 4.** Descriptive statistics of the scale and codes of the four themes (N = 200).

Theme (Mean; SD)	Codes (Respondents; %)	UNS Responses	
Future career development (M ± SD 3.59; SD = 0.52)	Job needs (n = 169; 85%)	Reading medical records will be easier. (Student ID.08) Foreign patients may be encountered clinically. (Student ID.102) Can understand the English document in the hospital, and understand relevant literature in English. (Student ID.110) Professional terminologies are commonly used in English at work, so that it is easier to understand doctors' orders. (Student ID.112) Nursing major is more or less related to English. If you want to pass the RN exam, you also need to have good English skills. (Student ID.123)	
	Job search advantages (n = 144; 72%)	Increasing the opportunities of job search. (Student ID.99) Language ability is an advantage when looking for a job. (Student ID.103) Nowadays, no matter what kind of job, employers attach great importance to employees' English ability. Good command of English earns extra points for job search. (Student ID.126) Good English means more job opportunities, and most of them are good jobs, such as large enterprise companies. (Student ID.144) The need for job hunting. Employers are paying more attention to the English ability during interviews.  (Student ID.164)	
	Promotion advantages (n = 112; 56%)	Faster promotion. (Student ID.44) Learning English well is helpful for getting promotion. (Student ID.57) High chance of promotion, and confirmed by senior officials. (Student ID.106) When writing up an upgrade report for promotion, English literature review is important. (Student ID.113) It is helpful for writing the future career promotion report. (Student ID.132)	
	International perspective (n = 75; 38%)	Can cultivate my foreign language skills so that I may be able to study abroad without communication difficulties. (Student ID.120)  Can increase the international perspective. (Student ID.66)  Can connect with the global village. (Student ID.44)  English is currently an international language, and it must be used to communicate with foreigners. (Student ID.43)  Can communicate with exchange students and participate in overseas internships. (Student ID.121)	
University studies (M = 3.45; SD = 0.57)	Nursing professional needs (n = 62; 31%)	Because many nursing professional textbooks and reading materials are written in English.  (Student ID.56)  Many clinical practices and university lectures are using medical terms in English, so it is important to build a solid foundation in learning English. (Student ID.61)  Understanding medical records, journals, and textbooks written in English. (Student ID.122)  Medical terms related to nursing professional are all written in English. (Student ID.176)  Clinical medical orders are written in English. (Student ID.178)	
	University regulations (graduation threshold/credits) (n = 49; 25%)	Because I need to pass the graduation threshold. (Student ID.45) There is a graduation threshold. (Student ID.70) Graduation threshold, compulsory credits. (Student ID.98) Graduation threshold, credits requirement. (Student ID.99) School curriculum regulation, graduation threshold. (Student ID.110)	
	Advanced study abroad (n = 27; 14%)	Very important for further study. (Student ID.22) Can study abroad and talk with foreigners. (Student ID.76) EFL courses and progressions are both important and practical. (Student ID.92) Opportunities to participate in overseas visits will increase. (Student ID.106) Can study abroad and communicate with foreigners. (Student ID.132)	

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Table 4. Cont.

Theme (Mean; SD)	Codes (Respondents; %)	UNS Responses	
Self- responsibility (M = 3.25; SD = 0.61)	Responsible for gaining knowledge (n = 124; 62%)	My own abilities should be my responsibility only. (Student ID. 1) Giving myself one more skill should be my things. (Student ID.58) Cultivating foreign language skills is important for the future. (Student ID.197) To increase one's ability is to be responsible for oneself. (Student ID.132) Now that it is an international society. One should know the need to improve one's foreign language skills. (Student ID.69)	
	Responsible for future life (n = 28; 14%)	Learning English well will not only help my future career but also life, for example, travel. (Student II Can be used in the future, at least some conversation for daily life. (Student ID.102)  English is useful in our lives, and failure to learn well will affect our future. (Student ID.113)  English is also needed in life, so learn well is a must. (Student ID.187)	
Personal well-beings (M = 3.14; SD = 0.73)	Demand for material (n = 156; 78%)	I can go abroad and have fun without worrying about the language barrier. (Student ID.46) With good English competence, there will be many job opportunities. If you have money, you don't have to worry about life. (Student ID.53) With chance of promotion, you can make more money and thus improve the quality of life. (Student ID.57) You can work or travel abroad, and enjoy a different life. (Student ID.68) As you have foreign language skills that you can go abroad to see different worlds and live a different (Student ID.120)	
	Psychological satisfaction (n = 98; 49%)	Enriching oneself. (Student ID.21) Can learn more new knowledge. (Student ID.67) Learning English can enrich your connotation and understand the fun of it. (Student ID.103) Can teach English for one's own child. (Student ID.109) Learning one more language to enhance self-worth. (Student ID.122)	
	Expansion of interpersonal relationships (n = 71; 36%)	Meeting people from different countries. (Student ID.67) Traveling abroad is barrier-free, and can also meet friends of different cultures and ethnicities. (Student ID.136) Having more opportunities to meet foreign friends. (Student ID.165) Being able to communicate and talk with people of different races. (Student ID.08) Can make friends everywhere. (Student ID.22)	
	Heterosexuality (n = 29; 15%)	Having an exotic relationship. (Student ID.72) You can meet a soul mate whose inner world can match you. (Student ID.103) More spouse options. (Student ID.142) Can marry to a foreigner in the future. (Student ID.170)	

The following four themes attempt to answer the second research question regarding the UNSs' professional core values in learning English.

# 3.4.1. Theme 1: Future Career Development and Learning English

Three codes—"job needs", "job search advantage", and "promotion advantage"—emerged in this theme. At present, a trend in the workplace is becoming more international, and EFL skills are being more valued. Many institutions including hospitals recruit employees judging from their EFL ability, especially for those institutions with foreign patients frequently. For example, an UNS perceived that

"Language ability is an advantage when looking for a job." (Student ID.103).

Clinically, in the advancement of professionals, nursing staff must write a qualified report to apply for a promotion. As much of the medical and nursing literature originates from international journals, they must read and comprehend English to acquire knowledge. One student's answer, for instance, was as follows:

"When writing up an upgrade report for promotion, English literature review is important." (Student ID.113).

Learning English well to have excellent EFL skills may increase staffs' competitiveness in the workplace, and even obtain more opportunities than their peers. One UNS said:

"Learning English well is helpful for getting promotion." (Student ID.57).

## 3.4.2. Theme 2: University Studies and Learning English

Four codes were categorized in this theme, including "international perspective", "nursing professional needs", "university regulations", and "advanced study abroad".

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Even in Taiwan, where Chinese mandarin is the official language, many medical-related terms, updated medical information, professional textbooks, and literature are mostly presented in English, both in university studies and clinical settings. UNS must have a certain level of English ability for the need of future communication with other medical teams. Misinterpretation of English may affect the effectiveness of professional knowledge acquisition, and even result in severe consequences which may jeopardize patients' health and lives.

"Medical terms related to nursing professional are all written in English." (Student ID.176)

To improve students' EFL ability, the university regularly organizes tutorial EFL courses and encourages students to take relevant competence examinations. Professors often promote relevant information to the UNS. The university also stipulates a few regulations for passing the English proficiency test, and encourages students to take the examinations such as TOEIC, GEPT, PVQC, etc.

"Graduation threshold, credits requirement." (Student ID.99)

Moreover, learning English well is beneficial for further study, for example, studying for a master's degree or doctorate in local institutes or abroad. The university regularly recruits qualitied students screened by their English capabilities to attend overseas visits and internships. Should they have plans to go studying abroad, learning English well can help UNS adapt to the environment more easily and communicate with people smoothly.

"Opportunities to participate in overseas visits will increase." (Student ID.106)

# 3.4.3. Theme 3: Learning English as Self-Responsibility

Two codes, "responsible for gaining knowledge" and "responsible for future life", were classified in this theme. Since the concept of core values is probably abstract for the NUS, they seemed to seldom think about the issue of self-responsibility. The nursing profession is considered a career that is easy to find a job after graduation. The majority of the NUS are studying this subject for the sake of employment, and many of them were persuaded by their parents or family elders. Few NUS were motivated by their own ambitions to become a nurse as their lifelong career. This kind of employment driven, and examination-oriented approach has influenced the educational and social context in Taiwan for a long time. When asked this question about their self-responsibility, most of the students could not figure out answers diversely but focused on the gaining of (linguistic) knowledge. This was their main responsibility as a student without hesitation.

"My own abilities should be my responsibility only." (Student ID. 1)

Academic competence is mostly the result of an individual's learning. As long as a student puts in the time and effort, there should be acquiring gains to some extent. Learning a foreign language can lead not only to and expanded perspective and acquisition of knowledge, but also to the gain of a lot of extra values in academic studies, careers, lives, and at the same time improve a person's general ability.

"Learning English well will not only help my future career but also life, for example, travel." (Student ID.66)

## 3.4.4. Theme 4: Personal Well-Beings and Learning English

Four codes containing "demand for material", "psychological satisfaction", "expansion of interpersonal", and "heterosexuality" were grouped. Psychological satisfaction of the UNS may come from several aspects, e.g., following the trend of globalization may give them a feeling of satisfaction. As the Internet technology is developing rapidly, information written in English is everywhere. Becoming a bilingual person can not only enhance the feeling of self-affirmation and self-worth but also create more opportunities. In the future, one can even teach his/her own child, and enjoy the sense of achievement from learning English.

"With good English competence, there will be many job opportunities. If I have money, I don't have to worry about life." (Student ID.53)

Frequent interactions among people of various nationalities are made possible, and there are many opportunities to contact foreign friends. With competent EFL skills, people can quickly expand their social circles and strengthen social connections.

"Traveling abroad is barrier-free, and can also meet friends of different cultures and countries." (Student ID.136)

Since the influence of the media, film, television, and music originates from Western countries, Taiwan society has long been envying Western cultures, political systems, and living standards. A few youngsters have developed a passion for and longing mentality for Western society. Moreover, society is now becoming more open, which allows exotic love and spouses from various countries. With the advantage of EFL, there is less barrier when falling in love or having a relationship with a foreign partner.

"Can marry to a foreigner in the future." (Student ID.170)

#### 4. Discussion

Regarding the first research question, the BIF scale provides an instrument to measure the UNS's construal level. From the result, the mean score was not high (M=15.02) compared with the previous research ( $M=14.98{\sim}16.62$ ), which collected data from some academic oriented universities in the United States. This result meet our expectation before the study. As our participants were nursing students from UST systems, their past learning experiences should not enable them to be perceived as high level as those undergraduates that studied in the academic oriented institutes. The learning goal of the Taiwanese UNS was very clear and substantial: to acquire the necessary nursing skills to take care of patients in clinical settings. The psychological distance from learning in the university to the workplace is rather "short" so they do not need to endure much uncertainty or delay satisfaction. Nevertheless, this may imply an improvement opportunity for the language and/or nursing teachers.

In addition, quantitative result of the ELCS demonstrate that among the four values, career development gained the highest points (M = 3.59), while personal well-being had the lowest (M = 3.14). If we divide the four into two categories of extrinsic (university studies and career development) vs. intrinsic (personal well-being and responsibility) motivations [10], it seems extrinsic orientation is still stronger than intrinsically driven EFL learning. UNS is quite motivated by external or instrumental force in this teaching context. People may tend to conclude that the spread of materialism and capitalism all over the world strongly influence the younger generations' perceptions of the world. Extrinsic motivations are observed everywhere, and the UNS is no exception.

However, from the construal level perspective, only the theme of "university studies" may be seen as lower level as it satisfies the students' needs immediately. The other three are higher level construals since career development, personal well-beings, and self-responsibilities are all happening in the future. These reasons all remind the UNS that learning English is a worthwhile investment for their long-term development, which corresponds to the nursing core values of "life-long learning" [4]. In reality, the UNS are encouraged by the social environment around them, including the authority's policy, university's regulations, clinical settings' requirements, teachers, parents, and even their peers, about the importance of learning EFL implicitly and explicitly [28].

Among the four core values/themes, "future career development" is the factor that most students were concerned about and considered the most important one. Judging by the author's years of teaching experience in the nursing university, UNS also arrange for their clinical internship in addition to classroom teaching. The clinical experience may enable UNS to realize the needs in their future workplace environment in advance. They can better understand the connection between English learning and nursing-related professional terminologies. The awareness may strengthen the emphasis of UNS on

English learning and can motivate them to learn English. As there are many successfully psychological precedents in daily life or education applying the notion of self-affirmation intervention, educators should think carefully about the possibility of its applications. In the future, it may also be worth further exploration and research in the local context of teaching and learning.

The other two core values/themes, self-responsibility and personal well-beings, were not well recognized by the UNS. The development of self-regulated learning and lifelong learning, suggested to be critical professional core values in nursing, may require more attention. In Taiwan, the examination system has become the most important factor for the relevant education parties, including authorities, schools, teachers, students, parents, and even the whole society in the evaluation of language learning and teaching achievements. Construal level theory may provide valuable insight into what the UNS believe about their ability to learn a foreign language that the teacher can take into account when preparing to teach the learners [15]. The language teacher may make an effort to avoid focusing all his/her teaching on examinations and scores; instead, the examination system should be seen merely as an evaluation instrument. For most learners, failure in the examinations has already dented their confidence. The direct link with examination scores does not work for those learners. In that situation, most of the teachers may have less idea of how to help them if they continue to hold the same viewpoint about learning and performance.

## 5. Conclusions and Limitations

This study is an exploratory inquiry employing the combination of quantitative and qualitative paradigms to extract the core values perceived by language students. Similar discussions of SLA (second language learning) motivation have been intrinsic (internal driven) versus extrinsic (external driven) motivations, and researchers tend to advise that intrinsic motivation can last longer and is more effective for achieving learner autonomy. Yet they did not propose any theory or model to explain the mechanism or phenomenon. The construal level theory may be the first step to help realize more about students' motivation and the cognitive process behind it. The current study attempts to investigate the crucial perceptions of language learning motivation recognized by the nursing background students systematically, and thus make a value list for the use of further teaching experiments.

As for the generalisability of this study, nursing students who have ever studied English as a foreign language in Taiwan may be the population. For those settings of vocational colleges and universities, the generalisability may be more applicable than the academically oriented institutes. Regarding the transferability of the qualitative data, triangulation processes and expert validity may have increased its trustworthiness and may serve as a reference for the nursing students in similar contexts.

There may have been limitations in this study, and opportunities for future research. First, the number of participants was not large enough. As discussed in the previous paragraph, the generalisability of this study may have its limitation. Recruiting more UNSs nationwide may improve this. Second, further investigations on the causal relationships, particularly for the relations between psychological/motivational factors and patterns of certain adaptive and/or maladaptive behaviours such as self-regulation/avoidance/self-handicapping may help provide insights into the UNSs' professional core values regarding their learning EFL. Lastly, the lower internal consistency and item-total correlation of the BIF may reveal a need for adjustment according to the context for the future studies.

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