

The Study of Learning Process, Campus Adaptation and Culture Adjustment of College Nursing Aboriginal Students in Taiwan—Combine both Longitudinal and Cross-Sectional Methods

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Abstract: The researchers recruit 10 aboriginal college students, majored in nursing, to explore their experiences regarding learning process, campus adaptation and culture adjustment in a school. Two of them contribute their experiences in a 5-year-sequence participation. In order to fulfill the aim of this research, participated in-depth interviews are adopted.

The findings conclude that urban aboriginal students tend to have better academic performances than rural aboriginal students do. Teachers' attitudes toward aboriginal students affect the students' studies and adaptation to the school. The more social resources they have, such as family, peers and teachers' support, the better they adapt to the school. Aboriginal students who have higher learning outcomes, also show better performance in self-concepts, interpersonal interaction, and self-identity. Financial concern would be the key influence when participants decided to pursue their further education or to start working after completing the five-year nursing program. Due to governmental advocacy, urban aboriginal students are encouraged to obtain native-language certificates.

As a result of these findings, suggestions such as promoting awareness of cultural variety in campus, developing more valid financial aids and resource, and establishing an integrated academic supporting system are presented.

Key words: aboriginal students, learning process, school adaptation, cultural adjustment

1. Research Motivations

Taiwan is a society consisted of many ethnic groups. There is no significant difference among Mainlanders, Hokkiens, Hokka people in terms of physical characteristics, cultural customs and languages as they are part of Han people; However, comparatively speaking, the Austronesians that belong to aborigines, reported a total population of 0.42 m only and comprised less than 2% of total population in Taiwan, reported huge difference

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with Han people in terms of culture and language perspectives, it is indeed, genuinely a minority group in Taiwanese society, in which it failed to go parallel with advantageous groups so far in terms of conservation of tradition, income, standard of living and years of education and so on. Education is mainly the path to change social class of individuals; hence the learning process and campus adaptation of aborigines at school highly require our attention.

Over last 40 years, an effort of Taiwan government on the promotion of aboriginal education has led to an increase in the population of educated aborigines from year to year, however, there is still a big gap between aboriginal students and non-aboriginal students in terms of college above admissions, the aborigines comprised around 14.12% while non-aborigines comprised around 35.4% of total college above educated population (Ministry of Education, 2009; Chou, 2009). When aboriginal students leave their hometowns and study in the Han culture oriented schools, the gap in between normally enables strong cultural shock to them, which not only causes extreme challenge in terms of learning aspect, but will possibly causes adaptation issues in terms of peer interpersonal relationship, teacher-student relationship and rule of life aspects (Tan, 2002).

According to related studies in Taiwan, aboriginal students who study in Han-based schools tend to report poorer learning efficacy and have difficulty in life adaptation or will subject to ethnic bias & discrimination issues (Huang & Kao, 1995; Yang, 2001). In recent years, many scholars mainly focus on the studies of learning adaptation of junior/senior high school students and aboriginal students (Tan, 2002; Huang & Kao, 1995; Ren, 1986; Lin, 1995; Yeh, 2002) while the quantitative survey is mostly adopted as a research methodology to college above educated aboriginal students (Lin & Tang, 2001; Lo, Huang, & Lin, 1999; Liao Chang, Lee, and others, 1999). And there are interviews of quantitative survey conducted with aboriginal freshmen (Liu, Liao Chang, Lee, Li, Yeh, & Lan, 2000; Liu, Chen, Tsao, & Li, 2004). While the long-term longitudinal qualitative study of college aboriginal students' learning process and campus adaptation in Taiwan is hardly seen. Therefore, the study focuses on the learning and adaptation process of college aboriginal students in Taiwan to conduct a cross-sectional and 5-year longitudinal qualitative research.

According to the statistics by the Council of Indigenous People (2009), Executive Yuan, the college aboriginal students in 2008 were ranked as top 3 in terms of student enrollment in various types of faculty, which are Medical Health (20.09%), People's Livelihood (16.34%) and Business & Management (12.89%) while the college nursing aboriginal students won the top rank according to an analysis of aboriginal students' general situation by Ministry of Education in 2008, reporting an enrollment of 2,466 students and a gap of 1,877 to Department of Information Management which is ranked the second, non-college nursing aboriginal students reported a 4.99% structure ratio, while aborigines who college nursing aboriginal students reported a 15.67% structure ratio, in which college nursing aboriginal students are 3.14 times of non-aboriginal students, a preference of aboriginal students on nursing can therefore be inferred (Chou, 2009).

The school chosen by the study is the Institute of Nursing that introduces full subsidy to female aborigines since academic year 1995, the ratio of aboriginal students in this school was once ranked as top among universities/colleges in Taiwan in terms of students' population structure, it however, stopped independent enrollment scheme of aborigines since academic year 2006 while the classes for the 5-year junior college were reduced from year to year, and is largely reduced for the time being, therefore, their learning and adaptation processes require further concern with records, while an unique experience of college nursing aboriginal students even worth our concern and attention more.

2. Research Purposes

According to the research background and motivations stated above, the purpose of this study is to explore the adaptation status of aboriginal students in learning process and campus adaptation from enrollment to graduation while studying at a Han dominated school. To be specific, the purposes of the study are as follows :

(1) Explore the life experience, personal background of aboriginal students before enrollment, and the effect of learning and campus adaptation on them after enrollment.

(2) Explore the learning process, campus life adaptation and ethnic identity development of aboriginal students from enrollment to graduation during the 5-year junior college.

(3) Summarize the research outcomes which are provided as a reference to the government and school educators, to plan and facilitate measures with regard to learning and development of college aboriginal students.

3. Definition of Terms

3.1 Learning Process

The learning process here refers to learning experience of aboriginal students before the 5-year junior college study, and their learning experiences and process during the 5-year junior college including schoolwork performance, learning pressure and adaptation, internship experience and personal growth etc.

3.2 Campus Adaptation

The campus adaptation here refers to aboriginal students' reaction and adaptation to various challenges in school life including interpersonal interaction, peer relationship, teacher-student relationship, part-time work experience etc.

3.3 Cultural Adjustment

The cultural adjustment here refers to culture shock caused from a reach to mainstream society of aboriginal students during the education process at school and the adaptation processes of individuals in ethnic culture and self- identity.

4. Literature Review

In recent years, various countries have consecutively headed toward a teaching direction of merger between ethnic groups, which is “multicultural education” development; while various circles are getting attentive to the aboriginal education in Taiwan (Department of Education, Taiwan Provincial Government, 1996; Lee, 1999). A literature review will be conducted in terms of education and learning and campus adaptation of aboriginal students as below.

4.1 Education and Learning of Aborigines

According to Tan (2000), the development of aboriginal education faces low academic achievement, low enrollment rate, high drop-out rate issues all the time due to the unfavorable factors such as insufficient education spending and manpower, poor teaching quality and high turnover rate, disadvantageous community and family culture, insufficient teaching facility and the lack of related regulations etc.

The environmental constraint has led to a loss of subjectivity of aboriginal culture and cause maladjustment

and further lead to learning impairment after it contacts the predominant Han culture (Wang, 1999). There is only language without character between aborigines, in which they cannot use characters to conduct logical thinking and reasoning, which not only leads to increased time and burden on learning, but also causes confusion and interference on thinking and reminiscence during the conversion process; causing low academic achievement and poor school adjustment (Ren, 1986; Lin, 1995; Huang, 2000).

Besides, aboriginal family reports relatively low social and economic status, in which such unfavorable family background will affect a chance at education (Wang, 1999). The aborigines confessed that the most important factor that leads to poor academic result is “poor family” and “awful reading environment at home” (Mo & Wang, 1997). It is generally believed by the elementary/junior high school teachers that teachers’ enthusiasm in teaching and attitude toward work are what matter to aborigines’ education, followed by teaching quality matter. Most of the teachers lack a capacity of multi-culture, they don’t understand the characteristics of aboriginal culture, they always accuse aboriginal students of their incompetence and having no idea of hard work when they face a sense of powerlessness (Lin, 1998).

According to the research results of aboriginal junior high school students’ adaptation, aborigines’ adaptation to school is associated with interpersonal relationship, teachers mostly consider the family support is the key to the success of school adaptation. Low academic achievement of aboriginal students is possibly because of being ignored during teacher-student interaction as teachers mostly report passive attention to aboriginal students (Tan, 2002; Yeh, 2002). As far as higher education is concerned, aboriginal students’ performances are significantly lower than Taiwanese students in terms of attitude & motivation, message management, reading & comprehension, problem solving, test-taking strategy, anxiety for learning and study strategies aspects according to the study by Liao Chang, Lin, and others (1999), The order of top 3 ranks for behavior disturbance is: school adaptation, individual attitude (attitude toward self and self-concept) and social entertainment. According to a study of aboriginal students’ school adaptation at higher education by Wu (2004), a bonus point added will on the contrary, cause a difficulty in course adaptation in terms of course adaptation aspect. And their adaptive and converted strategy, is to study assiduously by themselves and to seek for resources from outside.

According to a study by Liu and others (2000), there are 3 motivations that drive new aboriginal students to study at the Institute of Nursing: (1) Acquire professional skills. (2) Share family livelihood in advance. (3) Alleviate current economic burden of family. There are 3 factors that determine aboriginal students’ attitude toward learning and behavior: (1) Proactive attention of significant people. (2) Self expectation. (3) Model of peer behavior. According to a study by Liu, and others (2004), new aboriginal students normally dislike being highlighted for their self-identities and cause difficulty in course learning. It is found that the aborigines in general, study nursing at school due to economic weakness, they mostly feel a pressure enabled from learning process, however, they could find a sense of achievement from the experiment class and internship according to the research result by Shih and Chen (2006).

Thus it can be seen that aboriginal students report tougher process of learning than Taiwanese students due to the congenial disadvantage environmentally, in which their experiences in learning at college require our further attention when they break the congenial limitation and study at the university.

4.2 The Campus Adaptation of Aboriginal Students

School experience is an imperative factor which affects ethnic identity and academic achievement of minority groups. For those minority ethnic students, school education is a process that urges them to recognize the

mainstream culture, but also one of the factors that causes mental conflict and learning disorder (Tsai, 2003).

According to a study by Chen (1998), aboriginal students will more or less, subject to experiences in verbal assault, behavior attack and attitude of exclusion of the generation due to the different self-identity. Due to different skin color and outline, they will easily become the target of being mocked. Chen (1994) also pointed that it will delicately affect the cognition and acceptance of Taiwanese students on aboriginal students once the contents of school education and teachers' approach convey messages of stereotype or bias, where aboriginal students will feel an inner conflict of strong ethnic and cultural identity while interacting with teachers and peers.

A similar situation is happened overseas; according to a study by Rankin and Reason (2005), colored students experience a more unpleasant, hostile or threat behavior and other harassments which will interfere with learning than white students. Furthermore, the school climate experienced by colored students and white students is different, colored students perceived racial discrimination, hostility, and disrespect on minor peoples and a less accepted school climate. Verkuyten (2008) also pointed out that, adaptation and identification issues are what most immigrants and minority groups have to face every day, in which higher perception on discrimination is associated with low life satisfaction; there is a positive correlation between higher ethnic identity and life satisfaction. According to Cordeiro, Reagan and Martinez (1994), discrimination in education environment is what minority groups need to face forever, in schools, it shows discrimination in curriculum, course materials, teaching style, test and assessment and teachers' expectation.

However, aborigines report a nature of "vigor, optimism, contentment and acknowledgement of mandate of heaven" (Lee, 1996), therefore they show better capability in life adaptation than Taiwanese students. According to the finding by Lee (1999), aboriginal students generally report stronger life adaptation capability than non-aboriginal students; they are short of good reading habit for learning and report weaker learning motivation than non-aboriginal students. They would subject to peer influence more than non-aboriginal students, report direct emotional reaction and cause irrational behavior easily. According to a study by Huang (2000), those aboriginal students who reside in level ground report better "adaptation to social pressure" than those who live in hill tribes, the self-concept reports biggest explanatory power (20.5%) on overall life adaptation. According to a study of aboriginal students' school adaptation at higher education by Wu (2004), their friends are mainly aborigines-based although they have Han's friends in terms of interpersonal relationship adaptation. According to Tsai (2003), "curriculum pressure" and "lack of companion" are two factors that cause maladjustment of aboriginal elites during the college life.

According to Chen (2002), Yeh and Tan (2002), Lin (2002) and others, the foundation of aboriginal society's structure is a community composed of kinship, in which each individual belongs to the kinship community. They emphasize on a collected, shared, group driven, dynamic, game-based and practice learning scenario, they favor free, vivid and unconstrained learning style, they prefer concrete table and unconstrained learning style in terms of thinking model, and they like to introduce tangible visual images with less abstract concept.

According to the literature review listed above, aborigines are mostly in a disadvantaged position in culture since long time ago, there is significant difference between aboriginal culture and Han culture. Hu (1981) pointed that the unique values of aborigines including collective idea, undifferentiated idea and concrete thinking have substantial conflict with modern society which focuses on independency, taking responsibility, task division, characteristics of one job by one man and abstract thinking capability, in which a lone and disadvantageous position of aborigines is enabled in a competitive society. The biggest problems for aboriginal students when they study at Han oriented schools in the level ground are learning pressure and campus adaptation issues caused by

different social and cultural background from Han people, in which the process requires more exquisite and deeper understanding.

5. Research Methodology

5.1 Research Design

The purpose of this study is to further understand the learning and adaptation process of nursing aboriginal students in the 5-year junior college. As the nature of the study is exploratory, The study mainly focuses on an exploratory research with qualitative discovery-oriented approach introduced in order to further grasp the uniqueness and full view of aboriginal students' learning process during the 5-year college, to exquisitely understand the unique experience of each aboriginal student in terms of learning perspective with no pre-condition, to conduct data collection upon longitudinal and cross-sectional methods.

Researchers to trigger the research objects to express personal subjective point of view, attitude, feeling and experience by asking a question upon interview guide, and to further guide the research objects to explore the deeper connotation based on the contents discussed in order to acquire more complete information. A respect on research objects' subjective experiences, listening without prejudice, proper guidance is required during the interview, interference and interruption of research objects should be avoided. Having the interview process recorded under the consent of the case study and having the run-down script written after interview to facilitate processing of interview and data consolidation.

5.2 Researchers

The capability and background knowledge of researchers will have big impact in terms of the analysis and interpretation of the study as the primary research tool of qualitative research is mainly the researchers themselves. The researchers of the study are concurrently the interviewers, in which the 3 researchers all report a length of work for more than 10 years and have experiences in qualitative research, they are senior teachers and concurrently the counselors with counseling psychologist license.

5.3 Research Objects

Targeting aboriginal students who study at Chang Gung University of Science and Technology, the study introduced judgment sampling which covers ethnic difference, growing background of the level ground and the tribe, with 10 female aboriginal students selected as interviewees, in which one of the interviewee's father is a military personnel, and one of the interviewee's mother is a nurse, while the rest are blue collar workers, the related background information of interviewees are consolidated as Table 1.

5.4 Steps to Go

(1) In terms of longitudinal data collection, student A and B are interviewed with 5 interviews conducted during the 5-year study between Oct. 2002 and May 2007; as far as data collection by cross-sectional method, eight 5th year aboriginal students (C~J) are interviewed for 1~2 hour each between Mar. and Dec. 2009, conducting in-depth interviews by semi-structured "interview guide" and analysis of the collected qualitative data.

(2) Have the interview process recorded and the run-down script written after interview to conduct the qualitative analysis. A discussion on coding is proceeded by 3 researchers in terms of each respective interview run-down script to jointly analyze and categorize, with student A~J to represent the code of research participants, the coding guidelines of student A and B are "interview code-number of interviews-page no. of run-down script";

the coding guidelines of student C~J are “interview code- page no. of run-down script”.

Table 1 Related Information of 10 Interviewees

Student code	Tribe type	Growing environment	Family background	Part-time	Graduated	Tribal language certification
A	Seediq	city	Single parent/skipped generation family (mother: worker)	Y	Y	----
B	Burun	tribe	Nuclear family (worker)	N	Deferred graduation	----
C	Paiwan	city	Three-generation family (worker)	Y	Y	Passed
D	Taroko	tribe/city	Nuclear family (military personnel)	Y	Y	Passed
E	Amis	city	Single parent (mother: worker)	N	Y	Failed
F	Amis	city	Nuclear family (worker)	Y	Y	Passed
G	Burun	tribe	Parental separation (worker)	Y	Deferred graduation	Unattended
H	Paiwan	tribe	Single parent (mother: operating room assistant)	Y	Deferred graduation	Unattended
I	Atayal	city	Single parent (mother: nurse)	Y	Deferred graduation	Unattended
J	Seediq	tribe/city	Nuclear family (worker)	N	Deferred graduation	Unattended

(3) Data analysis: researchers will read each run-down script attentively for several times to find out meaningful description with basic information underlined for analysis. A true connotation is discovered through the meaningful statement. Having those with meaningful characteristics consolidated as a portfolio with subject and the subjective experience context of learning process and campus adaptation summarized for college aboriginal students. And lastly, make complete and comprehensive descriptions upon the integrated outcomes derived.

(4) Trustworthiness of data collection and analysis

The study uses following methods to establish the trustworthiness of qualitative research:

(a) **Prolonged engagement:** A co-existence between researchers and research objects for 5 years in school has enabled a chance to directly contact with aboriginal students, which is advantageous in establishing a mutual trust in between, therefore the students will be able to freely speak their minds during the interview while researchers will be able to further understand the contents that they express.

(b) **Triangulation:** Cooperated with research diary and field journal as proof of analysis, the study mainly focuses on interview run-down script for analysis, in which the researchers will firstly conduct analysis and discuss with psychologists, to verify over and over again so as to ensure the trustworthiness of contents.

(c) **Peer debriefing:** A consistent examination of data derived from joint analysis and discussion after the interview contents were analyzed by the 3 researchers in advance during the process of data analysis

6. Research Outcomes and Discussions

The research outcomes will be shown from learning process, campus adaptation and cultural adjustment perspectives upon the data and analysis of interview data.

6.1 Study Motivation and Learning Process

These aboriginal girls, who came from tribe or city, have left their hometowns in their 15 or 16 years old, they major in 5-year nursing school of one Institute of Technology. Nursing is a highly-specialized study, in which

the 5-year learning process is full of hard work and challenge, in which the path of internal struggle and good and bad in life were described respectively as below :

6.1.1 Factors that Lead to A Study at School of Nursing in the Institute of Technology

Given advantages such as tuition & miscellaneous fees by full subsidy provided by the school, people choose to study at school of nursing in this Institute of Technology as the burden of home will be relieved while they will acquire professional skills which give them an advantage for employment in the future, this is similar to the outcomes of a study by Shi and Chen (2006), Liu and others (2000). It is obviously seen that a subsidy on aborigines economically helps them pursue higher education without worries, which further helps foster the career class in the future as well as improve household economy.

I chose to study here because of President Wang's support, it on the one hand, helps alleviate the burden of my family, and on the other hand, is good to my life plan, however, I wasn't planned to be here at first...(C-1)

My point of view is, my mother and junior high school teacher feel that I may take it a try as the school provides good offer to aborigines. (D-2)

Due to a recommendation by junior high school tutor, saying that the school provides subsidy to aborigines, I decided to study here due to the poor family economy. (A1-2)

6.1.2 Learning Pressure and Adaptation

Due to the family culture, aborigines bear farer burden than non-aborigines in terms of learning perspective. Besides, the lack of concept and practice on numbers, aborigines report more learning pressure than non-aboriginal students for fundamental nursing technology with regard to numbers such as interpretation of life sign and calculation of intravenous infusion. It is known that the nursing curriculum is a dual pressure to aboriginal students (Liao Chang, Lin, Sun, & Tsao, 1999), therefore the process of adaptation and pressure they face worth our attention.

(1) Urban aborigines report better curriculum adaptation after studying at the university.

Student C considered that a life in level ground of urban aborigines for a long time enabled better management of Taiwanese students' learning style and hence better learning effect. Student J also realized a gap existed between city and village, somehow he believes that it can be overcome by hard work. Comparing the aboriginal students involved in this research, 5 students report a deferred graduation from Table 1, they mainly from the tribe, thus it can be seen that schools should pay more efforts to help the curriculum adaptation of aboriginal students from tribes.

Probably because I am an aboriginal, I am a slightly different from other aborigines in terms of life manner or...relationship to culture, just like my ex-aboriginal classmates, they are now under education... report a deferred graduation and dropout..., there are effects on learning ability more or less. (C-19)

Due to a living in level ground for a long time, I might know Taiwanese students better and is capable of grasping techniques easily, it might takes longer time for them to do. (C-20)

Children of some relatives and friends were ranked as top in the mountain, but may fall behind suddenly after they move down to the ground...there is a gap between city and village indeed, you may not necessarily be the last and might move forward after you try with your own effort. (J-12)

(2) The Pressure from nursing intern is big, but you will learn a lot from it after the intern.

A pressure from the process of nursing intern makes partial students withdraw at one time, however most of

them report a growth in terms of personality and interpersonal interaction aspect after the intern.

There are few times I feel like leaving the school...the intern I think! As aborigines got admitted because of bonus point, it is quite a pressure to us in terms of a gap to others. (E-1)

Hmm.. I think being a nurse I am dare to make friends with others as you can't be afraid of something when you go to hospital, I wouldn't mind talking to strangers throughout the intern. (F-7)

(what impress me a lot) is recent internship. I was in the delivery room of Chang Gung Memorial Hospital, Linkou, the senior sister over there is generally acknowledged as being mean the most...she is emotional too...she kept scolding on me at first, to shout with abuse...I am getting better in terms of pressure handling...I am quite surprise about being able to survive from this. (B5-2)

(3) The attitude of school or intern teacher toward aboriginal students will affect their interest in learning and adaptation.

Normally aboriginal students care about teachers' attitude toward teaching a lot, aboriginal students' interest in learning will be enhanced along with a sense of accomplishment attained easily when teachers hold a supportive and encouraged attitude; however, their attitude toward learning will be affected easily and even drop out of school when teachers draw conclusions out of a part. Some students also learn to adapt to teaching style of different teachers when they grow from time to time.

I passed the internship when I was doing one at the pediatrics department, but I really had a hard time there, because...I came down with disease whatever children have....also...a mental pressure, for being insulted by the teacher... (D-13)

Because I am sensitive, sometimes a look will make me think whether I have a mistake, however, I am happy when they give a compliment. (D-12)

I am quite impressive about being absent from class in my 3rd and 4th year as I was quite unsettled in mind at that time; which is heard from classmate by teachers, they came to me and persuade me through an easy chat; however, the class tutor will keep scolding which gives me no chance for an explanation, these two teachers enable a different feeling to me, I am thankful to that teacher a lot. (A5-1)

(4) A learning by doing is preferred, an experience in intern determines a commitment to nursing work.

Aboriginal students prefer vivid, DIY course normally, they always hold an attitude of expectation toward a learning of new nursing technologies, however, during the nursing intern, the gratitude of patients and family members enables a sense of achievement to aboriginal students, such outcome is consistent with the result of a study by Shih Miao-Fang, Chen Ming-Li (2006), the study also found that the aboriginal nursing students will be able to gain a sense of achievement, which is also a driving force that urges aboriginal students to continuously study in nursing field.

There is nursing technology behind when we conduct an experience; I am looking forward to new technology when there is one. (A3-4)

We have a nice teacher as he is willing to let me try a lot of new technologies, I will find a sense of achievement while caring for a patient. (H-3)

During the intern, you will be very much accomplished when patients express their thanks to you! (F-6)

(It's about graduation time! but I am going to defer graduation) a feeling of complex, I thought I might give up in the middle during the 5-year study...i have a thought of giving up intermittently...I have no interest in nursing and I am frustrated...(mainly) because the intern. (B5-1)

Student A, H, F learnt a lot from the internship, where they acquire many new ideas and technologies from teachers with harsh requirements, or gained a sense of achievement from patient's appreciation, they've seen birth, aging, sickness and death through and also experienced a lot from life. Student B reports an emotion of complex, he thought he would give up in the middle, just because of an idea of giving up intermittently; they want to give up because of having no interest in nursing and facing a frustration which mainly comes from internship. Although general aborigines love to learn and do things by themselves, however, the internship is also where a sense of achievement and frustration of aboriginal students mainly from.

6.2 Interpersonal and Campus Adaptation

6.2.1 The 5-year dormitory life is as rich as a harvest of learning of interpersonal interaction and professional knowledge.

A skill and competence in interpersonal interaction and communication acquired from the 5-year community life has not only affected the way of interaction with classmate but even affected the way to get along with parents. I believe these aboriginal students will still infinitely enjoy the interpersonal competence they acquire from student life after graduation.

Actually it is not easy to connect with people when I just got in, I gradually realized that this community life is about approaching others proactively, to receive some feedbacks or resources you need. (C-8)

I did not know any better when I graduated from junior high school, therefore I may hurt others unknowingly, however, here is about community, accommodation and life, I am pretty close to my roommate who is a nice person, they would speak to me directly when they feel uncomfortable about me, I started to restrain my temper slowly afterwards, as well as a (way) to get along with parents. (G-3)

Hmm...nothing is more precious than peace! I used to be direct and bad-tempered before, then they (good friends) felt that I am at a disadvantage for being like this....Now I only shout in front of them....(emotion) soon disappears after I give a shout! (F-10)

The 5 years study in the 5-year junior college allows the introverted student B to become much more outgoing and talkative, she learnt a lot in terms of self-expression and is trained to be independent during the part-time job and internship process, I learnt to see things from different angles and to think in a critical way, I am more mature in thought.

My junior high school students said that I am now a new person when they saw me...I become more outgoing and is getting talkative than before...hmm, it works for study here, you need to train yourself, then some characteristics required will be trained unconsciously ...I've learnt a lot ...in terms of self-expression and trained to be independent... (B5-1)

During the 5-year study at Chang Gung, my point of view on a lot of things have changed; I used to believe that there might be a right answer for one thing, however, there are a lot of answers in terms what school have taught us, in which every answer may not be necessarily 100% correct.the idea is taught in many classes. (A5-1)

The biggest change is a change in concept or idea...now there is a view in many perspectives....I would consider that some people make wrong things, but they are right in some way. (A4-12)

6.2.2 A collective and shared concept of aborigines will sometimes, cause interpersonal misunderstanding to Taiwanese society.

Aborigines' collectivism, undifferentiated and shared concepts, report an unclear cut on a boundary between

self and people. According to an example stated below, researchers did not take the behavior of student D as money-stealing, however a boundary between people and self needs to be learnt and adjusted mutually for similar interactions.

Once in an internship....we need to wear...clothes in green color in the delivery room, As I was on duty in that day ...(need to manage lunch for everyone), they didn't give me money and I didn't have enough money, then I said let's borrow money from others, two of them are good friends (the other one on duty)...I took the money from his/her purse without approval, I thought we are a team and are quite close to each other. (D-10)

After we got back from lunch, I talked to the classmate (about money borrowing)....they all said okay externally, but the one who brought lunch with me from outside whispered to me in private: they said I stole their money....it really hurts me! But I did not clarify the point as I am not familiar with them (D-11).

6.2.3 Those aboriginal student who have more interpersonal resources usually report better campus adaptation.

Stability in family life and parents' attitude toward education are fundamental factors that support the aboriginal elites to study without worries, such interview outcome complies with a study by Tsai (2003).

I was so regretted and decided to drop out of school in my first year, but my parents said to me at that time...it's a pity for you to leave without truly touching the core of nursing! (H-2)

(My family) is very supportive, no matter what difficulty I encounter with, or in a state of hysteria or feeling depressed, they all care for me a lot. (D-9)

In addition to guidance on study, aboriginal students will be inspired if they know a teacher in school.

I have a part-time job in audio/video center where there are two teachers are nice to me, and I trust her a lot, she taught me a lot since I was a freshman of the 5-year junior college....sometimes teachers will take a seat and have a chat with me. (D-5)

Interpersonal support is key point to campus life adaptation. Just like the good friend of student F are Paiwan aborigines and Hakka while the good friend of student is also a Taiwanese student, they offer a lot of support in no matter life support and course assistance. Such interview reports different result from a study by Tsai (2003): "lack of companion" is a factor that leads to maladjustment of aboriginal elites during college stage. According to researchers, a revolution feeling on standing together in times of need developed through being constantly together over the 5 years in such an Institute of Technology involves multi-ethnic groups with massive aboriginal students, in which a different look will be less given to those aboriginal students.

I've known Yi since I study at Chang Gung, my father had an affair during my first and second year at college and my mother committed suicide, I can help but cry every day, but I don't want the entire class know about it, Yi helped me through in that time...another good friend of mine Su joined us afterwards...Yi is a Paiwan aboriginal while Su is a Hakka. (F-3)

Su is the best in study between us, we both started to study around one week before the exam but I just can't get it, then she came to teach us...we were thankful to her help, I did not fail for having her help. Yi failed in some subjects but Su never complains: you are bothersome, she never did. (F-4)

My roommate will not be stingy in terms of assistance on schoolwork (a roommate closest to me) is a Taiwanese student. (E-8)

Because my senior sister cares for me a lot!... sometimes she told me, certainly come to her should you have any troubles. (A1-9)

6.2.4 Economic burden and part-time job affect schoolwork.

Although tuition and miscellaneous fees were fully subsidized, a high percentage of aboriginal students cover their living expenses through a part-time job. There is universally an economic burden among aboriginal students. According Table 1, 7 aboriginal students out of 10 interviewed have experience in part-time job, while student C and G sacrificed a lot of time on reading, making friends and clubbing, in addition to a pressure from schoolwork, it seems that aboriginal students bear bigger pressure in life than Taiwanese students. In which excessive part-time job will inevitably affect schoolwork and even lead to a deferred graduation.

I felt that I am different from others since the internship...You may need to make use of time left from work for reading...but you have no choice, i need to on shift with my mother to take care of sister (dialysis), or go to work. (C-10)

My sister supplies the living of my parents, then my younger sister works in a breakfast store and makes some money while myself also work as a part-time now. (F-1)

I need to take care of my own living expenses....you would sacrifice time of reading and clubbing for a part-time job, the 5-year junior college is all about dormitory, school and part-time job when i recall now. (G-5)

6.3 Culture Adaptation, Ethnic Identification and Life Planning

6.3.1 Economic burden affects life planning

A measure of full subsidy to those outstanding aboriginal students who report a financial difficulty provides help to change the life of aboriginal students. Economic perspective is still an important factor for aboriginal students to consider after graduation in no matter the advance study or employment option.

I might drop out of school in the half way if I decided to study in a high school...the economy of my family may not be able to afford it. (A5-3)

Knowing what I want ...is to take care of the family. Ya. Therefore I need to find a way out! (A1-8)

As I think there is still a big issue for aborigines in terms of economic aspect, I did not exclude the advance study as one option, but I need to take responsibility for the economy of my family, as well as my tuition and half of the living expense, therefore I choose to...be employed. (C-1)

I want to go to work as soon as I graduate, but my family wants me to go to work after I finish my 2-year college study....as I think the family reports poor economic condition, therefore I would like to make some money. (F-2)

6.3.2 The schoolwork performance affects the identity and confidence of aboriginal students

According to an observation by researchers, those aboriginal students who report better performance in schoolwork will be more confident in terms of self-concept and interpersonal interaction, which also affects their identification with aboriginal status and will criticize classmates who identify themselves as aborigines.

I wouldn't exclude myself as an aboriginal, however, my ex-classmate who is also an aboriginal, hates his father when he drinks, but as a status of aboriginal, his father enjoys the rights of aborigines, therefore he doesn't like the aborigines in class...those who just report the same behaviors as his father, therefore i extremely repel that classmate. (C-18)

And some students, they might give you a different look..... It is commonly acknowledged that you don't know anything about reading but smoking and drinking as you an aboriginal (A2-11).....but it seems not like that after the exam....I was astonished by her sudden hard work someday.... (roommate) would keep saying

that “I am surprised to see you perform better than me in terms of the exam...how could it be possible”. Hmm, why not. (A2-12)

The status of (aboriginal)! Is very good...it is a kind of cultural inheritance! It is something you would speak of while communicating with classmates! so does teacher during the class, ya...which will be applied to schoolwork....just like we do during presentation, we hang our clothes etc., you would use it when you paint...when you speak! And teach classmates how to speak a (mother tongue)...and sometimes a hunting by you aborigines will be mentioned during the class, it is a honor for me to raise my hand this time. (A2-10)

Student A and C report pretty good performance of schoolwork, they are relatively confident and report strong self-concept, identify with oneself and appreciate a status of aboriginal, which is seemingly different from the result of a study by Liu (2006), the study has pointed that a negative correlation between the development of internalization stage between ethnic identity and 1st-grade academic achievement, indicating that those aboriginal students who report higher academic achievement might report lower level of participation in group activity in order to achieve a standard of mainstream culture, and also report lower level of acceptance and appreciation in terms of the values and life model of minority groups. In addition to an appreciation of self-aboriginal culture, student A will be able to incorporate the feature of aborigines into her report or assignment.

6.3.4 Aboriginal students with deep outline and dark skin will easily subject to discrimination, however, an optimistic character and active performance can defeat discrimination.

Due to an immature mind of elementary/junior high school students, a discriminative wording will be shown on those classmates with darker skin and deeper outline. Discriminative words and deeds are largely reduced due to a large amount of aborigines and more mature mind of classmates after studying at such Institute of Technology with multi-ethnic groups, in which aboriginal students will be able to establish a confidence and defeat discrimination, however partial students will still feel a quite different look from teacher.

I am proud of being an aboriginal, classmates might make fun of me because of my skin color, I have experienced all these... (H-6)

As I used to have darker skin before, therefore I will be teased ...ya..but...it's better after studying here. (A-5)

I will be apparently defined as an aboriginal due to the characteristics....it is so restrained for being defined like that. One time, the intern teacher of * subject, she gives me an ask when she saw me: “are you an aboriginal?” due to my significant aboriginal characteristics, I answer “hmm, yes” I soon began my bad experience afterwards. It is heard that she is bad to aborigines, she dislikes aborigines. (B5-4)

6.3.5 The motivation of policy urges college aboriginal students to acquire tribal language certification.

According to related studies, the aboriginal elites merely subject to the contents of ethnic identity by blood relationship (Tsai, 2003) due to a loss of capability in mother tongue. While a motivation of policy (which regulates that bonus point of aborigines to pass tribal language certification) has urged urban college aboriginal students to acquire tribal language certification through learning, in which researchers consider it is helpful in terms of inheritance of tribal language and culture.

You would discover that I am different from other people, I don't have an accent and I don't speak my mother tongue, therefore I need to study on my own in order to pass the tribal language certification before....as (it is helpful) in the future (C-15).

As least people would ask you whether you could speak a mother tongue today, little could I speak at least, better than none. (C-17)

6.3.6 An experience of real getting along with different groups helps break a stereotype and facilitate merger between ethnic groups.

Partial aboriginal students felt a stereotype from the parents of Taiwanese students, however, a real experience getting along between different ethnic groups helps reduce a bias between Taiwanese students and aborigines.

There are parents of classmates input some ideas in them, therefore it is weird when they get along with us. Hmm...it is a bit disdained.....After they get along with us, they soon discover we are unlike what their parents said. (A5-5)

7. Conclusions and Suggestions

7.1 Conclusions

An in-depth interview with 10 female aboriginal nursing students in this study is to understand their learning process and campus adaptation experiences. The research outcomes will be shown from learning process, campus adaptation and culture adjustment perspectives upon the data and analysis of interview data:

7.1.1 Study Motivation and Learning Process

The main reason to choose nursing as participants' future career is its high employment rate in labor market, plus this particular school offers complete tuition waive and financial aids for all aboriginal students. Urban aboriginal students tend to have better academic performances than rural aboriginal students do. Teachers' attitudes toward aboriginal students affect the students' studies and adaptation to the school. The experiences of field education are core source of participants' frustration and sense of achievement in professional learning and identity.

7.1.2 Interpersonal and campus adjustment

A 5-year-school boarding experience positively shapes participant's life style, personal maturity, and professional growth. The more social resources they have received, such as support from their family, peers, and teachers, the better they adapt to the school. The majority of participants still need to work part-time to sustain their living expense even though their tuition and school sundry fees are covered by school.

7.1.3 Cultural adjustment and identity vs. career planning

The comprehensive financial support from school is an important factor to affect participants' willingness of choosing nursing profession as their future career, especially for those who were in lower social economic status. Financial issues are a large factor when aboriginal students decide whether to pursue further education or to start working after completing the five-year associate-degree program.

Aboriginal students who have higher learning outcomes, also show better performance in self-concepts, interpersonal interaction, and self-identity. Aboriginal students may encounter racial discrimination due to their salient physical symbols varied from other students of mainstream culture, however, self-assertiveness, positive personality, and good academic performance would conquer the frustration. The experiences that actually live or stay with people from other cultures defeat stereotyping aboriginal population and promote interracial dialogue. And because of governmental advocacy, urban aboriginal students are encouraged to obtain native-language certificates.

7.2 Suggestions

Researchers have proposed following suggestions upon the outcomes of this study:

7.2.1 A subsidy to college enrollment of aborigines should go diverse

Currently, a high college enrollment of aboriginal students in Taiwan has led to disadvantaged development of that ethnic society due to the over-centralized talent nurturing, and due to bigger financial difficulty of aboriginal students, a subsidy from the government or private sectors to college enrollment of aboriginal student should be diversified.

7.2.2 An assistance on academic adaptation of aboriginal students

The academic performance affects the self-concept and identification of aboriginal students, which helps aboriginal students with learning barriers in terms of academic adaptation aspect, e.g., an additional academic counseling provided will be helpful to the overall campus adaptation of aboriginal students.

7.2.3 The horizons of multi-culture should be developed among students and teachers

An experience in interaction between different groups will facilitate the merger between ethnic groups, in which a capacity of multi-culture should be developed among teachers or students in order to understand minority ethnic groups in different looks and diminish a bias and stereotype of aboriginal students, respect their cultures and learning styles to provide necessary assistance that helps the learning and adaptation of aboriginal students.

Note : The interview contents are partial interview run-down scripts of students A and B conducted in the first two years for “The Learning Process of Aboriginal Nursing Students (I)& (II)” of 2002-2004 special subject plan subsidized by **National Science Council**, Executive Yuan held by Liu R. L..

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