ABSTRACT

The study aims to analyze the implementation of incorporating E-baby care in the service-learning courses of colleges through the context of family education. The study applies qualitative research qualitative content analysis and interview and participant observation, supplemented by 260 questionnaire surveys, Structural Equation Model (SEM), and Second Order CFA model. The study objects consist of faculty and students from schools in Taiwan that incorporate E-baby care in the service-learning courses for colleges. The study aims to understand the effect of incorporating E-Baby care in the service-learning courses for colleges, cultivate students' literacy and sentiment in "care," accumulate the ability of observation and reflection, internalize value of abstract knowledge, and aggregate the experience value of peer collaboration.

An Analysis from the Perspective of Family Education: The Effect of Incorporating E-Baby Care in the Service-learning Courses of Colleges

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The educational concept of service-learning is under the profound influence of the "learning by doing" theory claimed by educator John Dewey. The concept of combining "service" and "learning" help students learn from the service field and practice concept of service by learning, so that students will perceive the meaning of experimental education. Katy Farber & Penny Bishop (2018) expressed that service-learning can cultivate the characters and sentiment of students, and service-learning is one instructional method for experimental learning, and the process of valuing action and reflection. Amy L. Phelps (2012) Service-learning (note the omission of a hyphen) is the implication of service activity in courses and learning objectives while service-learning is an instructional method. Services and learning objectives have been deliberately designed to enhance the connection between course instruction objectives and service outcome.

Most importantly, all participants in the class can share and exchange valuable experience and thereby attain the meaning of education.

In view of the educational meaning of service-learning, the Ministry of Education in Taiwan launched the “University Service-Learning Program” and designed a variety of service-learning courses. The program takes service-learning as academic credit or incorporates instructional units, potential courses, club activities, volunteer services, activity plan…etc. and others into the professional and technical courses of schools (Ministry of Education, 2007). According to the 2019 statistics compiled by the Ministry of Education on nearly 153 five-year junior colleges and universities in execution of service-learning program, all schools offer the program with different styles and characteristics. Following the development of IT teaching materials, the use of IT auxiliary teaching materials and E-equipment for cleaning in most of the service-learning courses offered in five-year junior college education, and the incorporation of E-baby care in service-learning courses for college, allow students to start out from the viewpoints of basic family education, with enlightenment in the ethical concepts of love people, love self, and love the society.

The new instructional strategy developed using information technology has injected vigor to traditional instruction method. Chen, et al. (2011) stated the development of technology and the supplement of technology information for education can support and expand the convenience of paper learning, in addition to saving resources. Moreover, the use of internet technology system provides effect for learning support. For example, data upload and download are unconstrained by time and space, which could timely record the relevant information and film at the learning site, and instruction related activity process in details for sharing, interacting and exchanging ideas, and opinion and discussion needed for instruction (Hwang, Tsai, Chu, Kinshuk, & Chen, 2012).

The five-year junior colleges where the researcher instructs has applied e-baby care teaching materials in the execution of service-learning courses for nearly 10 years. Students are grouped in the course to take various family roles and realistic teaching through the multi-culture instructions of the instructor, including the description of service-learning courses and group discussion of agenda between service-learning and family education. Students will have the opportunity to experience the scope of different family education restructure, in addition to acquiring service-learning internship credits from experiment learning through E-baby care teaching materials. In particular, the operation of e-baby care via remote system allows each e-baby to exhibit different emotion or need for care. Finally, student groups present project and record the series of process including theory, family script, and baby-care practice. Students will reflect the relation between the

family or caregivers and themselves while taking care of e-babies. The teachers will also understand the individual requirement of students from the process.

Tor further understand the effect of incorporating E-Baby care in service-learning courses of colleges, the study adopts the perspective analysis of family education to analyze the influence on students in various aspects of family education. The study intends to cultivate students' ethic education through establishing the care for family and ethics from this service-learning course.

Incorporating Context of Family Education in Service-Learning Course

Influence of Context of Family Education on Service-learning

Family education aims to provide the education of family living knowledge and capacity to all "family members." Everyone needs family education for their life while family education is also the education on family life, assisting people to blend into family, social cultural background, marriage, parental roles, and the educational process of preparing for social relation between groups and individuals. Such preparation will help individuals establish concepts of physical, mental, emotional and moral development, and social ethics (Katie Chau ., et al, 2016).

Taiwan Ministry of Education (2019) suggested the context of family education: the term "family education" refers to educational activities and services of all kinds that enhance family relationships and family functioning. The scope of "family education" shall be prescribed by the central competent authority. LEE,PIN-YI (2017) mentioned that family education emphasizes on the life of individual and family with extensive scope of context, including: family relation, family ethics, family interaction, interpersonal interaction, and family living quality. The context of family education helps one establish the initial concept of "people and self" and such relation between "people and people" and "people and environment" will produce the experience of love and care in life. Family education is the foundation for students to learn respect and care, love oneself and love others, which contain the sentiment of cultivating humanistic care as service-learning. The context of family education imposes profound meaning on service-learning.

Service-learning provides opportunities for students to participate in real activities, guiding students to apply their knowledge and skills in providing services for others. Service-learning also meets community demand by internalizing knowledge and value through actual hands-on and in-person experience. Service-learning is the lifetime lesson for citizens to participate (Mitchell et al., 2015). Johnston, et al.,(2016) the service implementation of service-learning helps students develop partnership with the community and such participatory learning experience

is considerably important for service-learning. College students will have the valuable learning opportunity to reflect on their interaction with the community and share experience with others.

The learning stages of service-learning are based on the experimental leaning proposed by Kolb and the process of transforming knowledge through different stages of experience. Service-learning transforms experience into knowledge through the four types of learning cycles. In particular, such process includes concrete experience (CE), (reflective observation (RO), abstract conceptualization (AC), and (active experimentation). Service-learning is a model of experience learning, where students take one step further to reflect and observe their experience through the concrete experience of actual contact, thereby to learn the capacity of relocation and producing new learning concept. The new concept is applied to experimentation to generate new concrete experience, forming the structure of one learning cycle (Yu-Chi Li.,Ruo-Lan Liu,2016). Such continuous service-learning knowledge value is shown in Figure 1:

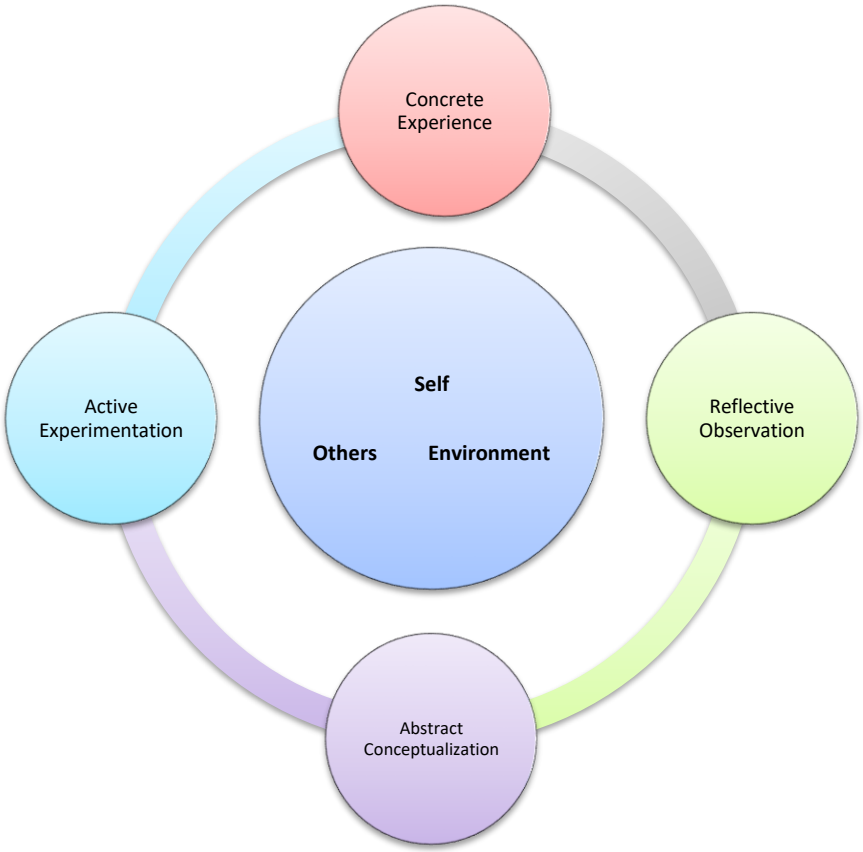


Figure 1. Influence of the Context of Family Education on Service-learning

Implementation of Incorporating E-Baby care in Service-learning Courses of Colleges

Incorporating E-Baby care in Service-learning Courses and Implementing the Richness of Digital Learning

Following the technological progress in recent years, the instruction model of service-learning through e-media and equipment can surpass traditional teaching and enhance the lively and vivid atmosphere at the instruction site (Lih-Juan Chan Lin, 2016). The IT generation has become the indicator of creative instruction site, as the development of roaming and wireless internet technology further provide opportunities supporting digital learning. Many studies on information learning prove that the use of internet information equipment can effectively support and expand the convenience from paper-based learning. Moreover, the wireless internet and transmission technology adopted allow students to access digital resources in real world and engaged in ubiquitous learning environment (U-learning) (Yang, C.-C., et al., 2013). In view of the advantage in incorporating information in courses and to enrich the content and fun of service-learning courses of colleges, the study incorporates E-baby care ion service-learning courses from the viewpoints on basic family life education (Figure 2).

Figure 2. Implementation of E-Baby care

Families are the smallest groups in sociology while parents play the important role in learning model for children in the process of human socialization. The interaction between family members the cultivation of personality and ethics in children is closely related (Lin, Shu-ling 2003). To enlighten students with the care sentiment for self, others and the environment, LEE, PIN-YI (2017) suggested that the context of family education can boost the knowledge and capacity of life in

people, establish healthy physical and mental development, build happy family, and aims to establish a harmonious and warm society.

Billig (2011) expressed that high-quality service-learning requires several principles: First, service-learning projects require the continual period of time for students to participate in all activities. Secondly, there is an interaction between service content and learners that allow learners to pursue realizable objectives. Thirdly, the service-learning projects should be consistent with the course content. Fourthly, the meaning of reflection can be attained from service experience.

For incorporate E-Baby care in service-learning courses of college, the course design must cooperate with multi-culture instruction. For example, describe service-learning and context of family education for students to compose family script and take role playing in groups. Students will place E-baby into plot for performance while taking care of e-baby for one day. Students will perceive the scope of family education through group reports. The e-baby will record students' hands-on service-learning scores, students reflect their relation with the group on the report, and teachers observe the individual requirement of students.

E-Baby Data quantify the learning effect of students' experimentation.

The operation accessories for e-baby teaching material include: computer-monitoring configuration and device, e-baby, chip senor and bracelet, milk bottle, and diapers. The computer monitors and configures all demands so that all e-babies show the different status of response and demand. Students randomly draw the e-baby for pairing and they serve as the caregivers (Figure 3).Students must follow the operations instructed in the course according to the crying responses of e-babies. They will first sensor the e-baby with bracelet to provide different care requirement. In case the students neglect the details of care safety and cause any negligence and injury in physical care, or if the e-baby cries for more than 30 seconds, the students will be deducted for points according to the number of command errors and level of hazard (See Figure 4 for examples of point deductions).

Class 妝521

Student 11 **ID1** 7D1E5 **ID2** 7EFD0

Baby 圓圓 **BABYD513** None None

Start 10/15/2019, 9 AM **Stop** 10/15/2019, 4 PM

Schedule Order 7 11 12 13 15

Quiet Times

Total Simulation Time: 0d 07h 00m **Baby cried 6 minutes total**

Proper Care		
Rock	1/1	100%
Diaper	2/2	100%
Burp	3/3	100%
Feed	3/4	75%
Average	9/10	90%

ID1 was used 0 times, ID2 was used 15 times

Mishandle		
Shaken Baby	0	0%
Head Support	3	-9%
Wrong Position	0	0%
Rough Handling	0	0%
Other		0%
Total	3	-9%

Performance Overview: 81%

Tuesday, October 15

9:00 AM Start Simulation
10:42 AM Head Support
12:49 PM Head Support
12:59 PM Missed Feeding
1:00 PM Head Support
4:00 PM Stop

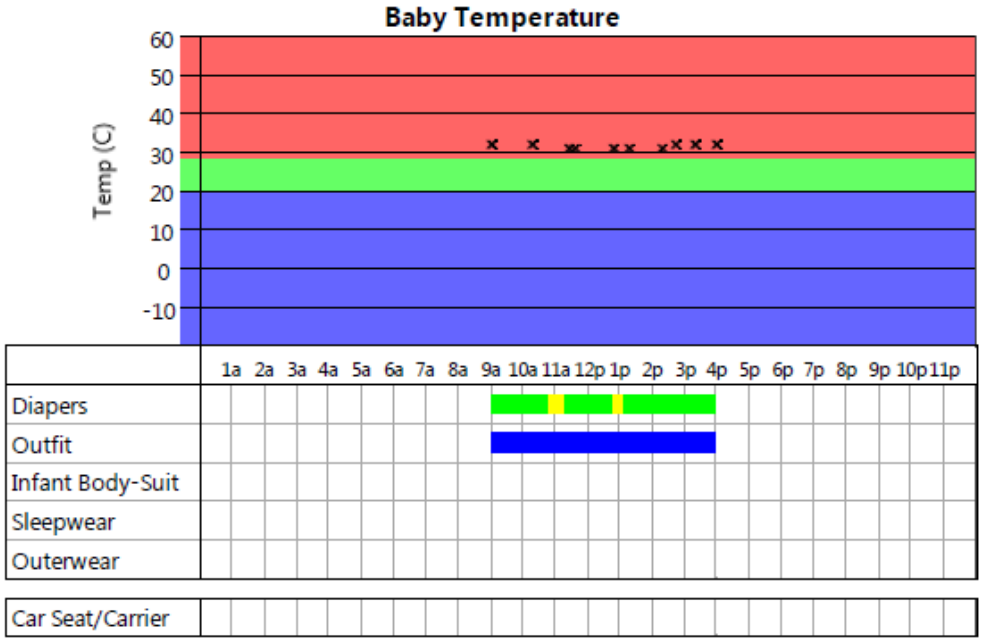
Figure 3. E-Baby Module Configuration and Outcome Presentation

BABYD513 Date Programmed: 10/15/2019 8:01 AM

Clothing and Temperature

Baby detects temperature, clothing, and length of time in car seat/carrier to address flathead syndrome. Missing clothing only appears if Baby detects no clothing during a significant period of time.

Look for spikes in temperature on the graph below to determine mishandling. Baby's temperature should fall inside the comfort range (in green – mid section of report). If Baby's temperature falls above or below the comfort range, Baby has been exposed to extreme temperatures for an extended period of time.



	Day 1
High Temp	32 (3:19 PM)
Low Temp	31 (11:25 AM)
Time out of safe temp range	5.1 hours
Max time between change of clothes	2.1 hours
Time in car seat/carrier	0.0 hours
Simulation Time	7.0 hours

Figure 4. Point Deductions for E-Baby

Structural Equation Modelling (SEM) verifies the high level of supplementary effect of family education viewpoints on service-learning

The study emphasizes on 260 quantitative questionnaire surveys. In particular, 250 questionnaire surveys consist of students with actual contact in E-baby care experience and 10 surveys consists of lecturing instructors. The study adopts Structural Equation Model (SEM) and Second order CFA model to analyze viewpoints of family education: parent education, filial education, sex education, marital education, parental absence education, ethics education, multi-culture

education, and family resources and management education are incorporated in service-learning course to cultivate students with the effect of building care and moral education viewpoints of ethics.

Verify the high correlation between family education viewpoints and service-learning context through convergent validity

Anderson and Gerbing (1988) expressed that the analysis of Structural Equation Model (SEM) must be divided into 2 stages: the evaluation of measurement model and structural model. The Confirmatory Factor Analysis (abbreviated as CFA, equivalent to measurement model evaluation) is part of the Structural Equation Model (SEM) analysis.

Hair, Anderson, Tatham and Black (1998) suggested that a good measurement model should have convergent validity and discriminate validity. As shown in the following table, the standard factor loading falls between 0.565-0.948, which conform to the range, indicating each question comes with question reliability. The composite reliability of research dimension falls between 0.835-0.94, all surpassing 0.7, indicating that each dimension comes with excellent internal consistency. Finally, the average variance extracted (AVE) has a range between 0.637-0.725, which are all higher than 0.5 and conform to the standards proposed by Hair, et al.(1998), and Fornell and Larcker (1981) . The results suggest excellent convergent validity of each dimension.

Table 1 First Order Dimension Reliability and Convergent Validity

Construct	item	Estimates of Factor Loading Significance				Question Reliability		Composite Reliability	Convergent Validity
		Unstd.	S.E.	z-value	P	Std.	SMC	CR	AVE
parent	par1	1.000				0.887	0.787	0.943	0.805
	par2	1.068	0.047	22.827	***	0.915	0.837		
	par3	1.137	0.054	20.902	***	0.881	0.776		
	par4	1.060	0.048	22.259	***	0.905	0.819		
Kid	kid5	1.000				0.943	0.889	0.964	0.869
	kid6	1.027	0.027	37.628	***	0.976	0.953		
	kid7	1.021	0.034	30.202	***	0.932	0.869		
	kid8	0.902	0.037	24.224	***	0.875	0.766		
Sex	sex9	1.000				0.900	0.810	0.942	0.804
	sex10	1.044	0.044	23.522	***	0.910	0.828		
	sex11	1.025	0.045	22.645	***	0.897	0.805		
	sex12	0.983	0.046	21.556	***	0.879	0.773		
married	marr13	1.000				0.928	0.861	0.962	0.865
	marr14	0.963	0.034	28.549	***	0.938	0.880		
	marr15	0.992	0.035	28.107	***	0.934	0.872		
	marr16	0.954	0.036	26.753	***	0.920	0.846		
Lost	lost17	1.000				0.927	0.859	0.953	0.836
	lost18	1.000	0.036	27.682	***	0.933	0.870		
	lost19	0.947	0.040	23.827	***	0.889	0.790		
	lost20	0.967	0.038	25.384	***	0.908	0.824		
ethic	eth21	1.000				0.910	0.828	0.968	0.883
	eth22	0.995	0.037	27.229	***	0.940	0.884		
	eth23	1.011	0.036	27.741	***	0.946	0.895		
	eth24	1.018	0.034	29.507	***	0.963	0.927		
multiple	mul25	1.000				0.927	0.859	0.964	0.871
	mul26	1.024	0.035	29.327	***	0.943	0.889		
	mul27	1.031	0.038	27.066	***	0.922	0.850		
	mul28	1.043	0.036	28.922	***	0.940	0.884		
frm	frm29	1.000				0.898	0.806	0.947	0.816
	frm30	1.045	0.045	23.345	***	0.907	0.823		
	frm31	0.947	0.045	20.923	***	0.868	0.753		
	frm32	1.100	0.043	25.702	***	0.939	0.882		

The study is a first order dimension with the relevance of sub-dimension shown in the following table. The relevance falls between 0.677~0.939 and relevance level is highly correlated, indicating there is an even higher common factor between the dimensions. The average mean falls between 3.99~4.1 and the standard deviation falls between 0.673~0.742.

Table 2 Dimension Description and Relevant Analysis

Dimension	Descriptive Statistics		Pearson Correlation Matrix							
	Mean	SD	1	2	3	4	5	6	7	8
parent	4.100	0.673	1.000							
kid	4.088	0.697	0.928***	1.000						
sex	4.073	0.702	0.900***	0.886***	1.000					
married	3.992	0.753	0.772***	0.819***	0.858***	1.000				
lost	4.033	0.716	0.764***	0.808***	0.865***	0.812***	1.000			
ethic	4.092	0.713	0.718***	0.764***	0.815***	0.727***	0.798***	1.000		
multiple	4.035	0.726	0.663***	0.677***	0.778***	0.734***	0.795***	0.888***	1.000	
frm	4.045	0.742	0.710***	0.740***	0.800***	0.746***	0.780***	0.931***	0.939***	1.000

***P<0.001

The Second order CFA model verifies the multiple effect of family education dimension and service-learning philosophy.

The Second Order Confirmatory Factor Analysis (CFA) is composed for at least three first order factor and 1 second order factor. The second order and all first order factors are directly connected and estimated for factor loading freedom. The arrow needs to be pointed from the second order factor to the first order factor (as shown in Figure 5). Kline (2011) believes that the positive-definite conforming to second order CFA model must meet the following three criteria:

1. One factor loading from the second order to the first order factor should be set to 1 or the second order factor variance set to 1;
2. Each second order should contain at least three first order factor;
3. Each first order dimension should contain at least 2 questions.

The second order CFA model yields 8 dimensions of family education: parent education, filial education, sex education, marital education, parental absence education, ethics education, multi-culture education, and family resource and management education, which are incorporated in service-learning courses. Each of which contains high level of correlation with the philosophy of service-learning (as shown in Table 3).

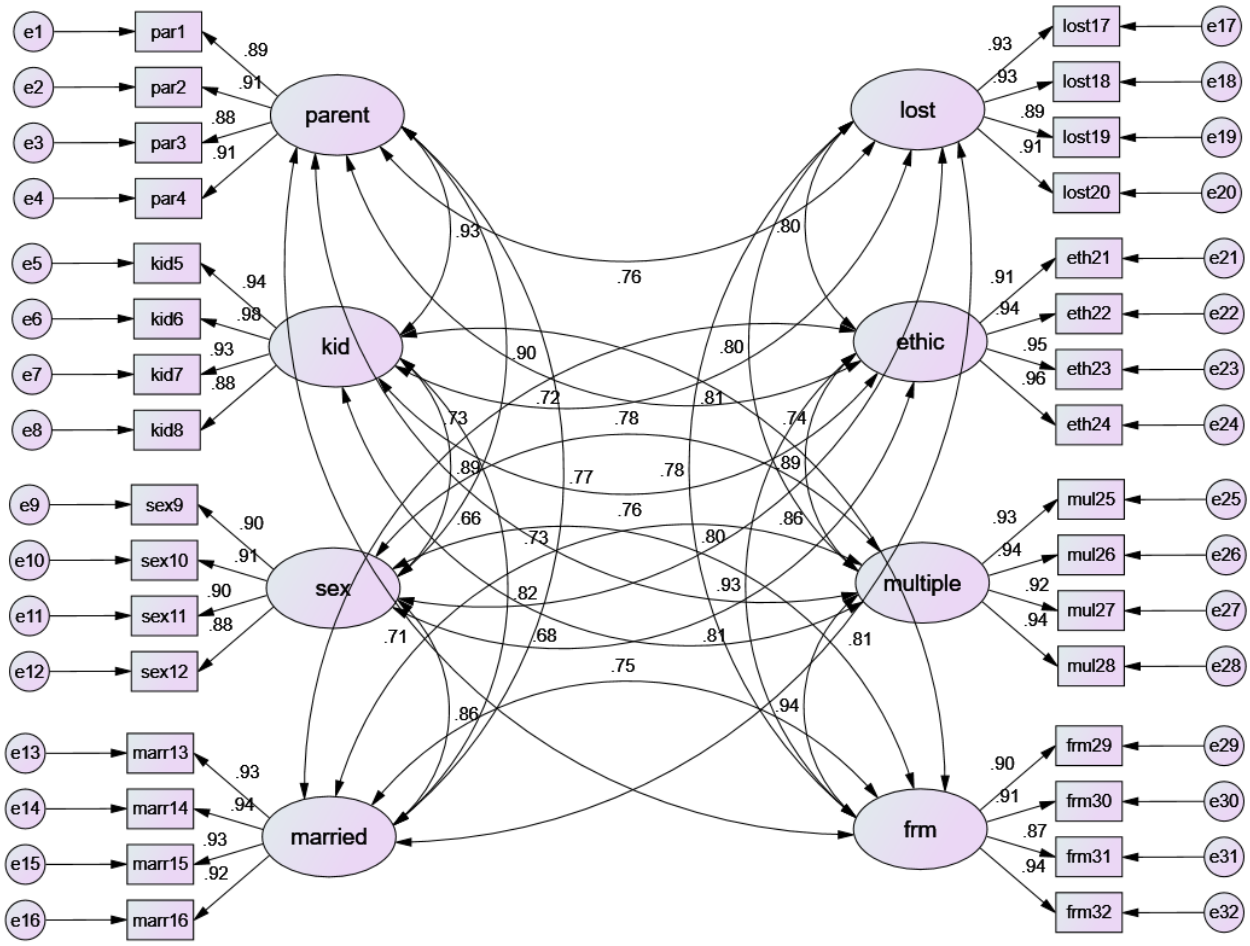


Figure 5 Second Order CFA Model Between Family Education and Service-learning

Table 3 Second order CFA model Reliability and Convergent Validity

Construct	item	Estimate of Loading Factor Significance				Question Reliability		Composite Reliability	Convergent Validity
		Unstd.	S.E.	z-value	P	Std.	SMC	CR	AVE
FAMEDU	parent	1.000				0.872	0.760	0.969	0.798
	kid	1.150	0.072	15.926	***	0.895	0.801		
	sex	1.192	0.073	16.303	***	0.946	0.895		
	married	1.222	0.081	15.11	***	0.872	0.760		
	frm	1.176	0.078	15.078	***	0.897	0.805		
	multiple	1.111	0.075	14.888	***	0.868	0.753		
	ethic	1.166	0.076	15.445	***	0.897	0.805		
	lost	1.193	0.076	15.694	***	0.899	0.808		

For the second order model of the family education dimension in this study, the objective coefficient =1866.848/2304.495=0.81, namely the second order CFA model explains 81% of first order is correlation model, indicating that service-learning can meet the purpose of family education (as shown in Table 4). Hence, the requirement for the theoretical model of the family education dimension in this study truly conforms to the philosophy of service-learning, suggesting the validity of second order model (Doll,et al., 1994).

Table 4 Model Fit Index of Family Education Second Order CFA

Dimension	**Second Order CFA Model**	**Chi-Squared Test**	**Degree of Freedom**	**Chi-Squared/DF**	**CFI**	**SRMR**
Family Education	1. First Order Full Correlation CFA Model	1866.848	436	4.282	0.891	0.036
	2. Second Order CFA Model	2304.495	456	5.054	0.860	0.065
	Proposed Value	As small as possible	As big as possible	<5	>0.9	<0.08

Context of Family Education has High Level of Imperceptible Influence and Effect on Service-learning

Family education is the foundation for cultivating excellent citizenship and morals in students. The study adopts the context of family education to integrate with new IT technological e-baby, and applies to the five-year junior college fundamental service-learning sources. The study adopts purposive sampling for interview and emphasizes on four service-learning instructors and 4 students having taken the service-learning courses (as shown in Table 5).

Table 5 Interview Objects

Identity		Teaching's Instruction Background/Student's Department
Student 1	5th-Yr Student	Student from Department of Cosmetics Application and Management
Student 2	4th-Yr Student	Student from Nursing Department (having taken pediatric nursing).
Student 3	2nd-Yr Student	Student from Department of Child Care
Student 4	3rd-Yr Student	Student from Department of Oral Care
Teacher 1	16 years of teaching seniority	Student from Nursing Department
Teacher 2	15 years of teaching seniority	English Teacher from Center of General Education
Teacher 3	14 years of teaching seniority	PE Teacher from Center of General Education
Teacher 4	13 years of teaching seniority	Teacher from Department of Cosmetics Application and management

Combining the experience learning proposed by Kolb, the study concludes the influence of context of family education on service-learning:

Family education and service leaning both advocate for the life experience with "love" and "care"

The common character between family education and service-learning is "love" and "care." As expressed by student 1: "*We find out about changes in life early when we*

have children. We need to put children in priority for care and love regardless in living quality or time allocation…" Student 4 believes: "*The context of family education and service-learning will affect a person's ideas and attitude, so we would voluntarily care about our family and friends…"*

It is evident that service-learning can enlighten students with the realization of "love" and "care." Teacher 2 also thinks that: "*By understanding parent's unconditional dedication and care for children, students are also trained into a person with kindness who can voluntarily care about their family and friends."*

Through the context of service-learning, students voluntarily and timely provide goodness of care. However, some teacher also suggested that the marital relation and context of relation between the two sexes in family education can also teach students the interaction between the two sexes. For example, teacher 3 thinks: *The simulation of family relation scenarios allow students to understand the dedication and efforts committed by their parents. They learn to love and care for family and show appreciation and satisfaction. Most importantly, students will take more caution towards the sex relationship."*

The context of *family* education helps one establishes the initial concept of "people and self." The relation between "people and people" and "people and environment" can produce the life experience of love and care. The common character of family education and service-learning is to develop the emotional education of respect for the same and opposite sex.

The e-baby care service-learning course enlightens students with the gratitude for parents or caregivers

Students perceive the dedication and efforts paid by parents and caregivers from the activity experience. As mentioned by student 1: *"I now know more about the care method* and *understand the hardship place on our parents whenever they took us out."* Student 3 also mentioned: *"It is difficult to find out why the baby cries. When the baby starts to cry, I would get my hands all tied up and I really appreciate my parents for raising us."*

Clearly students will only reflect on their experience after they have experimented in person. For this reason, teacher 1 said: "*Realizing the difficulty encountered by parents, hardship undergone by parents and cultivating student's attitude of precaution in life."* Teacher 2 also pointed out: "*the weight of e-baby is close to the actual baby. Many students could not handle the e-baby in the course*

and also reflect the difficulty in being a parent." Teacher 4 believes that: "*The mimic experimentation of e-baby puts youths in the hardship of raising children. They will put their feed in their parents' shoes and realize the dedication and loading of caregivers."*

The e-baby care service-learning course allows students to accumulate learning experience from experimentation, particularly students have reflected and are enlightened with the appreciation to their parents or caregivers.

E-baby care service-learning course cultivates students with patience, love, sense of responsibility as well as other abstract conceptualization.

The activity of e-baby care can cultivate personality traits: For example, *student 1 said: "I am annoyed by the baby's crying noise but I would try different methods to calm him down. I don't lose temper on the baby because I worry that I might hurt* them *baby. After all, if it's real person, parents must be responsible for their children."* Student 2 suggested: "*"You need to keep yourself even calmer to face a crying baby. I tell myself to be patient."* Moreover, student 3 indicated that: "*Some students lose patience and could not take care of the e-baby. They have been taken out a lot of points."*

E-baby care service-learning courses can cultivate student's patience, love, sense of responsibility, and other abstract conceptualization while teachers hold the same views. As mentioned by teacher 2: "*Experimentation unit can boost student's patience, dedication and love."* Teacher 3 mentioned: "*Students have their hands tied up when the baby cries but after some time of accustomed operation, they can treat the baby calmly. The activity helps students develop patience and sense of responsibility."*

Service-learning can cultivate students with patience, love and sense of responsibility. However, the prerequisite is that students must thoroughly blend into the scenarios in order to enhance their commitment in e-baby care. As mentioned by teacher 4: "*The identity and attitude of commitment of a person's mentality will affect the experimentation performance. As long as students identify with the authenticity, they will show more patience and excellent learning effect. Therefore, the scenario simulation and design by instructor play a critical part."*

The active experimentation of e-baby care through service-learning courses accumulates the experience value of peer collaboration.

Students will develop mutual assistance in the service-learning process. Student 2 *expressed*: "*When I have to go to the bathroom or need to leave the e-baby unattended temporarily, I will need to communicate with my partner and ask him/her to take care of the e-baby for me so I could leave for a while." Student 3 mentioned: "When the baby cried in class for no reason, I was just learning to take care of e-baby at the beginning so I was not familiar with it, but the students sitting around me helped me to take care of the e-baby."*

The assistance from the partner is necessary while the teachers perceived the same; teacher 1 commented:" *Students profoundly understand the importance of teamwork from the course learning experience. A good partner matters." Teacher 3 also stated: "The intensification of partnership helps understand how to collaborate with a partner."*

Clearly, students and teachers both believe that teamwork can boost the effect of service-learning. Nonetheless in the process of teamwork, there are inevitably some discretion of opinions due to the differentiation in personal recognition and concepts. Hence, teacher 2 pointed out: "*The upbringing behavior of original family affects the cognition and behaviors in next generation in terms of taking care of children." Student 1 also mentioned: "I will education my children according to the style of my family education. There could be conflict since the two students come from different families." It also reveals the significance of communication and respect of teamwork on collaboration.*

Conclusion and Suggestions

The Kolb's interpretation of service-learning acquired knowledge includes: concrete experience, reflective observation, abstract conceptualization, and active experimentation. Service-learning is one model of experimental learning. The paper adopts viewpoints of family education to analyze the effect of service-learning courses of colleges. Students will establish the moral educational viewpoints of caring for family and people, so that students will increase life experience in "love" and "care," and reflect the enlightenment of appreciation for parents or caregivers. Students will develop patience, love, sense of responsibility as well as other abstract conceptualization, to accumulate the experience value of peer collaboration. In general, the context of family education enlightens with care atmosphere for oneself, others and the environment. The influence of cultivating students' service-learning

should not be overlooked. Family education cultivates students with quality and sentiment of “care,” who will accumulate self-observation and reflection in living experience, in addition to transforming reflection feedback into internal knowledge value. Furthermore, the study voluntarily compiles the ideas and dedicate them in real actions, collecting into concrete experience through voluntary experimentation to show the knowledge of service-learning from the continuous experience value.

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