Submission No.:C000005
Affective Education

Proposal of "The VIA Model" for PBL activation with recog...
The VIA Model, Sense of values, The Priming Effect, PBL, ...

ISASE 2020

Proposal of the VIA Model for PBL activation with recognizing "Snapshot-like" intuitive sense of values

Koichi TAKAHASHI*, Masahiro KIYOSUMI *

*Kyushu University, Fukuoka, 815-0032, Japan
takahashi.koichi.538@s.kyushu-u.ac.jp
kiyosumi@design.kyushu-u.ac.jp

Abstract: Entrepreneurship Education is getting popular at the universities in Japan. The university students learn various kind of business skills through lectures and PBL (Project Based Learning) on the entrepreneurship program. However, the business skills are not sufficient to complete the project work. Self-awareness is another important factor for PBL activation. In this paper, we propose "The VIA model" as self-awareness method by using personal values card sort. This method is based on The Priming Effect of cognitive psychology so that "Generation Z" students can recognize sense of values instantly and have strong intention to complete PBL.

Keywords: The VIA Model, Sense of Value, The Priming Effect, PBL, Entrepreneurship Education

1. INTRODUCTION

The methodologies of Silicon Valley-style like lean launch pad are adopted in entrepreneurship program in the universities. The general entrepreneurship program starts with the ideation method. The ideation method focuses on the quality of the issues and design the usage scene of the expected customer called the customer journey, assuming "persona" of the users who use the product or service. This approach must be very useful to think about the unique business models. On the other hand, it is generally assumed that aspiring entrepreneurs must have some purpose and motivation such as money or success or others. Kwong[1] and colleagues point out that the student entrepreneurs need to draw enthusiasm while gaining experience and knowledge for startup.

The VIA model rely on the concepts of cognitive psychology, the priming effect and the ideomotor effect, as theoretical grounds. Kahneman[2] states that the priming effect is to activate subsequent information processing by giving a specific stimulus in advance. On the other hand, the ideomotor effect refers to the priming effect in which behavior changes depending on ideas. In this paper, self-awareness via the VIA model is expected to enable the university students to recognize sense of values of themselves and share with the team members. Also, self-awareness affords the ideomotor effect that activates subsequent PBL activities in entrepreneurship program.

Tasha Eulich [3] states that only 10-15% of people are confident that they can actually recognize themselves by the independent research. It means that most university students do not identify themselves either because of youth. Then, it is necessary for the students to utilize some methods to recognize their sense of values even if those are intuitive, instant and easy to change. The university students tend to evoke one's sense of values under preconscious in human brain by selecting appropriate words by personal values card sort. Sense of values is not fixed, but will be changed over time under the circumstances like ages, social position, and placed environment. In that sense, to recognize sense of values is to awaken preconscious and take "Snapshot-like" consciousness at that time. In this paper, we assume that there is a tendency for Generation Z students to emphasize process-oriented values like "learning", "empathy" and "relationship" as much as results-oriented values like "success", "wealth". We propose The VIA model as value recognition process including the additional seven values words added to Miller [4]'s Personal values card sort.

2. PREVIOUS RESEARCH

The Theory of Planned Behavior (TPB) is standard theory for designing entrepreneurship education by Ajzen[5]. TPB shows that "Intention" is the first step when people act, it is influenced by "Attitude", "Subjective Norm", and "Perceived behavioral control" of people who act. According to Ajzen, it will encourage action. Intention model of Krueger & Day[6] is an advanced theory based on TPB. Intention model consist of four key factors, Personal Desirability, Social Norm, Self-Efficacy, and Collective Efficacy. It is assumed that those factors influence strong intention for launching business.

Simon Sinek [7] states that leaders start with why, when

they launch new business based on their own values and beliefs, then, Intention is to have some kind of motive.

In other words, it is a personal definition of "meaning", and what underlies "meaning" come from the individual sense of values. Tomano [8] states that value recognition is to recognize one's essential desires. Value recognition is related to Personal Desirability in Intention model and it is important factor in the formation process of Intention. In this paper, we propose a method of recognizing intuitive sense of values that activates subsequent PBL (Project Based Learning).
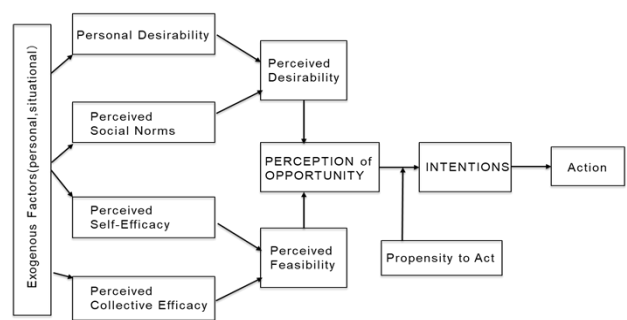

Figure 1: Intention Model (Krueger, 2000; Krueger & Brazeal, 1994; Krueger et al., 2000: Shapero, 1982)
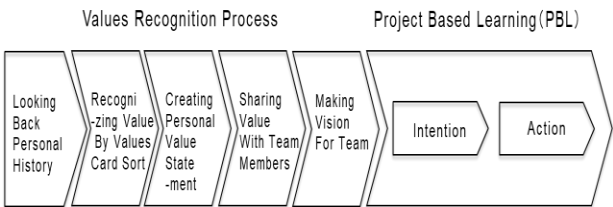
3. THE VIA MODEL

Figure2: The VIA Model

The VIA model is PBL activation process in entrepreneurship education based on TPB and Intention model. "V" means values recognition process that trigger Intention and cause subsequent actions on PBL. "I" means Intention, and "A" means Action. Also, "VIA" means that PBL is activated "via" self-awareness. Intention and Action follow the concept of TPB and Intention model. In the VIA model, if values recognition is prepared and the intention is raised, it is assumed that the action on PBL must be activated. The rationale for extracting the values of the VIA model is the "The priming effect". The priming effect is a term of cognitive psychology, and it activates the subsequent information processing by giving a specific stimulus in advance. The priming effect, whose behavior changes depending on the idea, is called "The ideomotor effect". The VIA model is expected to help the

university students to recognize personal value and share with team members, and make vision statement with the team members. The measurement of the effectiveness of the VIA model is the continuity of team activities in PBL, not the launch of new business.

3.1 Drawing Personal History

First, each student works on one's personal history. The Personal history is a pictorial representation of the impressive events that have occurred in the university student's life so far in four-quadrant timeline. After drawing the picture in the frame of four quadrants, one will explain one's life so far while showing the pictures to the partner. The side who listens to the explanation give feedback to the partner about the personality that one feels, while passing the note of a few key words.

Figure3: Personal History Four Quadrant Framework

3.2 Recognizing values by Personal Values Card Sort

Personal values card sort is a method developed by Miller and his colleagues at University of New Mexico. There are 83 words about values. The participants of the trial work were "Generation Z" the Japanese university students, we prepared more seven words.

"Empathy", "Excitement", "Learning", "Personality" and "Connection", "Social contribution" and "Solving social issues" were added, and totally 90 words. Firstly, narrow down to 20 words that seem to be close to one's values, and then narrow down to 6 out of 20 words. Finally, write a statement about one's values with reference to the six selected words.

Table1: The List of "Personal Values Card Sort" plus the seven value words for "Gen Z"

No.	LIST OF VALUES	No.	LIST OF VALUES	No.	LIST OF VALUES
1	ACCEPTANCE	31	GENEROSITY	61	POWER
2	ACCURACY	32	GENUINENESS	62	PURPOSE
3	ACHIEVEMENT	33	GOD'S WILL	63	RATIONALITY
4	ADVENTURE	34	GROWTH	64	REALISM
5	ATTRACTIVENESS	35	HEALTH	65	RESPONSIBILITY
6	AUTHORITY	36	HELPFULNESS	66	RISK
7	AUTONOMY	37	HONESTY	67	ROMANCE
8	BEAUTY	38	HOPE	68	SAFETY
9	CARING	39	HUMILITY	69	SELF-ACCEPTANCE
10	CHALLENGE	40	HUMOR	70	SELF-CONTROL
11	CHANGE	41	INDEPENDENCE	71	SELF-ESTEEM
12	COMFORT	42	INDUSTRY	72	SELF-KNOWLEDGE
13	COMMITMENT	43	INNER PEACE	73	SELF-RISE
14	COMPASSION	44	INTIMACY	74	SEXUALITY
15	CONTRIBUTION	45	JUSTICE	75	SIMPLICITY
16	COOPERATION	46	KNOWLEDGE	76	SOLITUDE
17	COURTESY	47	LEISURE	77	SPIRITUALITY
18	CREATIVITY	48	LOVED	78	STABILITY
19	DEPENDABILITY	49	LOVING	79	TOLERANCE
20	DUTY	50	MASTERY	80	TRADITION
21	ECOLOGY	51	MINDFULNESS	81	VIRTUE
22	EXCITEMENT	52	MODERATION	82	WEALTH
23	FAITHFULNESS	53	MONOGAMY	83	WORLD PEACE
24	FAME	54	NON-CONFORMITY	84	EMPATHY
25	FAMILY	55	NURTURANCE	85	IMPRESSED
26	FITNESS	56	OPENNESS	86	LEARNING
27	FLEXIBILITY	57	ORDER	87	PERSONALITY
28	FORGIVENESS	58	PASSION	88	RELATIONSHIP
29	FRIENDSHIP	59	PLEASURE	89	SOCIAL CONTRIBUTIONS
30	FUN	60	POPULARITY	90	SOLVING SOCIAL ISSUES

Submission No.:C000005
Affective Education

Proposal of "The VIA Model" for PBL activation with recog...
The VIA Model, Sense of values, The Priming Effect, PBL, ...

3.2 Creating personal value statement

The students make personal value statement by reference to the words they pick up. The followings are the sample of value statement of the students on the trial work:

"I like making and designing the objects and also act on human comfort and excitement."

"I like connections with people and take seriously what I want to do."

"I solve the negative parts of society I felt while having dreams and hopes with loving companionship."

3.3 Sharing personal values with team members

The team members share their own sense of values and value statement each other so that they can understand their personality to make subsequent vision and mission of the team.

3.4 Making vision and mission of the team

Next, team members make vision and mission of the team before they start PBL. Mission is a definition of what we want to accomplish through our business, and its significance to society. Vision is "outlook", which means "the future we want to be".

4. METHOD OF VERIFICATION AND RESULTS

4.1 Results of the trial session by values card sorting

Figure4 shows the result of personal values card sorting performed by the twenty-four university students as the trial session on The Innovation Leaders Program in Kumamoto University. "Fun", "Social contribution" and "Freedom" were top three value words that they chose. "Social contribution" belongs to the additional seven words for "Gen Z". However, the number of survey respondents was limited this time, it is necessary to collect more data for reading the general trend of value for "Gen Z" students.
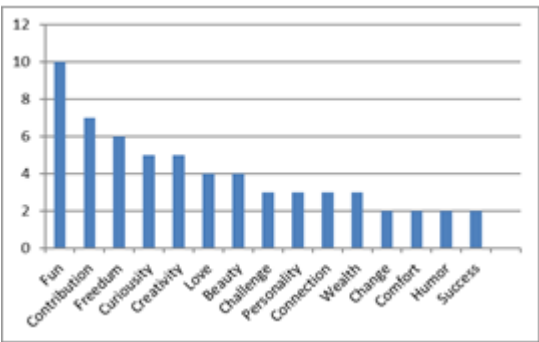

Figure4: Frequency distribution of value words

4.2 Analysis by questionnaire

The following five questions are prepared and asked two times: before and in the middle of PBL. The university students are asked on the five questions as shown in Table2 and Table3. The answers to each question are evaluated numerically on a five-point scale as shown in Table4. After collecting evaluation score, the correlation of each question is judged from the correlation coefficient in order to see the relevance between the data. Intention to PBL in Question2 is overall satisfaction as shown in Figure5.

Table2: Questionnaire before PBL (Q1 to Q3)

Questionnaire before PBL
Q1: I am convinced of my values recognized through this work.
Q2: I have positive intention for working on PBL.
Q3: I am convinced of our team vision and mission decided by dialogue with the team members.

Table3: Questionnaire in the middle of PBL (Q4, Q5)

Questionnaire in the middle of PBL
Q4: I think the relationship with our team members will be good to the end.
Q5: I think our team project will be completed to the end.

Table4: Evaluation Score

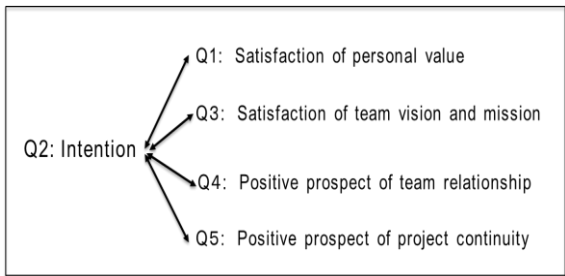|	
1 Point	I do not think so at all
2 Points	I do not think so
3 Points	I can not say either
4 Points	I think so
5 Points	I entirely think so

Figure5: Relevance between Intention and other questions

4.3 Results of questionnaire (Q1 to Q3)

Table5 shows the results of questionnaire (Q1 to Q3) by the twenty-four university students on the trial session. The average score of Q1 to Q3 were 4.20, 4.08, 4.87 of the five grades, which meaned they have convinced of their intuitive sense of values and team vision they chose. Also, they had the intention to PBL so far through value recognition and the satisfaction of team vision.

Submission No.:C000005
Affective Education

Proposal of "The VIA Model" for PBL activation with recog...
The VIA Model, Sense of values, The Priming Effect, PBL, ...

Table5: Average score of five grades evaluated on the trial session

Q1	Q2	Q3
Personal Values	Intention of PBL	Satisfaction of team vision
4.20	4.08	4.87

4.4 Verification in the middle of PBL (Q4, Q5)

We prepared Table of Correlation coefficient as shown in Table6 for the verification of overall questionnaire. The correlation coefficient indicating the degree of relevance to other questions is shaded portion in Table6. However, Q4 and Q5 questions had not been implemented on the trial session, because it was a timing that three months PBL project was just going to start.

Table6: Table of Correlation coefficient (Q1 to Q5)

	Personal values	Intention	Satisfaction of team vision	Team relationship	Project continuity
Q1: Personal Values	1				
Q2: Intention		1			
Q3: Satisfaction of team vision			1		
Q4: Team relationship				1	
Q5: Project Continuity					1

5. CONCLUSION

According to the experiments by Libet[9], what people think they have just decided is just subconscious follow-up. In other words, it means that unconsciousness precedes consciousness in decision making. If so, it is reasonable for people to recall sense of values that should already exist unconsciously by personal values card sorting for self-awareness.

In this paper, we proposed the VIA model for PBL activation and method of verification in entrepreneurship education. Although we could suggest the method of verification, it was insufficient for data analysis this time, because of the limited range of responses (Q1 to Q3) and limited number of respondents. It is required to collect more data and verify the effectiveness of the VIA Model as the priming effect from now on.

ACKNOWLEDGEMENTS

REFFERENCES

[1] Kwong, Caleb, Thompson, Piers, The When and Why: Student Entrepreneurial Aspirations, Journal of Small Business Management, vol.54 No,1, PP299-318, 2016

[2] Daniel Kahneman, Thinking, Fast and Slow, Hayakawa Publishing, Japan, pp97-108, 2014

[3] Tasha Eurich, What Self-Awareness Really is（and How to Cultivate It), HBR, ORG, NY, pp1-2, 2018

[4] W.R Miller, J.C'de Baca, D.B. Matthews, P.L. Wilbourne, Personal values card sort, University of New Mexico, Albuquerque, 2001

[5] Icek Ajzen, The theory of planned behavior, Organizational behavior and Human Decision Processes, ELSEVIER, vol.50, pp179-211, 1991

[6] Noris F. Krueger & Mellani Day, Chapter13 Looking Forward, Looking Backward: From Entrepreneurial Cognition to Neuroentrepreneurship, pp321-332, 2011

[7] Simon Sinek; Start with why, Nihonkeizaishinbun shuppansha, Japan, pp79, 2012

[8] Ittoku Tomano, Hajimeteno Tetsugakutekishikou (My first philosophical thought), Chikuma-premershinsho, Japan, pp103-108, 2017

[9] Benjamin Libet, Mind Time-The Temporal Factor in Consciousness, Iwanami Shoten, Japan, pp39-103, 2005