Negative Life Events and Future Time Perspective (FTP)

Takashi Mitsutomi and Tetsuo Ogawauchi

The purpose of the present study was to investigate the relationship between the degree of shock triggered by negative life events and future time perspective (FTP) in terms of the kind of project, project traits, and future extension as well as FTP components such as hopefulness, future orientation, and external control. Life event and project tests were administered to female university students. In the project test, the participants were instructed to write down the projects that they wanted to do and to write down the actualized (performed) period of each project. Subsequently, they were instructed to rate each project in terms of its importance, reality, joyfulness, concreteness, degree of being challenging, planning, and involvement. Next, the FTP scale (hopefulness, future orientation, external control) was administered. The results indicated that the total shock scores might be positively related to the kind and traits of a project and the feeling of hopefulness.
Key words: Negative life event, future time perspective, female university students

Future time perspective (FTP) is defined as the totality of an individual's view of his or her psychological future existing at a given time. Nurmi (1991) stressed that this concept is particularly important for young people for several reasons. First, well-structured and extended FTP is a characteristic of a well-adapted personality and allows for activities that are highly valued in modern society, such as delay of gratification, problem-solving, planning, and achievement.

Second, problem behavior among adolescents, such as delinquency, drug abuse, and difficulty in choosing a career, is likely related to how younger people perceive their future. Third, how adolescents perceive their future plays an important role in identity formation, which is often defined in terms of exploration and commitment to future-oriented interests.

FTP comprises the following three aspects: (1) cognition, (2) affectivity, and (3) belief. The cognitive aspects include future extension, content of FTP, and degree of structuralization of future. The affectivity aspect refers to a feeling of hopefulness and future orientation. The belief aspect measures belief about the future, especially the extent to which people believe they are able to influence and control their own future.

Children are impulsive and attempt to satisfy their needs immediately. However, FTP develops in adolescence, allowing the future to be seen with a larger scope. Then, reality increases and FTP changes from desires to goals. Adolescents make plans and are motivated to behave in ways to achieve their goals. During this developmental process, they encounter various events that may either facilitate or destroy FTP.

In the formation of FTP, negative life event might be important. The degree of shock triggered

by negative life event might destroy the formation of FTP. Previous research concerning the negative life event (Nishikawa, Fugisawa, Kojima, & Tomoda, 2018, Harkness, Bruce, & Lumley, Harkness, Monroe, Simon, & Thase, 1999, Mazure, 1998, Monroe & Harkness, 2005, Monroe & Reid, 2009, Monroe & Simons,1991) have investigated the relationship between life event and mental health. However, the relationship between negative life event and FTP is not investigated fully. Therefore, the present study investigates the relationship between the degree of shock triggered by negative life event and FTP.

Hopefulness has been investigated in many studies. Tsuzuki (2004) reported that the presence of ideal friends who serve as role models promotes a feeling of hopefulness. Tani (1998) found that a sense of basic trust in others promotes hopefulness and certainty about the future. Kashio (2012) found that among adolescents, emotional support was positively associated with hopefulness, the pursuit of goals, fulfillment in the present, and acceptance of the past.

Thus, hopefulness has been investigated in many studies. Therefore, we investigated the relationship between hopefulness and the degree of shock triggered by negative life events. In addition, we examined the association between the degree of shock triggered by negative life events and future orientation and external control components. Future orientation refers to the orientation to the future and refers to planning the life and prospecting the future time. External control is the concept that future is determined by the external factors such as chance and fate.

Tsuzuki (1982) noted that a focus on FTP content was needed. Therefore, in the present study, we investigate the relationship between the degree of shock triggered by a negative life event and FTP content. Here, FTP content was investigated in terms of the kinds of projects and their traits.

First, we examined the relationship between the degree of shock triggered by a negative life event and the numbers of projects included in each of the following life domains: vocation, study, and the economy; marriage, birth, love, and physical appearance; play, new experiences, hobbies and daily life; and mental growth and fatigue.

Second, we investigated the relationship between the degree of shock triggered by a negative life event and project traits. The degree of planning to actualize a project, the joyfulness attained from performing it, and its importance, concreteness, reality, degree of being challenging, and involvement might be important project traits. Therefore, we investigated the relationship between these project traits and the degree of shock triggered by the negative life event.

Nurmi (1991) indicated that extended FTP is a characteristic of a well-adapted personality and that allows for a activities that are highly valued in modern society such as delay of gratification, problem-solving, planning and achievement. Tsuzuki (1982) indicated that much research has focused on the future extension. Therefore, we investigate the relationship between future extension and the degree of shock triggered by life event.

Thus, the relationship between the degree of shock triggered by negative life event and FTP was investigated. We investigated FTP in terms of the kind of project, project traits and future extension, as well as FTP components such as hopefulness, future orientation, and external control.

Method

Participants

The study participants were 64 female students from a university located in the Kobe city, Hyogo Prefecture, Japan.

Instrument

In Mitsutomi & Kobayashi (2007, 2008, 2009, 2013), the procedure of life event test is not written in detail. We attempt to write the procedure in detail. The participants were instructed to list and describe the things (life events) that had a negative impact at the time of occurrence and continued to have negative effects into the present. We listed the examples of various life events and explained the meaning of instruction of life event test described above. For example, we explained that disappointment in love had the negative impact at time of occurrence when the participant experienced the disappointment in love. Then, participants were instructed to write the disappointment in love in the life event list if it continues to have negative impact into the present. We listed the examples of various life events and repeated the similar procedure. The examples of various life events were written in the life event test.

The participants were also instructed to write nothing when there were no life events. When there were life event, they were asked to rate the degree of impact that they currently felt for each life event on a three-point scale.

Next, a project test was administered. We listed examples of various projects. Then, we gave the paper that wrote the examples of various projects to the participants. Participants were instructed to write down the things (projects) that they wanted to do regardless of the number, to a maximum of 10. They were also instructed not to write anything when there were no things (project) they wanted to do.

Subsequently, they were instructed to write down the actualized (performed) period of each project in such as immediately, over the course of a life time, within ○○year (○○days, ○○ months), after ○○years (○○days, ○○months) or by ○○age (○○days, ○○years、○○ ○months). . Then, they were asked to rate each project in terms of its importance on a five-point scale (“Do you have trouble if you cannot perform the thing (project) ?”), concreteness (“Is the thing (project) concrete?”), reality (“Do you think you can actualize the thing (project) when you think one’s effort, ability, and support from the environment?”), joyfulness attained from performing the project (“Do performing the thing (project) bring you joy?”), degree of planning needed to actualize it (“Do you plan to actualize the thing (project) ?”), degree of being challenging (“Do you require more skills, knowledge, and effort to actualize the thing (project) ?”), and degree of involvement (“Do you work hard to actualize the thing (project) ?”).

Finally, we administered the FTP scale devised by Kobayashi, Inoue, and Mitsutomi (2005), which consists of three subscales. The first subscale measures future orientation and is composed of eight items (e.g., “I have purpose and direction for my future”, “I have a general plan for my life”). The second subscale measures hopefulness and is composed of 14 items (e.g., “I am looking forward to the future with great expectations”, “I have hope for my future”). The third subscale measures sense of external control over the future and is composed of five items (e.g., “I think that my future is determined by fate”, “I think that it is best to leave future events up to chance”). The participants responded to each of these items on a five-point scale.

Results

Life events were classified into one of six categories based on the content. Definitions and examples of the six categories are shown in Table 1. The various life events (six kinds of life events) were observed because we listed the examples of various life events. We established a high (H) group (above the median) and a low (L) group (below the median) for each total shock score. Table 2 shows the frequency of life events in the L and H groups for each category. The results indicated that the frequency of the life events was low for all categories in the L group. In the H group, the frequency of life events was higher for the failure in schoolwork and albeit, interpersonal relationship problems, death and sickness, and stop of playing categories.

Table 3 shows the shock scores for each category in the H and L groups. The results revealed that the shock scores were high for the interpersonal relationship problems and death and sickness categories in the L group, and for all categories in the H group.

Next, the projects were classified into one of four categories based on the FTP content. Definitions and examples of the four categories are shown in Table 4. The correlation coefficients between the numbers of projects included in the four categories and the total shock scores were then calculated (Table 5). The positive correlation coefficient between the number of projects and total shock scores was significant for the marriage, birth, love, and physical appearance category.

We also compared the numbers of projects between the H and L groups for each category. The results are shown in Table 6. The H group had significantly more projects than the L group in the marriage, birth, love, and physical appearance category ($t = 2.05$, $df = 62$, $p < .05$). We also compared the numbers of projects between the life events and no life events groups for each category. The results are shown in Table 7. The life events group had more projects than did the no life events group in the marriage, birth, love, and physical appearance category ($t = 2.00$, $df = 62$, $p < .05$).

Next, we investigated the relationship between project traits and shock scores. For each project trait, we summed the trait scores for all projects and divided the results by the number of projects. Then, we calculated the mean trait scores for the projects. Next, we summed the mean trait scores for the projects and divided them by the number of participants in both the H and L groups.

Thus, we calculated the correlation coefficients between the mean project trait and total shock scores for each category. The results are shown in Tables 8-11. When the participant had no project concerning the content category in question, the participant was cut from the analysis. The correlation coefficients between the mean challenge and total shock scores approached significance for the marriage, birth, love, and physical appearance category. The correlation coefficients between the mean planning and total shock scores approached significance for the play, new experiences, and hobbies and daily life category. The correlation coefficients between the importance and total shock scores approached significance for the play, new experience, hobbies and daily life category. The correlation coefficients between the mean concreteness and total shock scores were significant for the play, new experiences, hobbies and daily life category. The correlation coefficients between the mean importance and total shock scores approached significance for the mental growth and fatigue category. Finally, the correlation coefficients

between the mean involvement and total shock scores approached significance for the mental growth and fatigue category.

We also compared the means of the mean trait scores between the H and L groups for each category. For each FTP content category, we established an H group (above the median) and an L group (below the median) for each total shock score. When the participants had no project concerning the content category in question, the participant was cut from the analysis. The results are shown in Tables 12−15. The means of the mean challenge scores were higher for the H than for the L group for the marriage, birth, love, and physical appearance category ($t = 2.02$ $df = 30$, $p < .10$). The means of the mean importance scores were also higher for the H than for the L group for the play, new experiences, hobbies and daily life category ($t = 3.27$, $df = 22$, $p < .01$). The means of the mean planning scores were higher for the H than for the L group for the play, new experiences, hobbies and daily life category ($t = 2.32$, $df = 22$, $p < .05$). The means of the mean concreteness scores were higher for the H than for the L group for the play, new experiences, hobbies and daily life category ($t = 3.66$, $df = 22$, $p < .01$). The means of mean importance scores ($t=1.85$, $df=13$, $p<.10$) and mean involvement scores ($t=1.95$, $df=13$, $p<.10$) were higher for the H group than the L group for the mental growth and fatigue category.

Subsequently, the future time extension of H and L group was compared using t-test. In analyzing, we subtracted the participant' present age from the actualized (performed) period of project. When the participants answered the "life time", we subtracted the participant` present age the from the Japanese' mean life time. When the participants answered "Immediately", we gave the zero year.

Thus, we used the maximum difference scores as the index of future extension. The results indicated that there was no significant difference between H and L group (L;.7.52 H; 7. 45). These groups had the larger future extension scores, because these groups had some life time projects. For the life time project, the difference scores between the participant` present age and the Japanese `s mean life time was given. Thus, H group and L group had the larger future extension. The correlation coefficient between total shock scores and maximum difference scores were calculated. The significant correlation coefficient ($r=.018$) was not observed.

Next, we calculated the correlation coefficients between the three future components on the FTP scale and total shock scores. The results are shown in Table 16. The correlation coefficients between total shock scores and hopefulness scores approached the significance. We also compared the total scores for the FTP components between the H and L groups. The results are shown in Table 17. The H group had the higher hopefulness scores than L group ($t=1.71$, $df=62$, $p<.10$). Finally, we compared the total scores for the FTP components between the life events and no life events groups. The results are shown in Table 18. Again, the life event group had the higher hopefulness scores than no life event group ($t=1.74$, $df=62$, $p<.10$).

Discussion

The purpose of the present study was to investigate the relationship between the degree of shock triggered by negative life events and FTP. FTP was investigated in terms of the kind of

project, project traits and future extension, as well as FTP components such as hopefulness, future orientation, and external control.

The various life events (six kinds of life events) were observed because we listed the example of various life events. In the H group, in which the total shock score was high, the frequency of life events was high for the failure in schoolwork and albeit, interpersonal relationship problems, death and sickness, and stop of playing categories. Schoolwork and interpersonal relationships are important concerns in campus life. Therefore, failure in schoolwork and albeit, and interpersonal relationship problems can become shocking life events.

The death of a significant other and sickness experienced by oneself or significant other can also become a life event. In modern society, influenza is important because it can lead to stop of playing. Therefore, the stop of playing can also become a shocking life event.

Life events measured in the present study might not be event immediately after occurrence. This event might be event that elapsed for some time from the time of occurrence. During this period, the participants might consider the reason why the life event occurred and might regret that they triggered to the life event. Then, they might self-grow. Thus, they might have the stronger feeling of hopefulness through the sense of self-growth when they might experience the life event. In the previous study, future orientation, external control and especially hopefulness has been reported to be related to the mental health. In the present study, the difference was observed for the hopefulness. However, in the future orientation and external control, the difference was not observed. Further research is needed to gain a better understanding of these results.

Looking at the result concerning the kind of project, stronger shock leads to more marriage, birth, love, and physical appearance projects. When the shock is stronger, individuals might seek social support, which can be attained through love and marriage, which themselves can be attained through physical appearance projects. Birth projects might automatically result from marriage projects. Therefore, stronger shocks might lead to more marriage, birth, love, and physical appearance projects.

Looking at the results concerning the project traits, participants list more challenging marriage, birth, love and physical appearance projects when the shock is stronger. A few participants wrote challenging projects in detail. Looking at the results, challenging projects are, for example, marriage with wealthy male and marriage with handsome male,

Participants might distract from the stronger shock by listing the more important, planful and concrete new experience, play, hobby and daily life projects. The shock scores triggered by life events might be related to trait of mental growth and fatigue projects When the shock is stronger, the actualization of mental growth and fatigue projects is considered to be more important and the participants more strongly involve in actualization of the projects.

From the results described above, the degree of shock triggered by the life events appears to be related to the kind of project and its traits. Tsuzuki (1982) noted that a focus on FTP content was needed in FTP research. The results of the present study suggest that the outlook of Tsuzuki (1982) is valid.

The strong shock triggered by life events might prevent participant from prospecting the future

with the larger scope. However, there was no difference in the future extension between H and L groups. H group and L group had the larger future extension, because these group had some life time projects. Tsuzuki (1982) stated that not future extension but FTP content is important in the FTP research. Further research is needed to better understand this result.

In conclusion, the total shocking scores might positively relate to the kind and traits of a project and the feeling of hopefulness.

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Table 1　The definition and examples of categories

Category	Definition	Example
Death and sickness	This category refers to the death of the significant other and the sickness experienced by oneself and significant other.	My grandfather died. My mother had an illness.
The problems in the interpersonal relationship	This category refers to problems in the interpersonal relationship.	I had the trouble with the friends. I had disappointment in love.
The failure in schoolwork and albeit.	This category refers to the failure in the school work and albeit.	I failed to earn enough credits. I had failure in the albeit.
The crisis in the beauty culture	This category refers to the crisis in beauty culture	I got fat. I had a rough skin.
The crisis in the economy	This category refers to the crisis in the economy.	I lost the money. I exhausted my savings.
The stop of playing	This category refers to the stop of playing	The trip was stopped because of Influenza

Table 2　The frequency of life event for each category

	The failure in school work and albeit	The problems in the interpersonal relationship	The crisis in the beauty culture	The crisis in the economy	Death and sickness	The stop of playing
L	.11	.05	0	0	.34	.14
	(.40)	(.23)	(0)	(0)	(.48)	(.35)
H	.86	.82	.41	.17	.79	.86
	(.78)	(1.10)	(.73)	(.38)	(.81)	(1.09)

Table 3　The shocking scores of life event for each category

	The failure in school work and albeit	The problems in the interpersonal relationship	The crisis in the beauty culture	The crisis in the economy	Death and sickness	The stop of playing
L	1.75	2.0	/	/	2.50	1.60
	(.05)	(1.41)			(.79)	(.89)
H	2.11	2.63	2.27	2.60	2.17	2.32
	(.76)	(.72)	(.78)	(.54)	(.83)	(.80)

Table 4 The definition and example of project

Category	Definition	Example
Vocation, study and economy category		
Vocation	The category concerning the vocation	Work. Become accustomed to the work. Become a public servant. Become a counselor Open the business Become a president in the company Work hard. Become a teacher.
Study	The category concerning the study	Write the graduation thesis. Graduate. Go to the graduate school Study abroad Obtain a clinical therapist's license Study. Write the report.
Economy	The category concerning the economy	Become a rich Build a house Buy a car Save money Have an albeit.
Marriage, birth, love and physical appearance category		
Marriage and birth	The category concerning the marriage and birth	Marry Have a baby
Love	The category concerning the love	Love Have a boy friend
Physical appearance	The category concerning the physical appearance	Become a beautiful woman Become a stylish woman
New experience, play, hobby and daily life category		
New experience	The category concerning the exciting experience	Go to a trip. Win the game (club).
Play and hobby	The category concerning play and hobby	Raise the pet. Watch more movie Play with a family computer Play Go for a drink.

Daily life	The category concerning the daily life	Have a meal. Clean the room
Mental growth and fatigue category		
Mental growth	The category concerning the mental growth	Become a mentally strong Lead a fulfill life
Fatigue	The category concerning the fatigue	Want to go to bed Want to rest

Table 5 The correlation coefficients between the number of projects and total shocking scores for each category

Vocation, study and economy	Marriage, birth, love and physical appearance	Play, new experience, hobby and daily life	Mental growth and fatigue
.057	.52**	.12	－.08

Table 6 The number of project included in the four categories for each group

	Vocation, study and economy	Marriage, birth, love and physical appearance	Play, new experience, hobby and daily life	Mental growth and fatigue
L	1.75	.52	.45	.29
	(1.26)	(.90)	(1.01)	(.68)
H	1.72	1.30	.72	.57
	(1.47)	(1.96)	(.97)	(1.37)

Table 7 The number of projects included in the four categories for life event group and no life event group

	Vocation, study and economy	Marriage, birth, love and physical appearance	Play, new experience, hobby and daily life	Mental growth and fatigue
Life event Group	1.85 (1.36)	1.25 (1.14)	.67 (.99)	.50 (1.16)
No life event group	1.62 (1.50)	.62 (.88)	.50 (1.03)	.37 (.61)

Table 8 The correlation coefficients between the mean project trait and total shocking scores for vocation, study and economy category

	Reality	Plan	Joyfulness	Concreteness	Challengingness	Involvement
.17	−.11	−.19	−.14	−.13	.13	−.21

Table 9 The correlation coefficients between the mean project trait and total shocking scores for marriage, birth, love and physical appearance category

Importance	Reality	Plan	Joyfulness	Concreteness	Challengingness	Involvement
.29	.03	.16	−.11	.09	$.30^{+}$	.06

Table 10 The correlation coefficients between the mean project trait and total shocking scores for play, new experience, hobby and daily life category

Importance	Reality	Plan	Joyfulness	Concreteness	Challengingness	Involvement
.38+	－.09	.38^{+}	.08	.54**	.18	.29

Table 11 The correlation coefficients between the mean project trait and total shocking scores for mental growth and fatigue category

Importance	Reality	Plan	Joyfulness	Concreteness	Challengingness	Involvement
.45^{+}	.13	.27	.30	－.20	.40	.47^{+}

Table 12 The means of mean project trait scores in the each group for vocation, study and economy category

	Importance	Reality	Plan	Joyfulness	Concreteness	Challengingness	Involvement
L	4.58	4.40	3.73	3.20	3.92	4.21	3.49
	(.60)	(.84)	(.93)	(1.20)	(.90)	(1.00)	(1.08)
H	4.71	4.30	3.53	2.96	3.84	4.42	3.36
	(.46)	(.65)	(1.24)	(1.14)	(1.43)	(.58)	(1.28)

Table 13 The means of mean project trait scores in the each group for marriage, birth, love and physical appearance category

	Importance	Reality	Plan	Joyfulness	Concreteness	Challengingness	Involvement
L	3.81	3.83	2.57	4.21	3.25	3.42	2.46
	(1.10)	(.89)	(1.38)	(1.12)	(1.52)	(1.27)	(1.61)
H	3.95	3.67	2.66	4.01	3.29	4.27	3.03
	(1.04)	(.73)	(1.37)	(1.27)	(1.41)	(1.11)	(1.33)

Table 14 The means of mean project trait scores in the each group for play, new experience, hobby and daily life category

	Importance	Reality	Plan	Joyfulness	Concreteness	Challengingness	Involvement
L	1.49	4.66	2.4	4.03	2.44	2.72	2.71
	(1.45)	(.65)	(1.25)	(1.12)	(1.17)	(1.79)	(1.24)
H	3.39	4.16	3.4	4.08	3.98	2.89	3.18
	(1.37)	(1.11)	(.87)	(1.06)	(.87)	(1.61)	(1.32)

Table 15 The means of mean project trait scores in the each group for mental growth and fatigue category

	Importance	Reality	Plan	Joyfulness	Concreteness	Challengingness	Involvement
L	2.94	4.20	2.06	4.53	2.01	3.89	2.76
	(1.20)	(.51)	(1.35)	(1.35)	(.94)	(.87)	(1.33)
H	3.85	4.26	2.38	4.28	2.89	3.68	3.95
	(.58)	(.84)	(.96)	(.96)	(1.26)	(.22)	(1.02)

Table 16 The correlation coefficient between FTP three components scores and total shocking scores

	Hopefulness	Future orientation	External control
	.249+	− .09	.144

Table 17 The mean FTP components scores for each group

	Hopefulness	Future orientation	External control
L	47.72 (6.82)	27.08 (5.76)	14.00 (3.46)
H	50.99 (8.33)	26.34 (5.62)	15.34 (3.81)

Table 18 The mean FTP components scores for each group

	Hopefulness	Future orientation	External control
No life event group	49.00 (7.38)	26.93 (5.45)	14.00 (3.58)
Life event group	52.58 (8.35)	26.20 (5.16)	14.50 (3.45)

Situational Factors and Academic Delay of Gratification

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In the previous paper (Mitsutomi, et al, 2024 Situational Factors and Academic Delay of Gratification, Kwassui Nichibun, 65,7-23), Table 11 and 12 are not shown. Here, we show Table 11 and 12.

Table 11 The scores for each cluster in male.

	high delay cluster	Changing cluster
Self-efficacy	33.92	30.88
	(8.99)	(8.76)
General cognitive strategy	45.32	44.83
	(9.35)	(7.99)
Review summarizing strategy	10.24	9.98
	(2.48)	(2.73)
Giving attention	13.84	13.62
	(2.94)	(3.52)
Self-fulfillment	16.92	16.05
	(3.59)	(4.32)
Goal-oriented	16.96	14.63
	(3.74)	(4.16)
Past-acceptance	13.76	13.91
	(3.21)	(3.52)
Hopefulness	14.00	12.59
	(3.01)	(3.17)

Table 12 The scores for each cluster in female

	high delay cluster	Changing cluster
Self-efficacy	29.77	27.93
	(8.46)	(7.35)
General cognitive strategy	46.56	45.30
	(7.28)	(10.10)
Review summarizing strategy	10.85	9.75
	(3.22)	(2.98)
Giving attention	13.41	12.66
	(3.38)	(3.57)
Self-fulfillment	14.67	15.37
	(2.99)	(3.26)
Goal-oriented	15.33	15.12
	(3.63)	(4.01)
Past acceptance	13.63	12.90
	(3.28)	(3.67)
Hopefulness	12.63	12.70
	(3.26)	(3.32)