

Future Time Perspective and Mental Health

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The aim of the present study was to investigate the relationship between future time perspective (FTP) and mental health. Two studies involving university students were conducted, the first focusing on life feelings and the second on depression. Study 1 administered life feeling scale. After that, study 1 administered an FTP scale. Then, the project test was administered. All participants were instructed to list any projects that they want to do, and then to rate the traits (importance, reality, involvement, concreteness, planning, degree of being challenging, joyfulness) of each project. The study 2 procedures were the same as those in study 1, except that the depression and anxiety scale was used instead of the life feeling scale. The results of study 1 and 2 suggested that the traits of projects and components (future orientation, hopefulness, and external control) of FTP are associated with mental health to some degree.

Key words: Future time perspective, mental health, FTP components, project traits

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 behaviors among adolescents, such as delinquency, drug abuse, and difficulty in choosing a career, are 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 consists of the following three aspects: (1) cognition, (2) affection, and (3) beliefs. The cognitive aspect includes future extension, FTP content, and degree of structuralization of the future, while the affective aspect refers to a feeling of hopefulness, and 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.

Much research concerning the relationship between mental health and FTP has been conducted. We investigated the relationships between mental health and FTP components such as future orientation, hopefulness and external control. 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, pursuit of goals, fulfillment in the present, and acceptance of the past. Thus, hopefulness has been investigated in many studies. Therefore, we investigate the relationship between hopefulness and mental health. In addition, we examined the association between mental health and the future orientation and external control components.

Tsuzuki (1982) noted that a focus on FTP content was needed. Therefore, the present study also investigates the relationship between FTP content and mental health.

FTP content was investigated in terms of the kinds of projects and their traits. First, we examined the relationship between mental health and numbers of projects included in each of the following life domains:

vocation, study and economy; marriage, birth, love, and physical appearance; new experiences, play and hobby, and daily life; and mental growth and fatigue..

Second, we investigated the relationship between mental health and project traits, such as 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.

Study 1 and 2 are conducted to investigate the relationship between mental health and FTP. Study 1 and 2 focuses on the life feeling and depressive mood as indices of mental health respectively.

Study 1

The purpose of Study 1 was to investigate the relationship between life feelings and FTP.

Methods

Participants University students (30, males, 53, females)

Instrument. The fulfillment scale devised by Ohno (1984) was used. Because it is capable of measuring various life feelings, for the purposes of the present study, we changed the name of the fulfillment scale to the life feelings scale.

The life feelings scale (fulfillment scale) devised by Ohno (1984) is composed of four subscales. The first measures sense of fulfillment versus boredom and consists of 11 items (e.g., “I have lived a worthwhile life”, “I spend my time actively engaged in life”). The second measures sense of independence and self-reliance versus a lack of self-reliance and amae and consists of 12 items (e.g., “I have lived life on the basis of faith”, “I have confidence in my way of life”). The third measures sense of solidarity versus isolation, and consists of seven items (e.g., “I feel that nobody treats me kindly”, “I don’t think anybody understands me”). Finally, the fourth measures sense of trust and time perspective versus mistrust and time diffusion, and consists of eight items (e.g., “I feel happy fulfilling my responsibilities”, “I have something to live for”). The participants responded to each of these items on a five-point scale.

We administered the FTP scale devised by Kobayashi, Inoue & 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 expectation, I have hope for my future). The third subscale measures sense of external control over the future (e.g., I think that my future is determined by fate, I think that it is best to leave future events to chance) and is composed of five items. The participants responded to each of these items on a five-point scale.

A project test was administered to measure FTP content. After the investigator provided examples of project, the participants were instructed to write down projects that they wanted to do, regardless of the number of project, to a maximum of ten (Note1). Next, they were asked to rate each project on a five-point scale in terms of its importance (“Do you have trouble when you cannot perform the project?”), concreteness (“Is the project concrete?”), reality (“Do you think that you could actualize the project when you think one’s effort, ability and support from the environment?”), joyfulness attained from performing it (“Does performing the project bring you joy?”), degree of planning needed to actualize it (“Do you plan to actualize the project?”), degree of being challenging (“Do you need more skill, knowledge, and effort to actualize the project than now ?”), and degree of involvement (“Do you work hard to actualize the project?”).

Results

We established a high (H) group (above the median) and a low (L) group (below the median) for each of the

four life feeling subscales. We then investigated the relationship between three future components on the FTP scale and life feelings. We calculated the total scores for the FTP components in question and divided them by the number of items in the FTP components in question. Thus, we calculated the mean FTP component scores in question for each group of the four subscales in regard to life feelings. Then, we summed the mean FTP components scores in question that one by one has and divided them by the number of participants for each group. Thus, we calculated the means of the mean FTP components in question for both the H and L groups.

Table 1 The means of mean FTP components scores for each group of the four subscales in regard to life feelings

	Fulfillment		Independency and self-reliance		Isolation		Trust and time perspective	
	High	Low	High	Low	High	Low	High	Low
Hopefulness	3.55	3.22	3.53	3.24	3.24	3.61	3.74	3.06
	(0.55)	(0.48)	(0.59)	(0.44)	(0.48)	(0.53)	(0.50)	(0.32)
	3.49	3.17	3.51	3.08	3.22	3.49	3.60	3.05
Future orientation	(0.49)	(0.45)	(0.52)	(0.32)	(0.53)	(0.43)	(0.48)	(0.33)
	3.21	2.92	3.39	2.71	2.92	3.30	3.36	2.80
	(0.74)	(0.48)	(0.70)	(0.55)	(0.38)	(0.91)	(0.81)	(0.46)
External control	3.18	2.69	3.13	2.69	2.77	3.17	3.18	2.71
	(0.55)	(0.67)	(0.65)	(0.56)	(0.62)	(0.62)	(0.63)	(0.57)
	2.77	2.85	2.73	2.91	3.11	2.36	2.66	2.96
	(0.73)	(0.65)	(0.75)	(0.60)	(0.62)	(0.62)	(0.75)	(0.60)
	2.50	2.88	2.45	3.02	2.81	2.51	2.57	2.78
	(0.78)	(0.59)	(0.72)	(0.61)	(0.64)	(0.79)	(0.76)	(0.68)

Note: The top column is the result of males. The bottom column is the result of females.

The results are shown in Table 1. Among males, the means of mean hopefulness scores were higher for the fulfillment H than L group ($t=1.77$, $df=28$, $p<.05$). The means of mean hopefulness ($t=1.52$, $df=28$, $.05<p<.10$) and future orientation scores ($t=2.91$, $df=28$, $p<.01$) were higher for the independence and self-reliance H than L groups. The means of mean hopefulness ($t=4.53$, $df=28$, $p<.01$) and future orientation scores ($t=2.48$, $df=28$, $p<.01$) were higher for the trust and time perspective H than L group.

The means of mean hopefulness ($t=2.05$, $df=28$, $p<.05$) and future orientation scores ($t=1.65$, $df=28$, $.10<p<.05$) were higher for the isolation L than the isolation H group, and the means of mean external control scores ($t=3.52$, $df=28$, $p<.01$) were lower for the isolation L than the isolation H group.

For females, the means of mean hopefulness (fulfillment: $t=2.67$, $df=51$, $p<.01$; independence and self-reliance: $t=3.58$, $df=51$, $p<.01$) and future orientation scores (fulfillment: $t=.300$, $df=51$, $p<.01$; independence and self-reliance: $t=2.65$, $df=51$, $p<.01$) were higher for the fulfillment and independence and self-reliance H than L groups, and the means of mean external control scores (fulfillment: $t=2.60$, $df=51$, $p<.01$; independence and self-reliance: $t=3.00$, $df=51$, $p<.01$) were lower for the fulfillment and independence and self-reliance H than L groups.

The means of mean hopefulness and future orientation scores (hopefulness: $t=3.60$, $df=51$, $p<.01$; future orientation: $t=3.00$, $df=51$, $p<.01$) were higher for the trust and time perspective H than L group. The means of mean future orientation scores (future orientation: $t=2.50$, $df=51$, $p<.01$) were higher for the isolation L than H group, and the means of mean external control scores ($t=1.57$, $df=51$, $.05<p<.10$) were lower for the isolation L than H group.

The projects were each classified into one of four categories described in Table 2. The correlation coefficients between the number of project included in the four categories and four kinds of life feeling scores were

calculated. As shown in the Table 3, for males, trust and time perspective had a significantly positive correlation with the number of projects included in the vocation, study and economy categories. However, these were the only significant correlations. No significant relationship was basically found between the kinds of project and life feeling.

Table 2 The definition and example of project

Category	Definition	Example
Vocation, study and economy category		
Vocation	The category concerning the vocation	Become a public servants Become a counselor Open the business
Study	The category concerning the study	Go to the graduate school Study abroad Obtain a clinical therapist's license
Economy	The category concerning the economy	Become a rich Build a house Buy a car Save money
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
Physical appearance	The category concerning the physical appearance	Become a beautiful woman Become a stylish woman
New experience, play and hobby and daily life category		
New experience	The category concerning the exciting experience	Go to a trip.
Play and hobby	The category concerning play and hobby	Raise the pet. Watch more movie Play with a family computer
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

Table 3 The correlation coefficients between the number of projects and life feeling scores

	Vocation, study and economy	Marriage, birth, physical appearance and love	New experience, play and hobby, daily life	Mental growth and fatigue
Fulfillment	.13 (-.01)	-.03 (-.02)	.08 (.09)	.11 (.13)
Independency and self-reliance	.28 (-.04)	-.28 (.19)	.19 (.26)	.04 (.05)
Isolation	.06 (.09)	.01 (-.01)	-.01 (-.21)	-.13 (-.05)
Trust and time perspective	.46 (-.11)	.17 (.10)	.01 (.18)	.12 (.04)

Note: () is results of the females.

Finally, we investigated the relationship between the project traits and life feelings. Similarly, we established an H group (above the median) and an L group (below the median) for each of the four life feeling subscales and compared the project traits between groups using the t test. At the each trait of project, we summed the trait scores for all projects that one by one have and divided them by the number of projects. Thus, we calculated the mean trait scores for the projects for both groups in regard to the four life feeling subscales. Then, we summed the mean trait scores for the project that one by one have and divided them by the number of participants for both the H and L group. Thus, we calculated the means of mean trait scores for each group.

Table 4 The means of mean project trait scores for the each group of the four subscales in regard to life feeling

	Fulfillment		Independency and self-reliance		Isolation		Trust and time perspective	
	High	Low	High	Low	High	Low	High	Low
Importance	4.20	3.44	3.93	3.76	4.07	3.53	3.99	3.70
	(1.08)	(1.54)	(1.29)	(1.45)	(1.25)	(1.47)	(1.32)	(1.41)
planning	4.07	4.07	3.93	3.76	4.02	4.13	4.19	3.93
	(0.69)	(0.72)	(1.29)	(1.45)	(0.74)	(0.66)	(0.67)	(0.72)
Involvement	3.31	3.11	3.31	3.11	3.02	3.50	3.74	2.69
	(1.02)	(0.97)	(0.92)	(1.02)	(1.06)	(0.79)	(0.67)	(0.85)
Reality	3.30	2.76	3.23	2.80	2.81	3.33	3.30	2.78
	(0.86)	(0.80)	(0.91)	(0.73)	(0.78)	(0.90)	(0.92)	(0.72)
Concreteness	3.53	3.23	3.65	3.18	3.40	3.49	3.75	3.12
	(0.86)	(1.02)	(1.00)	(0.83)	(0.95)	(1.05)	(1.02)	(0.75)
Joyfulness	3.45	2.91	3.34	3.01	3.00	3.44	3.44	2.94
	(0.80)	(0.76)	(0.90)	(0.64)	(0.64)	(0.93)	(0.83)	(0.54)
Challengingness	4.07	4.00	4.30	3.74	3.68	4.58	4.45	3.62
	(0.89)	(1.04)	(0.86)	(0.97)	(1.04)	(0.51)	(0.90)	(0.81)
Importance	4.06	3.79	3.98	3.88	3.80	4.09	4.02	3.85
	(0.57)	(0.77)	(0.62)	(0.76)	(0.78)	(0.51)	(0.63)	(0.73)
Independency and self-reliance	3.95	4.05	4.31	3.62	3.90	4.14	4.36	3.64
	(1.21)	(0.79)	(0.83)	(1.11)	(1.90)	(0.93)	(0.82)	(1.10)
Isolation	3.79	3.70	3.92	3.48	3.65	3.85	3.91	3.56
	(0.72)	(0.94)	(0.68)	(0.96)	(0.93)	(0.68)	(0.67)	(0.94)
Trust and time perspective	3.49	3.54	3.98	2.98	3.47	3.57	4.19	2.84
	(1.53)	(1.21)	(1.33)	(1.25)	(1.38)	(1.41)	(1.10)	(1.31)
Fulfillment	3.91	3.76	3.81	3.91	3.91	3.78	3.91	3.77
	(0.74)	(0.83)	(0.74)	(0.43)	(0.56)	(0.67)	(0.78)	(0.42)
Concreteness	4.32	4.30	4.36	4.25	4.32	4.30	4.38	4.24
	(0.86)	(1.19)	(0.93)	(1.12)	(1.07)	(0.94)	(0.96)	(1.08)
Joyfulness	4.21	4.18	4.20	4.19	4.29	4.10	4.25	4.13
	(0.61)	(0.81)	(0.73)	(0.69)	(0.51)	(0.63)	(0.63)	(0.78)

Note: The top column is the result of males. The bottom column is the result of females.

The results are shown in Table 4. For males, the means of mean importance scores ($t=1.62$, $df=28$, $.05 < p < .10$) were higher for the fulfillment H than L group. The means of mean concreteness ($t=1.97$, $df=28$, $p < .05$) and joyfulness scores ($t=2.17$, $df=28$, $p < .05$) were higher for independence and self-reliance H than L groups. The means of mean reality ($t=1.75$, $df=28$, $p < .05$) and involvement scores ($t=1.42$, $df=28$, $.05 < p < .10$) were higher for the independence and self-reliance H than L groups.

The means of mean project reality ($t=2.57$, $df=28$, $p < .01$) and planning scores ($t=1.77$, $df=28$, $p < .05$) were higher for the isolation L than H groups. The means of mean planning ($t=3.62$, $df=28$, $p < .01$) joyfulness ($t=3.29$, $df=28$, $p < .01$), concreteness ($t=2.11$, $df=28$, $p < .05$), involvement ($t=2.33$, $df=28$, $p < .05$), and reality scores ($t=2.86$, $df=28$, $p < .01$) were all higher for the trust and time perspective H than L group.

For females, the means of mean reality ($t=1.67$, $df=51$, $.05 < p < .10$), planning ($t=2.45$, $df=51$, $p < .01$) and involvement scores ($t=2.25$, $df=51$, $p < .05$) were higher for the fulfillment H than L groups. The means of mean concreteness ($t=1.86$, $df=51$, $p < .05$), planning ($t=2.26$, $df=51$, $p < .05$) and involvement scores ($t=1.40$, $df=51$, $.05 < p < .10$) were higher for the independence and self-reliance H than L group.

The means of mean reality ($t=1.60$, $df=51$, $.05 < p < .10$), planning ($t=2.26$, $df=51$, $p < .05$), and involvement scores ($t=2.01$, $df=51$, $p < .05$) were higher for the isolation L than H groups. The means of mean importance ($t=1.39$, $df=51$, $.05 < p < .10$), concreteness ($t=1.67$, $df=51$, $.10 < p < .05$), planning ($t=2.36$, $df=51$, $p < .05$) and involvement scores ($t=2.78$, $df=51$, $p < .01$) were higher for the trust and time perspective H group than L group.

Discussion

For males, the means of mean hopefulness scores were higher for the fulfillment H than L group. Thus, for males, the fulfillment H group had an FTP component in which the degree of hopefulness was higher than that of the fulfillment L group.

Similarly, for females, the means of mean hopefulness scores were also higher for the fulfillment H than L group. In addition, the means of mean future orientation scores were higher for the fulfillment H than L group, and the means of mean external control scores were lower for the fulfillment H than L group. Thus, for females, the fulfillment H group had FTP components in which the degrees of hopefulness and future orientation were higher and that of external control was lower than those of the fulfillment L group.

For males, the means of mean hopefulness and future orientation scores were higher for the independence and self-reliance H than L groups. Thus, for males, the independence and self-reliance H group had FTP components in which the degrees of hopefulness and future orientation were higher than those of the independence and self-reliance L group.

For females, the means of mean hopefulness and future orientation scores were higher for the independence and self-reliance H than L groups, and the means of mean external control scores were higher for the independence and self-reliance L than H groups. Thus, for females, the independence and self-reliance H group had FTP components in which the degrees of hopefulness and future orientation were higher, and that of external control was lower, than those of the independence and self-reliance L group.

For both males and females, the means of mean hopefulness and future orientation scores were higher for the trust and time perspective H than L group. Thus, for males and females, the trust and time perspective H group had FTP components in which the degrees of hopefulness and future orientation were higher than those of the trust and time perspective L group.

For males and females, the means of mean hopefulness and future orientation scores were higher for the isolation L than H group, and the means of mean external control scores were higher for the isolation H than L group. Thus, for males and females, the isolation L group had FTP components in which the degrees of hopefulness and future orientation were higher, and that of external control was lower, than those for the isolation H group.

Concerning the relationship between the numbers of projects included in the life domain and life feeling, only the numbers of projects included in the study, economy and vocation category had a positive relationship with trust and time perspective. Therefore, the kinds of FTP might not be related to life feelings.

Regarding the relationship between project traits and mental health, for males, the means of mean importance scores were higher for the fulfillment H than L group. Thus, the fulfillment H group assigned a greater degree of importance to their projects than the fulfillment L group.

The means of mean concreteness, reality, involvement, and joyfulness scores were higher for the independence and self-reliance H than L group. Thus, the independence and self-reliance H group rated the concreteness,

reality, involvement, and joyfulness of their projects more highly than the independence and self-reliance L group.

The means of mean reality and planning scores were higher for the isolation L than H group. Thus, the isolation L group viewed their projects as having higher degrees of reality and planning than the isolation H group.

The means of mean planning, joyfulness, concreteness, involvement, and reality scores were higher for the trust and time perspective H than L group. Thus, the trust and time perspective H group assigned greater degrees of planning, joyfulness, concreteness, involvement, and reality to projects than the trust and time perspective L group.

Concerning females, the means of mean reality, planning, and involvement scores were higher for the fulfillment H than L group. Thus, the fulfillment H group assigned greater degrees of reality, planning, and involvement to their projects than the fulfillment L group.

The means of mean concreteness, planning, and involvement scores were higher for the independence and self-reliance H than L group. Thus, the independence and self-reliance H group assigned greater degrees of concreteness, planning, and involvement to their projects than the independence and self-reliance L group.

The means of mean reality, planning, and involvement scores were higher for the isolation L than H group. Thus, the isolation H group assigned lower degrees of reality, planning, and involvement to their projects than the isolation L group.

The means of mean importance, concreteness, planning, and involvement scores were higher for the trust and time perspective H than L group. Thus, the trust and time perspective H group assigned greater degrees of importance, concreteness, planning, and involvement to their projects than the trust and time perspective L group.

As mentioned above, Tsuzuki (1982) stated that a focus on FTP content was needed in FTP research. However, concerning the kinds of projects, no clear result was observed. On the other hand, life feelings influenced both the mean project trait and FTP component scores for males and females to some degree. These results suggest that a focus on project traits and FTP components on the FTP scale is needed to clarify further the relationship between FTP and life feelings.

Study 2

Study 2 investigated the relationship between depression and FTP.

Methods

Participants. University students (52 females and 30 males).

The study procedures were the same as those in Study 1, except that the depression and anxiety subscale of the multiple mood scale (Terasaki, Kishimoto, & Koga, 1992) was used instead of the life feelings scale. This subscale is composed of 10 items. The participants responded to each of these items on a four-point scale.

Results

We established an H group (above the median) and an L group (below the median) for the depression scores. We then investigated the relationship between the FTP components on the FTP scale and depression. We calculated the total scores for the FTP components in question and divided this score by the number of items in the FTP component in question. Thus, we calculated the mean FTP component scores for the depression H and L groups. Then, we summed the mean FTP component in question that one by one have and divided them by the number of participants for each group. Thus, we calculated the means of mean FTP components in question

for the both H and L group.

Table 5 The means of mean FTP components scores for the depression H and L group

	Depression	
	High	Low
Hopefulness	3.29	3.62
	(0.49)	(0.53)
Future orientation	3.21	3.61
	(0.50)	(0.38)
External control	2.99	3.28
	(0.63)	(0.87)
External control	2.89	3.17
	(0.64)	(0.61)
External control	2.89	2.62
	(0.59)	(0.88)
External control	2.75	2.50
	(0.80)	(0.58)

Note: The top column is the results of the males. The bottom column is the results of the females.

The results are shown in Table 5. For males, the means of mean hopefulness scores ($t=1.73$, $df=28$, $p<.05$) were higher for the depression L than H group. For females, the means of mean hopefulness ($t=2.97$, $df=50$, $p<.01$) and future orientation scores ($t=1.52$, $df=50$, $.05<p<.10$) were higher for the depression L than H group.

Projects were classified into one of four categories. The categories and their definition are shown in Table 2. No significant correlations were found between the numbers of projects in the four categories and depression scores.

Next, we established an H group (above the median) and an L group (below the median) for depression and compared project traits between the two groups using the t test. We summed the trait scores for the all projects that one by one have and divided these scores by the numbers of projects. Thus, we calculated the mean project trait scores for the depression H and L groups. Then, we summed the mean project trait scores that one by one have and divided them by the number of participants for each group. Thus, we calculated the means of mean project trait scores for the both H and L groups.

The results are shown in Table 6. For males, the means of mean reality scores ($t=1.3$, $df=28$, $.05<p<.10$) were higher for the depression L than H group. For females, the means of mean planning ($t=1.58$, $df=50$, $.05<p<.10$), and importance scores ($t=1.92$, $df=50$, $p<.05$) were higher for the depression L than H group.

Table 6 The means of mean project trait scores for depression H and L group

	Depression	
	High	Low
Importance	4.01	3.47
	(1.25)	(1.57)
Planning	3.95	4.34
	(0.70)	(0.62)
Planning	3.28	2.96
	(0.89)	(1.04)
Importance	2.92	3.32
	(0.86)	(0.85)

Involvement	3.48	3.32
	(0.90)	(1.06)
Reality	3.14	3.42
	(0.81)	(0.86)
Concreteness	3.89	4.37
	(1.03)	(0.62)
Joyfulness	3.87	4.07
	(0.67)	(0.69)
Challengingness	3.93	4.14
	(1.09)	(0.87)
Involvement	3.69	3.81
	(0.85)	(0.79)
Reality	3.31	3.98
	(1.48)	(0.97)
Concreteness	3.97	3.64
	(0.70)	(0.89)
Joyfulness	4.28	4.37
	(1.04)	(0.99)
Challengingness	4.16	4.20
	(0.75)	(0.60)

Note: The top column is the results of males. The bottom column is the results of females.

Discussion

For males, the means of mean hopefulness scores were higher for the depression L than H group. Thus, for males, the depression L group had FTP components in which the degree of hopefulness was higher than that for the depression H group.

For females, in addition to the means of mean hopefulness scores, the means of mean future orientation scores were higher for the depression L than H group. Thus, for females, the depression L group had FTP components in which the degrees of future orientation and hopefulness were higher than those for the depression H group.

No significant relationships were found between depression and the number of projects in the life domain for the males and females. Thus, depression does not seem to be related to the kinds of projects for males and females. Regarding the relationship between project traits and depression, for males, the means of mean reality scores were higher for the depression L than H group. Thus, for males, the depression L group had projects in which the degree of reality was higher than that for the depression H group.

For females, the means of mean planning and importance scores were higher for the depression L than H group. Thus, the depression L group had projects in which the degrees of importance, and planning were higher than those of the depression H group.

Concerning the kinds of projects, no clear relationship was observed. These results suggest that a focus on project traits and three FTP components on the FTP scale are needed to clarify the relationship between FTP and depression.

General Discussion

Study 1 and 2 suggested that mental health appeared to influence to some degree FTP components such as future orientation, hopefulness and external control for both males and females.

Much research has investigated the relationship between mental health and FTP. Although Tsuzuki (1982) reported that a focus on FTP content was needed to conduct FTP research, few studies have investigated the relationship between FTP content and mental health. Therefore, in the present study, we focused on the kinds and traits of projects as FTP content and investigated the relationship between FTP and mental health in two

separate studies focusing on life feelings and depression.

No clear results were observed in regard to the relationship between the kinds of projects and mental health. On the other hand, in Study 1, mental health appeared to influence to some degree the project traits for both males and females. In Study 2, mental health appeared to influence to some degree the project trait for females.

These results suggest that a focus on project traits and three FTP components on the FTP scale are needed to clarify further the relationship between FTP and mental health.

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(Note 1) Mitsutomi & Kobayashi (2007, 2008, 2009, 2010, 2011, 2013) listed up the example of project. Concretely, the paper that wrote example of various projects was given to the participants. Participants might respond to the project test on the basis of example of the projects. In the Mitsutomi & Kobayashi (2005), we called this test event test. However, we had better call the project test rather than the event test. Participants were instructed to write down the seven projects (events) that want to do. The paper that wrote the example of various projects was given to the participants. In the Mitsutomi & Kobayashi (2006), the paper wrote the example of various projects was also given to the participants.