**Comparing educational effects between role-play and gatekeeper training in
Crisis-management, Anti-stigma, and Mental Health Literacy Program for
University Students (CAMPUS)**

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Abstract

Aims: We compare the educational effects of role-play and discussion and gatekeeper training to develop an evidence-based suicide prevention education program for university students.

Methods: Participants comprised 145 medical students. “Crisis-management, Anti-stigma and Mental Health Literacy Program for University Students” (CAMPUS) was designed and developed, which included a lecture and a parallel session for role-play or gatekeeper training. Students attended a lecture and were randomly assigned to the role-play group or gatekeeper training group. Questionnaires were filled before the module, immediately after the module, and three months after the program.

Results: The role-play group learned more appropriate coping skills, whereas the gatekeeper training group improved their self-efficacy as gatekeepers. The students’ depressive state had decreased at three months after the program, along with the reduced suicide probability in students with suicide risk.

Conclusions: Role-play and gatekeeper training evinced different educational effects. However, CAMPUS was comprehensively effective in preventing suicide in university students.

Keywords: gatekeeper training; mental health literacy; self-stigma, suicide prevention education; university student

1. Introduction

Suicide is the second leading cause of death in the world among individuals in the 15-29 year old bracket (World Health Organization, 2019). University student suicide is a severe issue in many countries (Ministry of Health, Labour and Welfare in Japan, 2018; Eskin et al., 2016; Peltzer & Pengpid, 2017).

Prior studies have found that suicide awareness programs and skills training with suicide prevention strategies are useful for students (Waldvogel et al, 2008; Katz et al., 2013; Strunk et al., 2014; Wyman et al., 2010). However, almost every time, the subjects of these programs were secondary school students, and scant research has examined its application in universities. Scant evidence exists of suicide primary prevention conducted in a university setting (Harrod et al., 2014; Tachikawa et al., 2017). A few online programs have been provided for university students (Han et al., 2018; Manning et al., 2011), but additional research could clarify the effectiveness of face-to-face suicide prevention education programs for universities.

Similarly, gatekeeper training emerged as one of the most important suicide prevention strategies for students (Katz et al., 2013). The faculty, staff, and counselors of a secondary school were mainly targeted by the training (Wyman et al., 2010; Flynn et al., 2016; Reis & Cornell, 2008, King & Smith, 2000). However, both the staff and students were targeted in the university context (Hashimoto et al., 2016; Cimini et al., 2014; Indelicato et al., 2011; Rallis et al., 2018). Namely, university students may be educated to prevent suicide in others without the chance to learn suicide prevention personal skills.

A large-scale study in Europe found Youth Aware of Mental health (YAM) to

be more effective than screening and gatekeeper training for teachers in decreasing suicide ideation among high school students a year after the experiment (Wasserman et al., 2015), suggesting that suicide ideation and attempts by students could be diminished by education and by provision of knowledge and skills for suicide prevention. Therefore, it is essential to examine which suicide prevention programs or gatekeeper training modules function best in suicide prevention in college and university students.

The authors of this paper developed an original suicide prevention program, named ‘Crisis-management, Anti-stigma, and Mental Health Literacy Program for University Students’ (CAMPUS). This module comprises a lecture on mental health literacy (MHL) and suicide prevention and two types of exercises: an education session and gatekeeper training. The present study applied CAMPUS to comparatively evaluate the effects of these two exercises on Japanese university students. Two hypotheses were examined in this study: 1) that the two types of exercises would exert different educational effects on MHL and suicide prevention and 2) that both exercises would be able to reduce the severity of suicide ideation and depression in high suicide risk students and would maintain the low risk of suicide ideation and depression in other students.

2. Materials and Methods

2.1 Program details of CAMPUS

CAMPUS focuses on three concepts. The first is ‘MHL’, which involves obtaining knowledge and understanding about mental health and the adjustment of attitudes about the phenomenon (Jorm et al., 1997). The second is ‘anti-stigma.’ This notion incorporates self-stigma, self-esteem, and help-seeking behavior (Corrigan et al.,

2006; Lin et al., 2017). It also addresses self-stigma on a wider range of problems such as loans, sexual minorities, pregnancies before marriage, and suicide. The third concept is ‘crisis intervention,’ which assesses how the life of an individual who intends to commit suicide or partake in other dangerous behaviors can be saved. CAMPUS is constructed to include a lecture and two exercises based on these three concepts.

In one exercise, students were then asked to role-play a troubled student with self-stigma, friends of the student, and observers of the situation. The scenarios were based on three scripts relating to issues that university students often face: (1) conflicts between students in various situations, (2) a consultation involving self-stigma, and (3) a consultation on suicidal thoughts. Only the “troubled student” knew the details, and the “friends of the student” were asked to listen without knowing the details. All the students were requested to pay special attention to their feelings when they did the role-play. Thereafter, the participants were asked to discuss behaviors that could be more appropriate for friends of a student with negative feelings, the way they felt as they were playing each role, and their own behavior if they found themselves in such situations. This exercise group was named the role-playing group (RP group). In another exercise, students watched three kinds of gatekeeper training films produced by the Japanese Cabinet Office (2012). They were also required to pair-up for a training exercise on listening and role-play. After being trained on how to listen to a friend talk about a bad or good situation, they engaged in a role-play of a consultation involving self-stigma (student maladjustment and alcohol issue) and suicidal thoughts based on scene setting. They were asked to focus on how to listen as a gatekeeper. This group was named the gatekeeper training group (GT group). The groups were separated to compare the effects of the two types of exercises, and the sessions were executed in a

parallel manner.

2.2 Procedures

The program was first enforced in July 2017 as part of a required course. It was run by lecturers and three psychiatrists who belonged to the Tsukuba University Health Center. The facilitators of the two exercises also assigned to the project two psychiatrists and five graduated students who were majoring in psychiatry, clinical psychology, or public health. CAMPUS was implemented during university hours using three classes (one frame 75 minutes).

Self-reporting questionnaires were administered at three points of time to assess the effects of CAMPUS: before the program (T1), immediately after the program (T2), and 3 months later (T3). All students were informed in advance that they were required to attend this program, but that they would not be penalized if they refused to respond to the questionnaire. Students who agreed to participate in this study were required to tender written consent and to memorize it before the session began. This procedure and the details of the CAMPUS are illustrated in Figure 1. The registered code of the study is UMIN27790.

2.3 Participants

The participants of the study initially comprised 145 sophomore medical students (90 male and 55 female) from the University of Tsukuba, Japan. Of them, nine students (all male) refused to consent to the survey and were excluded from the analysis. Thus, 136 students finally participated in the study. The ages of the participants ranged from 19 to 30 ($M = 19.93$, $SD = 1.35$). Among the 136 students, 67 were assigned to the

RP group, and the remaining 69 were nominated to the GT group.

The researchers believed that the subjects of the RP group might feel the psychological burden of role-playing in open-group and small-group discussions. In contrast, gatekeeper training is generally conducted without any such limitations. Thus, students with high risk were assigned to the GT group. Cut-off points of the Suicidal Behavior Questionnaire-Revised (SBQ-R) (Osman et al., 2001) and Quick Inventory of Depressive Symptomatology: Japanese ver. (QIDS-J) (Fujisawa et al., 2010) were calculated at T1 to screen students who evinced a higher risk of suicide or severe depression. Overall, four students obtained scores over the cut-off point of SBQ-R (=8), and nine scored over the cut-off point of QIDS-J (=11). These 13 were all placed into the GT group and the others were randomly classified into the two groups based on sex according to the size of a number in the table of random numbers.

2.4 Measures

Gatekeeper Self-Efficacy Scale (GKSES) was created by Morita et al. (2015) and is a 9-item measure of the confidence of gatekeeper skills. The students answered questions pertaining to gatekeeping skills including their knowledge of suicide prevention using a 7-point Likert scale ranging from “not at all” to “extremely”.

General Help-Seeking Questionnaire (GHSQ) is a 10-item measure of help-seeking intentions for various supporting individuals such as a friend, parent, intimate partner, doctor (Wilson et al., 2005). Participants were queried more general help-seeking intentions when they face personal and emotional problems with a 7-point Likert scale. The total score of 9-items was used, excluding the question that asked about “others” because most students did not answer it.

Brief-COPE is a self-reporting measure of 14 coping skills and has 28 items (Carver et al., 1989; 1997). This study adopted 9 of the 14 coping skills from Japanese version of the scale (Otsuka et al., 2009): self-distraction, active coping, denial, substance use, behavioral disengagement, venting, positive reframing, planning, and self-blame. The participants were asked to respond on a 4-point scale in terms of the frequency in which they used the abovementioned skills.

SBQ-R is a 4-item self-reporting measure of suicide risk (Osman et al., 2001). The total score ranges from 3 to 18. Three question items (Q1-3) that queried the experience of suicide ideation or behavior were measured at T1 and T3 because these items could not logically be changed in the course of T1 and T2. The question item of the possibility of dying by suicide in the future (Q4) was asked at T1, T2, and T3.

QIDS-J is a scale that assesses depressive symptoms that individuals may have experienced within the time-frame of two weeks before taking the test (Fujisawa et al., 2010; Rush et al., 2003). It is composed of 16 items that are answered on a 4-point scale.

Simplified Japanese version of WHO-Five Well-Being Index (S-WHO-5-J) is scale that assesses mental well-being, which Inagaki et al. (2013) changed the original 6-point scale to a 4-point scale (Awata et al., 2007). The participants were asked to report their mental well-being over the last month.

2.5 Ethical considerations

Written informed consent from the participants was obtained. The Tsukuba University Health Center staff were prepared to follow-up with any participants presenting with illness or needing a consultation after joining. The participants were

given all teachers' contact information for them to consult the teachers. Students screened by the SBQ-R and QIDS-J were sent follow-up e-mails, and so were the worried after they had attended the program. The e-mails said that they could consult us or the Tsukuba University Health Center. The approval from the Medical Ethics Committee of the University of Tsukuba (No.1173) was obtained prior to study conduct.

2.6 Statistical analyses

Each measure was used to assess and note any changes that occurred in participants as they progressed from T1 to T2 and T3. The differences in the effects observed on the two exercise groups were evaluated using the analysis of variance (ANOVA), considering the factors of groups (RP group*GT group and GT group*screened students) and time (T1, T2, T3). Because of non-random assignment of the screened students to the GT group, a comparative analysis was conducted between the GT group and them to assess the effects of the program on students evincing high risk of suicide. When the main effect for time was significant, the Bonferroni test was used for the post-hoc analyses. When the interaction for time and group was significant, a simple main effect test was performed. The effect size is shown by partial η^2 . SPSS ver.25.0 was used to run these analyses.

3. Results

All the questionnaires were answered by 67 students from the RP group and 68 students from the GT group. All 13 screened students also completed the three questionnaires. This process is shown in Figure 2. Figures 3, 4, 5, and 6 display the mean scores of each scale at every point and for each group. The means, standard deviations, and the significance test are reported in Tables 1 and 2.

The gatekeeper self-efficacy of the RP group and the GT group at T2 and T3 were significantly higher than at T1. The GT group exhibited significantly higher self-efficacy levels than the RP group at T2. The screened students showed higher self-efficacy than the GT group.

The scores of help-seeking intentions were significantly higher at T2 for the RP group and the GT group than at T1. When comparing the GT group's and the screened students' scores, and significant differences were observed between scores at T1 and T2.

The difference in scores of active coping between the RP group and the GT group at T1 disappeared at T3. Though the GT group scored higher than the RP group in regard to positive reframing, the scores of both groups improved comprehensively between T1 and T3. Moreover, a significant interaction was observed with regard to self-blame between RP group and GT group. The score of the RP group decreased from T1 to T3; thus, the difference between the RP group and the GT group at T1 were non-existent at T3. Group main effects were significant for substance use and self-blame upon comparing scores of the GT group and the screened students. The scores of the screened students were significantly higher than those of the GT group for both variables.

The risk of suicide and suicide behavior likelihood revealed no main effects or interactions because suicide risk of the RP group and the GT group was already comprehensively low. Comparing the scores of the GT group and screened students, the risk of screened students decreased significantly from T1 to T3, but the group difference was significant at both T1 and T3. Moreover, a significant difference was found in the suicide behavior likelihood obtained by the GT group and screened students at T1, but

the scores of screened students decreased significantly from T1 to T3.

The responses tendered by RP group and GT group evidenced a significantly reduced severity of depression and an increased level of mental health over the course of the three questionnaires. The depression scores of the screened students were higher than the scores of the GT group at both T1 and T3, and the scores were lower from T1 to T3 in both groups. The mental health of screened students was comprehensively lower than that of the GT group.

4. Discussion

The results of the analyses evidenced that CAMPUS comprehensively improved the self-efficacy of gatekeepers and enhanced the participants' coping skills with regard to certain issues faced by students. Further, it led to reduced levels of depression in all students and 3 months after the program, it was proved to also decrease suicide risk in students who evinced the high risk of suicide. The CAMPUS is more cost and time effective than other programs (Aseltine & DeMartino, 2004; Wasserman et al., 2015). University students may be able to grasp the learning more easily than other youth groups and could apply this knowledge to their daily lives earlier as well. In conclusion, this study provides empirical support for the hypothesis that CAMPUS would work as a prevention program for students who exhibited high risk of suicide. CAMPUS was also shown to perform as a safe program for students with low risk of suicide.

The two exercises exhibited different educational effects about a few variables. The students in the RP group were required to understand differences in opinions, in self-disclosure about mental health in scenarios of conflict, and introspection. The present data suggest that these experiences advanced the urge to self-help and the broadening of the perspectives of the group's participants. On the other hand, the GT

group naturally showed a more dramatic advance of the self-efficacy of gatekeeping than the RP group. A possible explanation for these differences is that the two exercises were performed in different contexts. Since the role-play and the discussions in the RP group placed emphasis on the participants to think about negative situations, the students may have developed coping and self-help skills as a result of the activity. In contrast, the students in the GT group might have become better equipped to recognize mental health issues in other people rather than in themselves, even though they were asked to play the role of a suicidal student. It is also important to note that the gatekeeper training included in CAMPUS decreased levels of depression and reduced the risk of suicide. The outcomes of the present investigation reveal that gatekeeper training for university students does mean suicide prevention not only for people around them but also for themselves.

In contrast, no difference was found between the two groups in the results pertaining to the help-seeking intention, but the help-seeking attention was found to rise temporarily in this study. As in previous studies (Katsumata et al., 2017; Strunk et al., 2014), the results of this study also reinforce the difficulty of longitudinal improvement of the help-seeking intention. The program attempted to intervene to mitigate the general self-stigma related to the help-seeking intention, but some of the intervention research of the anti-stigmatization program did not establish the desired long-term effects (Shimotsu, 2016). A possible contributor to the temporary change in the reported help-seeking intention in this study may have resulted from the learning about the choices of resources and not from any change in the participants' behavior with respect to self-stigma.

Future studies should focus on improving CAMPUS and on creating a complete

program that includes both exercises for all participants. The combined effects of the program should be evaluated because RP is useful for the participants themselves, and GT is useful for their families, friends, and other significant people. It is the lack of information of effect for students with a high risk of suicide and serious depression as they were not placed in the RP group. The drop in suicide risk and depression must be replicated by placing high-risk students in the RP group. It should be noted in discussing the study's generalizability that the participants were medical students. Although CAMPUS asked them to consider suicide and mental health from a layperson's viewpoint, their consciousness that they might work with suicidal patients in the future might have influenced the educational effect. Future studies need to implement CAMPUS for university students with various scholastic abilities to generalize the program.

Figure Captions:

Figure 1. The procedure and details of the CAMPUS program and the thrice-administered questionnaires.

Figure 2. Participant Flow Chart from T1 to T3. T1 = before the program, T2 = after the program, T3 = three months after the end of the program.

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Table 1*Educational and mental effects of the CAMPUS program*

			ANOVA F (partial η^2)					
Group			T1	T2	T3	Time	Group	Interaction
GKSES	RP	<i>M</i>	26.34	34.02	34.16	79.06 *** (.41)	5.96 * (.05)	5.37 ** (.05)
		(<i>SD</i>)	(8.48)	(10.13)	(11.38)			
	GT	<i>M</i>	26.50	40.28	38.22	34.62 *** (.35)	7.07 ** (.10)	0.21 (.00)
		(<i>SD</i>)	(10.84)	(8.39)	(8.55)			
	SC	<i>M</i>	33.62	45.77	43.31			
		(<i>SD</i>)	(9.95)	(7.35)	(12.65)			
GHSQ	RP	<i>M</i>	32.11	33.57	32.05	5.88 ** (.05)	0.98 (.01)	1.69 (.05)
		(<i>SD</i>)	(7.92)	(6.75)	(6.44)			
	GT	<i>M</i>	31.92	34.91	34.21	4.00 * (.06)	0.47 (.01)	1.72 (.03)
		(<i>SD</i>)	(8.48)	(7.70)	(6.02)			
	SC	<i>M</i>	31.77	34.85	30.38			
		(<i>SD</i>)	(10.65)	(5.05)	(8.85)			
SBQ-R	RP	<i>M</i>	3.72	-	3.57	1.13 (.01)	0.54 (.01)	0.42 (.00)
		(<i>SD</i>)	(1.13)		(1.08)			
	GT	<i>M</i>	3.80	-	3.76	14.15 *** (.18)	16.73 *** (.20)	12.74 *** (.16)
		(<i>SD</i>)	(1.19)		(1.22)			
	SC	<i>M</i>	6.31	-	4.92			
		(<i>SD</i>)	(3.20)		(2.02)			
QIDS-J	RP	<i>M</i>	3.62	-	3.11	12.30 *** (.09)	1.24 (.01)	1.39 (.01)
		(<i>SD</i>)	(2.65)		(2.87)			
	GT	<i>M</i>	3.38	-	2.35	26.17 *** (.28)	32.03 *** (.33)	6.68 * (.09)
		(<i>SD</i>)	(2.83)		(2.58)			
	SC	<i>M</i>	9.46	-	6.31			
		(<i>SD</i>)	(5.58)		(3.66)			
S-WHO-5	RP	<i>M</i>	14.35	-	15.30	6.68 * (.05)	0.51 (.00)	0.10 (.00)
		(<i>SD</i>)	(2.81)		(2.95)			
	GT	<i>M</i>	14.76	-	15.51	1.79 (.03)	5.92 * (.08)	0.02 (.00)
		(<i>SD</i>)	(3.31)		(2.94)			
	SC	<i>M</i>	12.77	-	13.69			
		(<i>SD</i>)	(3.61)		(3.84)			

Note. RP: Role-play group; GT: Gatekeeper Training group; SC: screened students; T1: before the CAMPUS program; T2: after the CAMPUS program; T3: Three months after the CAMPUS program. The top line of each cell of ANOVA F reflects the results of the comparison between the RP group and the GT group, and the second line of each cell of ANOVA F shows the results of the comparison between the GT group and the screened students. * $p < .05$, ** $p < .01$, *** $p < .001$

Table 2*Change in coping skills through the CAMPUS program*

	Group		T1	T3		ANOVA F (partial η^2)		
						Time	Group	Interaction
Self-distraction	RP	M	5.27	5.42	]	0.02 (.00)	0.21 (.00)	1.85 (.02)
		(SD)	(1.20)	(1.18)				
	GT	M	5.53	5.35	]	2.87 (.04)	0.16 (.00)	0.70 (.01)
		(SD)	(1.36)	(1.27)				
	SC	M	5.85	5.31	]	0.26 (.00)	4.51 [*] (.04)	5.38 [*] (.04)
		(SD)	(1.41)	(1.49)				
Active coping	RP	M	5.09	5.44	]	0.82 (.01)	0.34 (.01)	3.72 (.05)
		(SD)	(1.17)	(1.19)				
	GT	M	5.72	5.50	]	0.66 (.01)	0.53 (.00)	1.49 (.01)
		(SD)	(0.98)	(1.06)				
	SC	M	5.46	6.08	]	0.45 (.01)	0.42 (.01)	0.45 (.01)
		(SD)	(1.76)	(1.19)				
Denial	RP	M	3.07	3.03	]	1.23 (.01)	0.57 (.01)	0.06 (.00)
		(SD)	(1.12)	(1.14)				
	GT	M	2.81	3.04	]	0.43 (.01)	7.45 ^{**} (.10)	0.06 (.00)
		(SD)	(0.97)	(1.24)				
	SC	M	3.07	3.03	]	0.04 (.00)	1.85 (.02)	0.35 (.00)
		(SD)	(1.12)	(1.14)				
Substance use	RP	M	3.09	2.99	]	0.38 (.01)	0.86 (.01)	0.02 (.00)
		(SD)	(1.29)	(1.22)				
	GT	M	2.98	2.82	]	1.88 (.02)	0.32 (.00)	1.06 (.01)
		(SD)	(1.16)	(1.11)				
	SC	M	3.92	3.85	]	2.21 (.03)	1.99 (.03)	0.02 (.00)
		(SD)	(1.66)	(2.15)				
Disengagement	RP	M	4.12	4.08	]	3.96 [*] (.03)	7.70 ^{**} (.06)	0.73 (.01)
		(SD)	(1.22)	(1.17)				
	GT	M	3.81	3.91	]	2.18 (.03)	0.05 (.00)	0.62 (.01)
		(SD)	(1.03)	(1.14)				
	SC	M	4.08	4.23	]	2.21 (.03)	1.99 (.03)	0.02 (.00)
		(SD)	(1.55)	(1.74)				
Venting	RP	M	4.67	4.72	]	1.88 (.02)	0.32 (.00)	1.06 (.01)
		(SD)	(1.59)	(1.29)				
	GT	M	4.67	4.98	]	2.21 (.03)	1.99 (.03)	0.02 (.00)
		(SD)	(1.48)	(1.39)				
	SC	M	5.15	5.54	]	2.21 (.03)	1.99 (.03)	0.02 (.00)
		(SD)	(1.52)	(1.13)				
Positive reframing	RP	M	4.71	5.12	]	3.96 [*] (.03)	7.70 ^{**} (.06)	0.73 (.01)
		(SD)	(1.48)	(1.40)				
	GT	M	5.42	5.58	]	2.18 (.03)	0.05 (.00)	0.62 (.01)
		(SD)	(1.38)	(1.30)				
	SC	M	5.15	5.69	]	2.18 (.03)	0.05 (.00)	0.62 (.01)
		(SD)	(1.41)	(1.18)				

Table 2*Change in coping skills through the CAMPUS program (continued)*

Group			T1	T3	ANOVA <i>F</i> (partial η^2)		
					Time	Group	Interaction
Self-blame	RP	<i>M</i>	4.91	4.43	1.51 (.01)	1.85 (.02)	6.31 * (.05)
		(<i>SD</i>)	(1.42)	(1.46)			
	GT	<i>M</i>	4.27	4.44	0.00 (.00)	13.36 (.17)	*** (.01)
		(<i>SD</i>)	(1.46)	(1.51)			
	SC	<i>M</i>	5.92	5.77	0.00 (.00)	13.36 (.17)	*** (.01)
		(<i>SD</i>)	(1.38)	(1.88)			
Planning	RP	<i>M</i>	5.49	5.72	1.36 (.01)	3.42 (.03)	0.23 (.00)
		(<i>SD</i>)	(1.26)	(1.23)			
	GT	<i>M</i>	5.89	5.98	1.70 (.03)	0.02 (.00)	0.85 (.01)
		(<i>SD</i>)	(1.19)	(1.22)			
	SC	<i>M</i>	5.62	6.15	1.70 (.03)	0.02 (.00)	0.85 (.01)
		(<i>SD</i>)	(2.10)	(1.57)			

Note. RP: Role-play group; GT: Gatekeeper Training group; SC: screened students; T1: before the CAMPUS program; T3: Three months after the CAMPUS program. The top line of each cell of ANOVA *F* shows the results of the comparison between the RP group and the GT group, and the second line of each cell of ANOVA *F* presents the results of the comparison between the GT group and the screened students. * $p < .05$, ** $p < .01$, *** $p < .001$

Figure 1

The procedure and details of the CAMPUS program and the thrice-administered questionnaires.

Figure 2*Participant Flow Chart from T1 to T3*

Note. T1 = before the program, T2 = after the program, T3 = three months after the end of the program.

Figure 3

Change in the Education Effect and Mental Health of RP group and GT group through CAMPUS program from T1 to T3

Note. Abscissae: from T1 (pre-training) to T3 (after 3 months of training). Ordinates = mean scores of each measure. Solid lines = scores of Role-play group. Broken lines = Gatekeeper Training group. Error bar = Standard Error. Double arrows = significant main effect. * $p < .05$, ** $p < .01$, *** $p < .001$.

Figure 4

Change in the Education Effect and Mental Health of GT group and screened students through CAMPUS program from T1 to T3

Note. Abscissae: from T1 (pre-training) to T3 (after 3 months of training). Ordinates = mean scores of each measure. Broken lines = Gatekeeper Training group. Gray dashed lines = scores of screened students. Error bar = Standard Error. Double arrows = significant main effect. * $p < .05$, ** $p < .01$, *** $p < .001$.

Figure 5

Change in the Coping Skills of the RP group and GT group through the CAMPUS program from T1 to T3

Note. Abscissae from T1 (pre-training) to T3 (three months after the training). Ordinates: mean scores of each measure. Solid lines = scores of Role-Play group. Broken lines = Gatekeeper Training group. Error bar = Standard error. Double arrows = significant main effect. * $p < .05$, ** $p < .01$, *** $p < .001$.

Figure 6

Change in the Coping Skills of the GT group and Screened Students through the CAMPUS program from T1 to T3

Note. Abscissae from T1 (pre-training) to T3 (three months after the training). Ordinates: mean scores of each measure. Broken lines = Gatekeeper Training group. Gray dashed lines = scores of screened students. Error bar = Standard error. Double arrows = significant main effect. * $p < .05$, ** $p < .01$, *** $p < .001$.