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# Connecting the world's Children through Communication



# Effects of the Letter Exchange Program on Mental Health in Japanese High School Students

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# CONNECTING THE WORLD'S CHILDREN THROUGH COMMUNICATION

Effects of the Letter Exchange Program on Mental Health in Japanese High School Students

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#### 1. BACKGROUND

#### **Children and Youths Problems in the World**

Children and youths in developing countries are involved in poverty, conflicts, child labor, and other adversities in life. On the contrary, mental health problems are uprising in developed countries despite of comfortable living conditions. Among Japanese children, especially youths, there is depression, low self-esteem or apathy as general mental health problems.

➤ We considered Japanese youth should recognize global problems, take action, and their mental health might be improved.

# <u>Cultural Exchange Program Improve Mental</u> <u>Health and Global Friendship?</u>

Some Japanese pedagogical reports imply cultural exchange or international understanding programs influence on youths' mental health and global friendship. For example, Some empirical reports suggest that the program effects self-esteem (Morotomi, 1999). And various programs that aim to create global friendship have been provided in Japanese schools and communities.

➤ However, evidence of program effects is not available in Japan.

### **Limitations of the Current Program**

Current programs usually cost high traveling expenses, which seam to lead some limitations.

- •Only few students in the school are allowed to participate in the program.
- •Several students communicate with one overseas student/teacher.
- •Thus communication is not deeper, sometimes simply for entertainment.
- New program which will costs lower and involve more youths in more closer communication is required.



#### 2. BREAKTHROUGH

#### the Letter Exchange Program

To develop a new program, we had the idea of "the letter exchange program."

Letters have a lot of benefits as follows.

- •The handmade message enables real and closer communication.
- •letters are inexpensive and anyone join in it.
- •letters remain longer and recipients would remember the friendship longer.
- The letter exchange program should be more inexpensive, closer communication, easier to be spread out.

# Current Programs

- ✓ Surface communication sometimes like entertainment
- √ Few participants is included
- ✓ Not one-on-one basis
- ✓ Expensive

#### The Letter Exchange Program

- ✓ Closer communication
- ✓ More participants can be included
- ✓ One-on-one basis
- ✓ Inexpensive

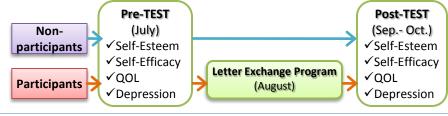
#### 3. OBJECTIVE

The purpose of this study is to evaluate effects of the Letter Exchange Program on mental health in Japanese youths, through standardized scales and statistical analysis.

# 4. METHOD to EVALUATION

#### **Design and Procedure**

The intervention study design was adapted, both participants and non-participants completed the pre- and post-tests.



# **Subjects**

We sent letters to more than 90 high schools in Sapporo and its environs to recruit program participants, and visited 14 high schools to obtain non-participants as the control group. 29 high school students (5 boys and 24 girls, mean age=16.65, SD=1.07) took part in the program, and 218 students from 3 high schools (96 boys and 123 girls, mean age=16.74, SD=0.67) were included in the control group as non-participants.

Evaluation subjects were 22 participants (5 boys and 17 girls, mean age=16.68, SD=1.09) who answered to both pre- and post-questionnaire (Response rate=75.86%). And 22 non-participants (5 boys and 17 girls, mean age=16.91, SD=0.75) were selected in stratified random sampling matched with gender, as well as how degree a non-participants wants to join in the program.

**Exclude criteria:** Subjects who didn't complete either pre- or post- tests, gave up answering halfway were excluded from the analysis.

# **Measurements**

Mental health were assessed by standardized psychological or psychiatric scales.

**Self-esteem**: Rosenberg's Self-Esteem Scale (Yamamoto et.al, 1982) **Self-efficacy**: General Self-Efficacy Scale (GSES) (Sakano & Tojo, 1986)

**QOL (Quality Of Life)**: WHO/QOL-26 (Tazaki & Nakane, 1997) **Depression**: Self-Rating Depression Scale (SDS)

# PROGRAM in JAPAN

#### Aim

The letter exchange program was designed...

- (1)Participants will exchange their lifestyles and problems, and be aware of their own worth beyond countries.
  - → to raise the Self-Esteem and QOL, reduce the Depression.
- (2)Participants will have the belief that they are capable of helping each other beyond countries.
  - → to inspire the Self-Efficacy.
- (3)Participants will actually take action for their surroundings or friends in this world.
  - → to encourage to take action.

#### **Program Steps**

- (1)Lecture on children and youths problems in the world.(2)Activities to reflect lifestyle, values and problems of
- participants.
- (3) The letter exchange in which participants exchange their lifestyle, values and problems, and make friendship.
- (4) Volunteers took Japanese letters to partnership countries and brought replies back to Japan.
- (5) Discussion and presentation what they learned from exchanging lifestyle, values and problems, and also what they can do for global children and youths problems.

#### Partner of the Letter Exchange

- •Cambodian youth who belong to Cambodia NGO School.
- •Indian youth who dropped out of Child Labor and live in rehabilitation center.

#### ✓ Reason for partnerships:

Cambodia is rebuilding from the conflict, India has the problems of Child Labor and Street Youth. These problems are not found in Japan but we hope Japanese youths will recognize and grapple with them, as well as reflect their lifestyle through letter exchange with youths in these two countries.

◆ The letter Exchange Program was performed in cooperation with JICA Sapporo, Japan Committee for UNICEF Hokkaido Area Committee, Sapporo UNESCO Association.

Day 1.



(1)Lecture



Day 2, 3.

(4)Receive the reply



(2)Activity



(5)Discussion



(3)Send the letter



(5)Presentation

#### 5. RESULTS

# **Baseline Comparison between Participants and Non-participants**

Non paired t-test was conducted between participants and nonparticipants in the pre-test, no significant differences were detected. They had almost the same score in baseline.

# **Effects of the Letter Exchange Program on Mental Health**

➤ No score change in non-participants

As a result of a paired t-test, non-participants did not indicate any score change between pre- and post-test (Table1).

#### ➤ Score change in participants

After the letter exchange program, participants' QOL sub-score [environment] (t=-3.50, p<.01) and [whole QOL] (t=-3.32, p<.01), Self-Efficacy sub-score [Competence](t=-2.89, p<.01) were increased (Table 1, Figure 1).

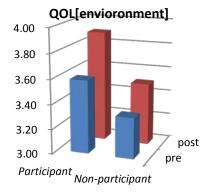
- ✓ Environment: the satisfaction with one's living environment.
- ✓ Competence: the belief of capability to contribute to the world.

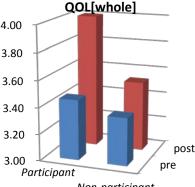
Table1 Effects of the Letter Exchange Program on Mental Health

	Participants			Non-participants		
	Pre	Post		Pre	Post	
	Mean ± SD	Mean ± SD	р	Mean ± SD	Mean ± SD p	
QOL	$3.55 \pm 0.40$	$3.67 \pm 0.54$	0.14	$3.37 \pm 0.53$	$3.54 \pm 0.68 \ 0.12$	
physical	$3.62 \pm 0.60$	$3.56 \pm 0.55$	0.61	$3.38 \pm 0.48$	$3.52 \pm 0.62 \ 0.25$	
mental	$3.39 \pm 0.44$	$3.48 \pm 0.67$	0.44	$3.35 \pm 0.66$	$3.48 \pm 0.71 \ 0.32$	
social	$3.59 \pm 0.51$	$3.71 \pm 0.77$	0.42	$3.53 \pm 0.61$	$3.74 \pm 0.67 0.19$	
environment	$3.59 \pm 0.46$	$3.90 \pm 0.50$	0.002 **	$3.33 \pm 0.65$	$3.50 \pm 0.78 \ 0.17$	
whole	$3.45 \pm 0.44$	$4.00 \pm 0.72$	0.003 **	$3.36 \pm 0.65$	$3.52 \pm 0.89 \ 0.25$	
Depression	41.91 ± 5.84	$40.82 \pm 6.15$	0.27	$42.00 \pm 7.20$	41.09 ± 7.16 0.48	
Self-Efficacy	$6.73 \pm 3.76$	$7.55 \pm 3.65$	0.08	$7.45 \pm 3.71$	$8.09 \pm 3.70 \ 0.35$	
initiative	$3.14 \pm 2.14$	$3.32 \pm 1.91$	0.54	$3.73 \pm 2.23$	$4.09 \pm 2.04 0.35$	
anxiety	$1.64 \pm 1.40$	$1.82 \pm 1.56$	0.54	$2.14 \pm 1.64$	$2.27 \pm 1.75 0.68$	
competence	1.95 ± 1.43	$2.41 \pm 1.22$	0.009 **	$1.59 \pm 1.22$	$1.73 \pm 1.32 \ 0.27$	
Self-Esteem	31.36 ± 8.17	$31.68 \pm 7.20$	0.67	$29.09 \pm 7.35$	31.82 ± 7.01 0.13	

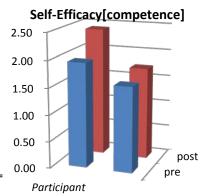
<sup>+</sup>N of QOL[whole] in Non-participants= 24, +Significant differences; p<.01\*\*

Fig1 Significant differences of Participants' pre- & post-test





Non-participant



Non-participant

#### 6. DISCUSSION

#### √ Summary and Strengths

We have created the Letter Exchange Program as a new cultural exchange program in order to provide an cheaper, closer and easier communication. We also evaluated its effects, this is the first time statistical evaluation conducted on a cultural exchange program in Japan.

We found the letter exchange program contributed to Japanese youths' mental health and global friendship. The feeling of Quality-Of-Life, the satisfaction with living environment and the belief "I can contribute to the world" were remarkably increased in participants.

Descriptions in the poster presentation in this program also indicate global friendship, namely "We are friends", "If we live in different countries, our important things are not different".

#### ✓ Limitation

There are some limitations in this study. Especially, we did not studied subjects in partnership countries although we provided the similar program in Cambodia and India. For future study, subjects in partnership countries should be included.



presentation