The Effectiveness of a Program Designed to Enhance the Self-Esteem of Female Adolescents of the Rajavithi Home for Girls, Bangkok, Thailand

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Objective: To study the effectiveness of group activities designed to enhance the self-esteem of female adolescents aged 12-18 years old of the Rajvithi Home for Girls, Bangkok, (experimental group) and the Saraburi Home for Girls, Saraburi, (comparison group).

Material and Method: This was quasi-experimental research. Each group was comprised of 36 adolescents. The experimental group participated in numerous activities designed to improve their self-esteem. The activities were conducted over 4 sessions of 2-3 hours duration per session. The self-esteem assessments were conducted before, immediately after the intervention, and 4 weeks henceforth, using the Coopersmith Self-Esteem Inventory School Form (CSEI).

Results: Prior to the intervention, neither group showed any difference in its general characteristics including its self-esteem mean scores. Immediately after the intervention and, 4 weeks later, the experimental group had significantly higher self-esteem mean scores than they had prior to intervention (p < 0.001). However, the comparison group showed no difference in self-esteem mean scores at both time periods of the post intervention period (p > 0.05). It was also found that the experimental group's self-esteem mean scores were significantly higher than the comparison group's, (p < 0.05) both immediately after the intervention as well as 4 weeks henceforth. The self-esteem mean score at the 4 week post intervention stage remained higher than it was after the intervention, even though there was slight decrease with significant difference (p < 0.001).

Conclusion: The research results indicate that the self-esteem level among adolescents could be developed, especially amongst those adolescents in foster homes. Thus related organizations should conduct self-esteem enhancing activities for adolescents in order to strengthen necessary life skills including spiritual health, which are the prerequisites for success in later life.

Keywords: Self-esteem, Adolescent, Rajavithi Home for girls, Group activity

Adolescence is the period of transition from childhood to adulthood. It is also an age of ideal seeking and getting into trouble, concomitant with adaptation to ones socio-economic environment(1). An adolescent who resides in a broken home, is an orphan, has a poor family relationship, or a poor social position will have low self-esteem(2). Most children in foster homes are from child groups who faced social problems: they have no guardians, are from broken families, do not receive adequate care from their parents, reside in broken homes and/or may have parents who are in jail or welfare institutes, etc(3,4). The parenting skills of both mothers and fathers is related...
to the self-esteem of adolescent children through parental involvement, quality relationships, and parent availability\(^{(5)}\). Thus, the children of foster home usually lack parental attachment, positive interpersonal relationship and have low self-esteem. Although these children get adequate professional care from the institute, the officers are not able to provide them with their psychological needs, such as the love and understanding children would normally receive from their parents. In such an environment then, such children are at higher risk of developing low self-esteem than other children\(^{(6)}\).

Self-esteem is an important factor in adolescent emotional, educational and overall social adjustment\(^{(7)}\). Adolescents who have low self esteem and lack confidence may think that they are inferior. They may also feel isolated, depressed or anxious. Such adolescents tend to harm themselves, and are not able to construct positive relationships with others. They also often come under the influence of and compliant with, the demands of others. Some adolescents will develop behavioral problems, such as substance abuse, criminality or delinquency\(^{(8)}\), and may also engage in sexually risky behavior which may result in unwanted pregnancies and abortion\(^{(9)}\). Therefore, adolescents in foster home should engage in self esteem enhancing programs in order to prevent the rising of such negative behaviors.

Previous studies involving adolescents in foster homes were mostly done as cross sectional studies to find the factors associated with unpleasant adolescent behavior. Some studies of interventions showed improved but unsustainable outcomes. However, this study showed a program that could enhance adolescents’ self esteem for a sustainable period of time as long as the adolescents continue performing the activities they had learned.

**Material and Method**

This research used a quasi-experimental research design using a pretest-posttest control group to study the effectiveness of group activities in enhancing the self esteem of female adolescents in the Rajvithi Home for Girls (as the experimental group) and the Saraburi Home for Girls (as the comparison group), no mental retardation, no medical record of psychosis or depression, were literate, had never participated in a self esteem enhancing group activity, were willing to participate in this experiment, scored less than 15 on the Thai General Health questionnaire and scored 4 or less on the lie scale of the self esteem assessment questionnaire\(^{(10)}\). A high GHQ score meant a proactivity mental illness. Mental ill adolescents can not successfully participate in group activities, They are also more likely to have lower self-esteem than the adolescents who had lower scores. If they have very low self esteem due to mental illness, they had to be individually treated instead of including a group activity. The Schlessman’ s formula was applied. The number in \(\mu_0\) and \(\mu_1\) was replaced by the number of the self esteem mean score of the participant as in a previous study by Upsornsiri Eampracha\(^{(11)}\).

\[
\begin{align*}
\alpha &= 0.05  \\
Z_\alpha &= \text{Type I error at } 0.05 = 1.645  \\
\beta &= 0.10  \\
Z_\beta &= \text{Type II error at } 0.10 = 1.282  \\
\sigma^2 &= \text{variances of the previous study} = 5.65  \\
\mu_0 &= \text{mean score of the self -esteem of the comparison groups} = 30.68  \\
\mu_1 &= \text{mean score of the self -esteem of the experimental groups} = 34.97  \\
\end{align*}
\]

\[
\begin{align*}
22 &+ 22 \\
\frac{Z_\alpha + Z_\beta}{2\sigma^2} \frac{(\mu_1 - \mu_0)^2}{\sigma^2} &+ 22 \\
\frac{(34.97 - 30.68)}{2(5.65)^2} &+ 22 \\
22 &+ 22 \\
\end{align*}
\]

Adding 20% for each group, there were then 36 adolescents in each of the two groups. The ethics in human research approval was done via The Mahidol University Institutional Review Board (MU-IRB) No. 159/2005.

The research instrument consisted of two parts: instrument for the data collection and intervention instrument. The questionnaire included socio-demographic characteristics, self-esteem questionnaire and Thai General Health Questionnaire (Thai GHQ-30). The self-esteem questionnaire was comprised of 52 items in 5 self esteem subscale which were general self subscale, social self-peers subscale, home-parent subscale, school-academic subscale and a lie subscale. Yes or no answer were required. A positive item tallied 1 point if the participant answer “yes” and a negative item tallied 1 point if the participant answer “no. The lie
subscale, comprised of 8 items, was excluded from sum score. If the score of the lie subscale was over 4, this was an indication that the participant did not response honestly. The total score ranged from 0-44 points. The higher the score, the higher the participants’ self-esteem. The reliability of the self esteem questionnaire was 0.90. The Thai GHQ-30 which was comprised of 30 items, including 4 mental problems which were unhappiness, anxiety, social impairment and hypochondriasis. There were 4 choices in each item. The score was 0-0-1-1 which meant that if the participants selected one of the last 2 choices, they would get 1 point. A total score of 4 or more showed a mental problem. The higher the total score, the higher the mental problem. The reliability of the Thai GHQ-30 was 0.80-0.94.

The intervention instrument was the group activities in enhancing self-esteem which were based on Coopersmith’s idea, comprised of 5 instructions:

1. Enhancing self-acknowledgement including acceptance of mistakes, failure and criticisms.
2. Enhancing group participation in decision-making and problem-solving skills.
3. Enhancing the behavior of expression.
4. Enhancing the concept of goal setting, expectations and the feedback of successful experiences.
5. Enhancing positive reinforcement by oneself and one peer group.

The program consisted of 11 activities as follows: Who am I?, Life stupa, Problem-solving skills, Your picture, My goal in life, Experiences of which I am proud, I am my best friend, Positive support, Meditation to reinforce mind power, My heart for you and Smile record. Data Collections were collected as follows:

1. Using a Thai GHQ-30, a socio-demographic questionnaire and a self esteem assessment questionnaire were used to screen the girls of both groups. A sample was then selected according to the inclusion criteria of both groups which also included comparable demographic characteristics. This data was then collected for the pretest.
2. The experimental group activities were conducted over 4 sessions of 2-3 hours per session.
3. The self-esteem level of every participant of both groups, was ascertained through the use of the self esteem questionnaire after the completion of the intervention.
4. Step 3 was repeated 4 weeks later.

Data was analyzed by using frequency distribution, percentage, mean, standard deviation, a Chi-square test, an independent sample t-test and a paired t-test.

**Results**

**General data**

Adolescents in the experimental and the comparison groups had initial mean ages of 13.7 and 14.5 years, respectively. All of the adolescents were Buddhists. Participants of both groups were mostly studying at Primary and Secondary school levels. The grade point average in the experimental and the comparison groups were 2.88 and 2.65 respectively. They had also lived for 6.14 and 5.08 years in the foster home, respectively (Table 1). The special abilities of both groups were mostly in sports, but also in chorus singing, drawing and cheer leading, etc. The most important people to them were fathers and mothers. When the adolescents of the experimental group had problems or were anxious, they would consult with guardians and officers of the foster home and, then
their friends. On the other hand, most adolescents of the comparison group would consult their friends rather than the guardians or officers of their foster home. Prior to the intervention, the Thai GHQ-30 mean scores of the adolescents in the experimental and the comparison groups had the initial mean scores of 5.28 and 5.89, respectively. However, after testing, no statistical difference was found (p = 0.547).

**The research hypothesis testing**

1) This testing compared the self-esteem mean scores of the participants of the experimental and the comparison groups before, immediately after the intervention, as well as 4 weeks henceforth as shown in Table 3.

Before the intervention, the experimental and the comparison groups had the initial self-esteem mean scores of 25.22 and 25.72, respectively. However, after testing, no statistical difference in the self-esteem mean scores between the two groups was found (p = 0.702).

<table>
<thead>
<tr>
<th>Table 2. Comparison of the average grade point between the experimental group and the comparison group</th>
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<tbody>
<tr>
<td>Average grade point</td>
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<tr>
<td>Experimental group (n = 24)</td>
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<tr>
<td>Comparison group (n = 20)</td>
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<tr>
<td>t = 1.318 df = 42 p = 0.195</td>
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</tbody>
</table>

2) This compared the self esteem mean scores of the two groups before, and immediately after the intervention as well as 4 weeks henceforth as shown in Table 4.

**The experimental group**

Immediately after the intervention, the self-esteem mean score of the experimental group was higher than that of the comparison group’s at 32.53 and 26.03, respectively. After testing, the mean score of the experimental group was significantly statistically higher that of the comparison group (p < 0.001).

Four weeks after the intervention, the experimental group self-esteem mean score was higher than that of the comparison group at 29.14 and 25.36, respectively. After testing, there was a statistically significantly higher self-esteem mean score for the experimental group than for the comparison group (p=0.003).

<table>
<thead>
<tr>
<th>Table 3. Comparison of the self-esteem mean scores between the experimental group and the comparison group before, immediately after the intervention, and 4 weeks henceforth</th>
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<tbody>
<tr>
<td>Comparison of self-esteem mean scores</td>
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<tr>
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<tr>
<td><strong>Before the intervention</strong></td>
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<tr>
<td>Experimental group</td>
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<tr>
<td>Comparison group</td>
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<tr>
<td><strong>Immediately after the intervention</strong></td>
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<tr>
<td>Experimental group</td>
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<tr>
<td>Comparison group</td>
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<tr>
<td><strong>4 weeks after the intervention</strong></td>
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<tr>
<td>Experimental group</td>
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<tr>
<td>Comparison group</td>
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</tbody>
</table>

* Statistical significance < 0.05
** Equal variances not assumed
Comparison of the self-esteem mean scores within the experimental group and the comparison group before, immediately after the intervention, and 4 weeks henceforth

<table>
<thead>
<tr>
<th>Comparison self-esteem mean scores</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>t</th>
<th>df</th>
<th>p-value</th>
<th>Mean difference</th>
<th>95% CI of the difference</th>
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<tbody>
<tr>
<td><strong>Experimental group</strong></td>
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<tr>
<td>Before the intervention</td>
<td>36</td>
<td>25.22</td>
<td>5.06</td>
<td>11.18</td>
<td>35</td>
<td>&lt;0.001*</td>
<td>7.31</td>
<td>5.98 - 8.63</td>
</tr>
<tr>
<td>Immediately after the intervention</td>
<td>36</td>
<td>32.53</td>
<td>4.56</td>
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<tr>
<td><strong>Experimental group</strong></td>
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<tr>
<td>Before the intervention</td>
<td>36</td>
<td>25.22</td>
<td>5.06</td>
<td>7.96</td>
<td>35</td>
<td>&lt;0.001*</td>
<td>3.92</td>
<td>2.92 - 4.92</td>
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<tr>
<td>4 weeks after the intervention</td>
<td>36</td>
<td>29.14</td>
<td>4.56</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>Comparison group</strong></td>
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<tr>
<td>Before the intervention</td>
<td>36</td>
<td>25.72</td>
<td>5.97</td>
<td>0.29</td>
<td>35</td>
<td>0.387</td>
<td>0.31</td>
<td>-1.83 - 2.44</td>
</tr>
<tr>
<td>Immediately after the intervention</td>
<td>36</td>
<td>26.03</td>
<td>7.30</td>
<td></td>
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<tr>
<td><strong>Comparison group</strong></td>
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</tr>
<tr>
<td>Before the intervention</td>
<td>36</td>
<td>25.72</td>
<td>5.97</td>
<td>-0.40</td>
<td>35</td>
<td>0.344</td>
<td>-0.36</td>
<td>-2.17 - 1.45</td>
</tr>
<tr>
<td>4 weeks after the intervention</td>
<td>36</td>
<td>25.36</td>
<td>6.29</td>
<td></td>
<td></td>
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</tbody>
</table>

* Statistical significance < 0.05

<table>
<thead>
<tr>
<th><strong>Table 5.</strong> Comparison of the self-esteem mean scores of the experimental group immediately after the intervention, and 4 weeks henceforth</th>
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<tbody>
<tr>
<td>Comparison of self-esteem mean scores</td>
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<tr>
<td>---------------------------------------</td>
</tr>
<tr>
<td>Immediately after the intervention</td>
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<tr>
<td>4 weeks after the intervention</td>
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</tbody>
</table>

* Statistical significance < 0.05

that four weeks after the intervention, the experimental group had sustained this statistically significantly higher self-esteem mean score (p < 0.001).

**The comparison group**

Immediately after the intervention, the comparison group had an initial self esteem mean score comparable to the pre intervention score (26.03 and 25.72, respectively). After testing, the statistical difference of the pre intervention and post intervention self-esteem mean score was found to be insignificant (p = 0.387).

Four weeks after the intervention, the comparison group had an initial self esteem mean score closer to its pre intervention score (25.36 and 25.72, respectively). After testing, the statistical difference between the pre intervention and post four weeks intervention self-esteem mean score was found to be insignificant (p = 0.344).

3) This compared the self -esteem mean scores of the experimental group immediately after the intervention and 4 weeks henceforth as shown in Table 5. The self-esteem mean score was slightly lower four weeks after the intervention, compared to immediately after the intervention (29.14 and 32.53, respectively). After testing, the statistics showed that four weeks after the intervention, the participants of the experimental group had a statistically significant lower self-esteem mean score than it had immediately after the intervention (p ≤ 0.001).

**Discussion**

Before the intervention, adolescents of both the experimental and comparison groups showed no
statistical difference in their self-esteem mean scores. This is perhaps due to the sampling technique of the frequency matching principle of both groups. In addition, both groups had similar general characteristic and lived in similar environments. Notably, none of the participants had ever received any formal training in either self-esteem enhancement techniques or provision of co-intervention techniques. Therefore, the results of the self-esteem mean scores of both groups showed no statistical difference or bias in either the experiments measurement method or in its results.

The characteristics, pattern of behavior, and the attitudes and the feelings of each person were initially unique and constant. However, these characteristics may have improved during the course of the experiment either because of the learning process or a positive reinforcement had catalyzed a positive change in an adolescent’s behavior or opinion\(^{(12)}\). The group activities used to enhance self-esteem were developed based on the 5 principles of self-esteem enhancement which were group learning, self capability, self acceptance, self-esteem, and a recognition of mistakes, failures and criticisms. Moreover, the group activities led each participant to learn about the thinking process, decision making, problem solving, self expression, goal setting, appropriate expectations, successful experiences, revision and, positive reinforcement both by oneself and by others, all of which was relevant to the adolescents development\(^{(13)}\). Consequently, the experimental group participants experienced a renewed recognition of their capabilities which caused a significant positive change in their behavior\(^{(14)}\). Therefore, immediately after the intervention, adolescents in the experimental group had a higher self-esteem mean score than they had prior to the intervention. However, since the members of the comparison group did not participate in the self-esteem enhancement group activities, their self-esteem mean scores remained unchanged. Consequently, they did not experience the significant positive changes we have seen in the experimental group participants\(^{(12)}\).

In addition, if the activities developed by the researcher were applied and practiced in daily life, the higher adolescents self-esteem would be sustained. When the researcher repeated the evaluation 4 weeks after the intervention, it was found that adolescents in the experimental group were still participating in the activities despite having received no further instruction. The researcher only emphasized how important and useful those activities were, and also suggested that further benefits could be gained from continued practice. It was subsequently shown that these adolescents voluntarily continued these activities, and as a results continued to receive the ongoing benefits of these activities. As a result, 4 weeks after the intervention, the self-esteem mean score remained higher than their pre-intervention score, even though there was a slight decrease immediately after the intervention.

**Limitation and suggestion for the future research**

This research is limited in its scope to effectively measure self-esteem level over on extended period of time. For future research, it should be added that follow-up evaluations at 3 month and 6 months, post intervention, is recommended in order to measure the sustainability of the intervention group activities. Should the self-esteem level be found to be decreasing, the group activities should be used again to booster the adolescents self-esteem

**References**

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ผลของการโปรแกรมส่งเสริมความรู้สึกมีคุณค่าในตนเองของวัยรุ่นในสถานสงเคราะห์เด็กหญิงบ้านราชวิถี

สุพร อภินันทเวช, ทวีพร พาณิชยพงศ์, พนุชนี ช่วยทอง, จรวยพร สุภาพ, เยาวลักษณ์ เสินวิวัฒนกุล

วัตถุประสงค์: เพื่อดำเนินผลของการจัดกิจกรรมกลุ่มส่งเสริมความรู้สึกมีคุณค่าในตนเองในวัยรุ่นอายุ 12-18 ปี

วิสัยและวิธีการ: การวิจัยนี้เป็นการวิจัยทดลอง เพื่อดำเนินผลของการจัดกิจกรรมกลุ่มส่งเสริมความรู้สึกมีคุณค่าในตนเองของวัยรุ่นอายุ 12-18 ปีที่พักอาศัยอยู่ในสถานสงเคราะห์เด็กหญิงบ้านราชวิถี (กลุ่มทดลอง) และวัยรุ่นที่พักอาศัยอยู่ในสถานสงเคราะห์เด็กหญิงจังหวัดระช有的 (กลุ่มเปรียบเทียบ) จำนวนกลุ่มละ 36 คน โดยกลุ่มทดลองจะได้รับกิจกรรมกลุ่มส่งเสริมความรู้สึกมีคุณค่าในตนเอง 4 ครั้ง ครั้งละ 2-3 ชั่วโมง ทำการประเมินผลความรู้สึกมีคุณค่าในตนเอง ก่อนการทดลอง หลังจากสิ้นสุดการทดลองทันที และอีก 4 สัปดาห์ต่อมา โดยใช้แบบวัดความรู้สึกมีคุณค่าในตนเองของคูเปอร์สมิธ (Coopersmith Self-Esteem Inventory School Form: CSEI) วิเคราะห์ข้อมูลโดยใช้วิธีการจงใจแจงความถี่ ร้อยละ ค่าเฉลี่ย ค่าเบี่ยงเบนมาตรฐาน Chi-square test, Independent Samples t-test และ Paired t-test

ผลการศึกษา: พบว่า กลุ่มทดลองรับการทดลอง 2 กลุ่ม มีลักษณะทั่วไป และคะแนนเฉลี่ยความรู้สึกมีคุณค่าในตนเองในแต่ละกลุ่ม หลังจากสิ้นสุดการทดลองทันที และอีก 4 สัปดาห์ต่อมา กลุ่มทดลองมีคะแนนเฉลี่ยความรู้สึกมีคุณค่าในตนเองที่สูงกว่ากลุ่มเปรียบเทียบ (p < 0.001) แต่ในกลุ่มเปรียบเทียบพบว่าคะแนนเฉลี่ยความรู้สึกมีคุณค่าในตนเองทั้งสองระยะไม่แตกต่างกันทางสถิติ (p > 0.05) และเมื่อเปรียบเทียบคะแนนเฉลี่ยความรู้สึกมีคุณค่าในตนเองระหว่าง 2 กลุ่ม หลังจากสิ้นสุดการทดลองทันที และอีก 4 สัปดาห์ต่อมา พบว่าคะแนนเฉลี่ยความรู้สึกมีคุณค่าในตนเองของกลุ่มทดลองสูงกว่ากลุ่มเปรียบเทียบอย่างมีนัยสำคัญทางสถิติ (p < 0.005) แต่คะแนนเฉลี่ยความรู้สึกมีคุณค่าในตนเองที่ 4 สัปดาห์หลังจากสิ้นสุดการทดลองทันที แม้ว่าจะมีคะแนนเฉลี่ยลดลงเล็กน้อยและมีนัยสำคัญทางสถิติ (p < 0.001)

สรุป: จากผลการวิจัยแสดงว่า การจัดกิจกรรมกลุ่มส่งเสริมความรู้สึกมีคุณค่าในตนเอง สามารถส่งเสริมความรู้สึกมีคุณค่าในตนเองของวัยรุ่นได้ ดังนั้นนโยบายที่มีส่วนเกี่ยวข้องกับเด็กและเยาวชนควรจะมีการกระจาย และจัดกิจกรรมกลุ่มเพื่อช่วยส่งเสริมความรู้สึกมีคุณค่าในตนเองให้แก่เด็กและเยาวชนกลุ่มนั้น ๆ ทั้งนี้เพื่อให้เด็กและเยาวชนเกิดความรู้สึกมีคุณค่าในตนเอง มีทักษะชีวิต มีความแข็งแรงทางจิตใจ ซึ่งจะพัฒนาความสามารถในการจัดการกับสถานการณ์ที่ต่าง ๆ ได้ และสามารถดำเนินชีวิตอยู่ในสังคมตามที่ตนเองปรารถนา