A Factor Analysis and Enhancement of Adolescent Students' Autonomy Through Group Counseling*

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The objectives of this study were to analyze adolescent autonomy components, to reassemble group counseling programs and to compare group counseling effectiveness in enhancing the students' autonomy. The samples were 1,114 grade 1 - 3 Thai adolescent students selected for the autonomy component study. Subsequently, eight students as an experimental group and eight students as a control group were randomly selected from 24 Sansai Wittayakom School students with total autonomy scores at 25th percentile and lower. A Confirmatory Factor Analysis verified that the autonomy functioning model was consistent with the empirical data and characterized into seven high loading factors (p < .05); namely, self-efficacy, self-regulation, self-reliance, selfconfidence, self-responsibility, self-assertiveness and self-evaluation. Each factor covered four areas: academic performance, personal care, peer relationship and parental/guardian connectedness. A three- stage group counseling, the initial stage, the transition and working stage, and the final stage, was constructed by integrating counseling theories and techniques to enhance the students' autonomy. Statistically significant differences (p < .05) in the total and each autonomy component of the experimental group existed before, after counseling and after the follow up period. Moreover, statistically significant differences (p < .05) in the total and each autonomy component between the experimental group and the control group existed before, after counseling and after the follow up period.

Keywords: Autonomy Adolescence Group Counseling.

Introduction

Autonomy is a psychological concept illustrating adolescents' efficient daily functioning which leads to their well-being. However, Thai adolescents, particularly, are still facing challenging and difficult situations that may induce delinquent behaviors being a major concern of authorities (Office of National Economic and Social Development Board. 2006). According to the Ministry of Public Health (2011), the lack of strict regulations, for instance, on entertainment venues in several area, Thai young adolescents were able to enter the places without supervision which often led them to experiment things such as drugs and sex. Consequently, Thai

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adolescents, as young as 13 years have been diagnosed with sexually transmitted diseases. Therefore, Thai young adolescents should be nurtured and trained to be able to live and regulate their own life more efficiently as autonomous persons.

Grolnick and Ryan (1987) pointed out that autonomy is a characteristic fostering an individual's life regulation which leads to greater conceptual learning. Moreover, autonomy support was associated with more intrinsic motivation, less pressure and tension, more creativity, more cognitive flexibility, higher self-esteem, greater persistence of behavior change, and better physical and psychological health (Deci & Ryan, 1987). Additionally, Grolnick and Ryan also found that parental autonomy support was positively related to children's self-regulation, competence, adjustment, and academic achievement. Ekstrom (2005) concluded that an autonomy promotion enhances more self-direction to one's life, greater life satisfaction, and lesser inner tension, external forces and unconscious drives. Consequently, the person can live without confusion over what to do, and alienation from certain of one's decisions and actions.

According to Russel and Bakken (2002), one of the most important adolescent tasks is autonomy which refers to adolescents' ability to think, feel and act on their own by developing the sense of self-governance, self-reliance, responsibility, independence, conformity and decision-making. Though adolescence is viewed as a time of 'storm and stress'; the period of 'calm and joy' is also addressed to manifest an autonomy which was operationally defined as an attempt to illustrate an individual's ability to rule one's self. Accordingly, a model was proposed with the following major components of individual's autonomous functioning: self-regulation, self-reliance, self-efficacy, self-responsibility, self-confidence and self-evaluation are major components (Beckert, 2005). Noom, Dekovic, and Meeus (2001) analyzed differential conceptual theoretical perspectives resulting in an integrative autonomous model. That is, autonomy comprises choosing and defining a goal, feeling confident about one's own choices and goals, and developing a strategy to achieve these goals.

In a counseling context, Corey (2004) defined autonomy as a capacity fostering individuals inherently towards self-regulation and self-determination and away from being controlled with awareness, spontaneity, and capacity for intimacy. In achieving autonomy, people have capacity to

make decisions, thereby empowering themselves and altering the course of their lives. In terms of enhancing an adolescents' autonomy, Delaware Department of Education (2002) proposed four adolescent development dimensions; comprising academic performance, personal care, peer relationship and parental/guardian connectedness. Moreover, Noom (1999) also indicated that adolescent autonomy development concerns individual and social factors.

According to a pilot study in the context of Thai adolescence by employing an in-depth interview (n = 12) and open-ended questionnaires (n = 452), the researcher concluded that Thai adolescents' autonomy characteristics were composed of six components: self-reliance, self-regulation, self-responsibility, self-confidence, self-assertiveness, and self-evaluation. By integrating and synthesizing those adolescent autonomy concepts and models with the pilot study's results, the researcher has developed an adolescent autonomy conceptual framework. Consequently, a Thai adolescent autonomy model has been proposed. The autonomy functioning model could be characterized into seven factors; namely, self-efficacy, self-regulation, self-reliance, self-confidence, self-responsibility, self-assertiveness and self-evaluation. Moreover, each factor covered four indicators as follows: academic performance, personal care, peer relationship and parental/guardian connectedness.

According to Milne (2003) counseling helps people clarify what is important to them, get in touch with their inner resources, explore feelings, thoughts and meanings to their life, and offer support during developmental, transitional periods and at times of crisis. Therefore, counseling is a means to help people resolve problems or live their lives in a more insightful and fulfilling way. Most counseling theories share a common goal in enhancing individuals' autonomy (Kirdpitak, 2002). Whereas Ryan (1991) noted that autonomy is a fundamental principle of developing human beings, a criterion for mental health, and a major objective of counseling or psychotherapy. In addition, autonomy should not be thought of in terms of an essentially individualistic journey towards an abstract and determinate rationality, but as a process involving other people in whom reasons are demanded and given in dialectic. And if autonomy means having a degree of control over our lives, then we have to help each other understand the ways in which power is taken from us and exercised over us (Smith, 1998).

The related research in autonomy and the evidences of group counseling in effectively developing individuals' autonomy components can be proved, both locally and abroad, in the following studies. Panapithakkul (1996) found significantly positive correlations of autonomy, social adjustment, mental health, and physical health of pre-adolescent students in Bangkok ghetto. Whereas, a study of Noom et al. (2001) employed a confirmatory factor analysis to verify Dutch adolescents' autonomy model which consisted of three latent constructs: attitudinal, emotional, and functional autonomy and the autonomy scale consisted of three observed constructs: perceptions of goals, locus of control and coping. The results yielded a consistent model with the empirical data. The researchers concluded that adolescent autonomy model comprised 3 dimensions: attitudinal autonomy, emotional autonomy and functional autonomy.

Dworkin and Lee (2005) found that the increase in autonomy of adolescents was accompanied by maintaining close relations with parents. While independence increased across childhood, parent-child connectedness decreased. Their study suggested the need to support parents in remaining connected to their children as they enter adolescence. In addition, Balakrishnan and Nasir (2009) examined the effect of arts person-centered group therapy in enhancing the self empowerment of adolescent girls. The results revealed that the intervention were effective in the self empowerment of the experimental group participants.

Buranacharearnkit (2003) found that young adolescents had a significantly higher self-confidence by means of a twelve sessions of rational emotive and behavioral group counseling program. Whereas, Tangrid (2006) found that upper secondary school students' self-responsibility and self-confidence significantly improved through group counseling based on person-centered counseling theory.

Falco (2008) found that middle school students' self-efficacy and self-regulated learning strategies in Mathematics were enhanced by skill builder's curriculum. Trotter (2006) assessed the efficacy of equine assisted group counseling on children and adolescents with at- risk of academic or social failure. Results of the study indicated that the intervention showed a statistically significant improvement in twelve behavior areas. Moreover, Jalali and Nazari (2009) studied the effects of social learning group model training on self- esteem, self-confidence, self-assertiveness and academic

achievement in third grade students. The results demonstrated significantly higher mean scores of all those four components in both post interventional and follow-up stages.

The autonomy enhancement, as in case of this study, was determined by A Confirmatory Factor Analysis of the seven adolescent autonomy factors and the four indicators; and then counseling theories and various techniques (Corey, 2004) were applied to create group counseling programs for enhancing the autonomy of the adolescents.

The purposes of this study were to analyze adolescent students' autonomy components, to reassemble group counseling programs and to compare the effectiveness of group counseling in enhancing adolescent students' autonomy. Subsequently, the study was hypothesized as follows: (1) Adolescent students' autonomy model would be composed of seven factors: self-efficacy, self-regulation, self-reliance, self-confidence, self-responsibility, self-assertiveness and self-evaluation. Moreover, each factor covered four indicators as follows: academic performance, personal care, peer relationship and parental/guardian connectedness, (2) Statistically significant differences (p < .05) in the total autonomy and in each of the seven components of the autonomy of the experimental group exist before counseling, after counseling and after the follow up period, (3) Statistically significant differences (p < .05) in total autonomy and in each component of the autonomy between the experimental group and the control group exist before counseling, after counseling and after the follow up period.

The results of this study would provide the following benefits. Adolescents' autonomy could be understood and valued by means of A Confirmatory Factor Analysis of Thai young adolescents' autonomy components. In addition, an Adolescent Student Autonomy Scale and group counseling programs in enhancing adolescent student autonomy are obtained. Moreover, the effectiveness of group counseling programs in enhancing adolescent student autonomy could be explored. Subsequently, the research results would benefit any counselors, psychologists, teachers, and personnel in charge of Thai adolescents in terms of the research application in their own contexts.

Methods

Samples

The population of the study consisted of 2,232,253 grade 1-3 secondary school students from the Office of the Basic Education Commission (2008). They were divided into two groups. The first group was randomly selected by employing a multi-stage cluster random sampling method in order to obtain 1,114 adolescent students being representative of the autonomy component study. The second group was selected by using a purposive sampling method from 24 grade 1-3 Sansai Wittayakom School adolescent students, who had total autonomy scores at the 25th percentile and lower; and they were then selected and divided into two groups which were classified as an experimental group and a control group. Each group was composed of eight students.

Instruments

Phase I: A 54-item Adolescent Student Autonomy Scale was developed, following A Semantic Differential Scale (Osgood, Suci, & Tannenbaum, 1957) and the adolescent students' autonomy operational definitions, for analyzing adolescent students' autonomy components and indicators. Cronbach Alpha Coefficient ($\alpha = 0.9259$) yielded a high reliability of the instrument. The selected items of the scale are shown in Table 1.

Phase II: Group counseling programs were reassembled to enhance adolescent students' autonomy by integrating group counseling concepts, theories and techniques (Corey. 2004; Corey & Corey, 2006) and combining with group counseling activities (Geldard & Geldard, 2002; Morganett, 1990; Smead, 2000; Thompson, 2003).

Procedures

Phase I: Adolescent Students' Autonomy Factor Analysis. The data was collected for A Confirmatory Factor Analysis from 1,114 grade 1-3 adolescent students in 30 classrooms 10 schools from 5 regions of the whole Kingdom of Thailand by using an Adolescent Student Autonomy Scale (54 items) during 3rd – 18th March 2009.

Table 1

he selected Items of Adol	свес.	iii Di	nacri	1 1111	iono	my Scare
1. Self-efficacy		1				
When I answer a teacher inco					_	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
I don't know what to do.	2	1	0	1	2	I believe that I could find the
						right answer later.
2. Self-regulation						
When my friends urge me to	take (drugs	or al	cohol	ic dri	nks,
I hesitate and dare not to	2	1	0	1	2	I will refuse them right away.
reject their persuasions						
3. Self-reliance						
I don't have anything for din		ecaus		paren	ts/gu	
I will wait until they come	2	1	0	1	2	I will cook dinner myself.
back home.						
4. Self-confidence						
When my friend criticizes me	as a	n inde	ecisiv	e pers	son,	
I will ignore what they say.	2	1	0	1	2	I will do self-exploration
						consistently to avoid being ar
						indecisive person.
5. Self-responsibility						
A teacher assigns me to do a	piece	of w	ork th	at I a	m no	t good at,
I will reassign others to do	2	1	0	1	2	I will try harder to do it.
it.						
6. Self-assertiveness						
When I see a friend violate ru	ıles o	f spoi	t,			
I do not dare to stop him.	2	1	0	1	2	I will convince him to follow
•						the rule.
7. Self-evaluation					l	
Once I leave an examination	roon	1.				
	2	1	0	1	2	I can evaluate my exam
I never feel confident in		1 1	v	1 1	_	i i can evaluate my exam

Phase II: Adolescent Students' Autonomy Enhancement through Group Counseling. Following Corey and Corey (2006), the three-stage group counseling programs:

The initial stage, the transition and working stage, and the final stage were constructed to enhance adolescent students by integrating the concepts and various techniques of eight group counseling theories (Corey, 2004; Corey & Corey, 2006). That is, a person-centered counseling theory

(Rogers, 1970, as cited in Corey, 2004), a rational emotive behavior therapy counseling theory (Ellis, 1992, as cited in Corey, 2004), a behavior counseling theory (Lazarus, 1996b, as cited in Corey, 2004), an existential counseling theory (Frankl, 1963, as cited in Corey, 2004), an individual counseling theory (Adler, 1996, as cited in Corey, 2004), a reality counseling theory (Glasser, 2000, as cited in Corey, 2004), a transactional analysis counseling theory (Berne, 1966, as cited in Corey, 2004), and a Gestalt counseling theory (Perls, 1996, as cited in Corey, 2004; Jacobs, Masson, & Harvill, 2002). The group counseling process and the application of the selected group counseling theories for enhancing each of the autonomy components are shown in Figure 1. Moreover, group activities were designed or selected for stimulating group counseling. Consequently, 10 group counseling sessions were obtained for enhancing the selected adolescent students.

Following a Randomized Pretest-Posttest Control Group Design (Naiyapat, 2005), eight students were randomly selected as group counseling members, while eight students, as a control group, did not participate in the counseling. The ideal of counseling group size on a weekly basis as suggested by Corey and Corey (2006) that a group of adolescents might be made up of 6 to 8 people. A group of this size is big enough to give ample opportunity for interaction and small enough for everyone to be involved and to feel a sense of "group". The weekly group counseling, as in case of this study, took place at a counseling center Sansai Wittayakom School, Chiang Mai Province, during 21st August – 25th September, 2009. Repeatedly, the Adolescent Student Autonomy Scale was administered after group counseling and at the follow-up period for comparing the effectiveness of the group counseling.

Statistical Treatments

A Confirmatory Factor Analysis (Jöreskog, & Sörbom. 1993) was employed to verify the autonomy model goodness of fit to the empirical data. In order to compare the effectiveness of group counseling, ANOVA Repeated Measurements were employed (Stevens, 2002). That is, Two-Way ANOVA Repeated Measurements were employed for autonomy total scores comparisons. Moreover, a One- Way ANOVA Repeated Measurement was used to compare the differences of total autonomy of both the experimental

and control groups. Then, a Two-Way ANOVA Repeated Measurement: a One Between and Two Within Design was employed to compare each of the autonomy factors.

Results

Phase I: An Adolescent Students' Autonomy Factor Analysis. Initially, A Confirmatory Factor Analysis of adolescent students' autonomy revealed highly significant correlations (p < .05) among adolescent autonomy factors, as shown in Table 2. That is, a highest significant correlation (α = 1.00) between self-efficacy (SEF) and self-confidence (SCF) was found to exist; while there was a least significant correlation (α = 0.78) between self-regulation (SRG) and self-assertiveness (SAS). Moreover, low to moderate levels of correlations (α = 0.13 – 0.68) among 28 autonomy indicators were obtained.

Table 2

Pearson Correlation Coefficients of Adolescent Students' Autonomy Factors

Autonomy Factors		omy Fac	tors					
		1	2	3	4	5	6	7
1. Self-efficacy	(SEF)	1.00						
2. Self-regulation	(SRG)	0.95*	1.00					
3. Self-reliance	(SRL)	0.90*	0.93*	1.00				
4. Self-confidence	(SCF)	1.00*	0.83*	0.91*	1.00			
5. Self-responsibility	(SRP)	0.80*	0.84*	0.91*	0.90*	1.00		
6. Self-assertiveness	(SAS)	0.83*	0.78*	0.85*	0.84*	0.84*	1.00	
7. Self-evaluation	(SEV)	0.84*	0.79*	0.87*	0.85*	0.86*	0.92*	1.00

According to the analysis for testing the adolescent autonomy model's goodness of fit, the Confirmatory Factor Analysis initially revealed high factor loadings (b_s) (p < .05) which equaled 0.89 - 0.96. Among those seven factors, together with 28 indicators, the self-reliance gained the highest loading (b = 0.96).

As shown in Figure 2, the analysis of Goodness of Fit Indices (Tabachnick & Fidell, 2001) yielded a non-significant Chi-square ($\chi^2 = 302.004$, df = 273, relative $\chi^2 = 1.106$, p = 0.110). The analysis verified the

consistent model with the empirical data (p < .05) when considering with other indices (Tabachnick & Fidell, 2001; Ho, 2006). For instance, they are Goodness of Fit Index (GFI = 0.981), Adjusted Goodness of Fit Index (AGFI = 0.972), Root Mean Square Residual (RMR = 0.020), Standardized Root Mean Square Residual (SRMR = 0.020). Moreover, Root Mean Square Error of Approximation (RMSEA = 0.010), Parsimony Goodness of Fit Index (PGFI = 0.660), Comparative Fit Index (CFI = 0.999), Normed Fit Index (NFI = 0.992) and Non-Normed Fit Index (NNFI = 0.999) also significantly indicated that the model was congruent with the empirical data.

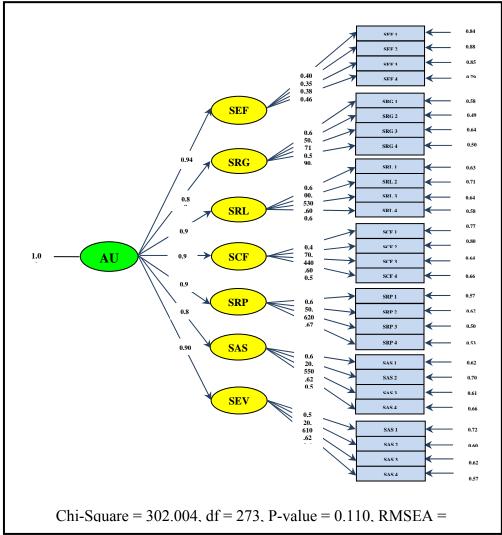


Figure 2. A Confirmatory Factor Analysis of the Adolescent Autonomy Model

In conclusion, the model of autonomy functioning could be characterized into seven factors; self-efficacy, self-regulation, self-reliance, self-confidence, self-responsibility, self- assertiveness and self-evaluation. Each factor covered four areas as follows: academic performance, personal care, peer relationship and parental/guardian connectedness. The factor loadings of those seven components were high at the .05 level, and they were found to be capable of measuring the autonomy functioning factors.

Phase II: Comparisons of Group Counseling Effectiveness in Enhancing Adolescent Students' Autonomy. In order to compare total autonomy scores of both the experimental group and the control group, a Two-Way ANOVA Repeated Measurement was used to yield a statistically significant difference (F = 17.615, p = 0.000) of the interaction of time and group with the total autonomy, as shown in Table 3. According to a One-Way ANOVA Repeated Measurement, the analysis indicated statistical differences of total autonomy scores of the experimental group (F = 42.187, p = 0.000) and the control group (F = 4.789, p = 0.026), as shown in Table 4. The results verified that a statistically significant difference in the total autonomy of the experimental group was found to exist before counseling, after counseling and after the follow up period at the .05 level. The results of the analysis evinced that the group counseling was a key factor in enhancing positive changes in the adolescent students' autonomy. However, the control group also obtained a significant difference in total autonomy.

In order to compare each of the seven autonomy factors, a Two-Way ANOVA Repeated Measurement: a One Between and Two Within Design was employed. As shown in Table 5, there was a statistically non-significant difference (F = 1.014, p = 0.438) of the interaction of autonomy factors, time, and group; however, the interaction of autonomy factors and time yielded a statistically significant difference (F = 2.292, p = 0.010). Subsequently, a statistically significant difference (F = 17.885, p = 0.000) of the interaction of time and group was obtained. A conclusion can be drawn from the analysis that statistically significant differences in each of the autonomy component between the experimental group and the control group were found to exist before counseling, after counseling and the period after the follow up at the .05 level.

Table 3

The Comparisons of Total Autonomy Scores of the Experiment and Control Groups Before, After, and at the Follow-up Periods by Means of a Two-Way ANOVA Repeated Measurement

Source of Variance	Sum of squares	df	Mean Square	F	p
Between Groups					
-Experiment Group and	0.990	1	0.990	6.832*	0.020
Control Group					
-Error	2.028	14	0.145		
Within Group					
- Time	3.959	2	1.979	36.422*	0.000
- Group * Time	1.915	2	0.957	17.615*	0.000
-Error	1.522	28	0.054		
	p* < .05				

Table 4

The Comparisons of Total Autonomy Scores of the Experiment and Control Groups by Means of a One-Way ANOVA Repeated Measurement

Group	Source of Variance	Sum of squares	df	Mean Square	F	р
Experiment	- The Measurement effects				·	
Group	before, after, and at the					
	follow-up period	5.451	2	2.726	42.187*	0.000
	-Error	0.905	14	0.065		
Control	- The Measurement Effects					
Group	Before, After, and at the					
	Follow-up Period	0.422	2	0.211	4.789*	0.026
	-Error	0.617	14	0.044		

p* < .05

Table 5

The Comparisons of each of the Seven Autonomy Factors by Means of a Two-Way ANOVA Repeated Measurement: A One Between and Two Within Design

Source of Variance	Sum of Squares	df	Mean Square	F	p
Between Groups	•		•		
-Experiment Group and Control Group	4.620	1	4.620	4.484*	0.05
-Error	14.424	14	1.030		
Within Group					
-Factors	7.479	6	1.246	5.839*	0.000
-Factor * Group	8.517	6	1.420	6.650*	0.000
-Error	17.932	84	0.213		
-The Measurement effects					
before, after, and at the	27.828	2	13.914	35.809*	0.000
follow-up period					
-Time * Group	13.899	2	6.949	17.885*	0.000
-Error	10.880	28	0.389		
-Factor * Time	3.570	12	0.297	2.292*	0.010
-Factor * Time * Group	1.580	12	0.132	1.014	0.438
-Error	21.803	168	0.130		

p* < .05

Though, simple effects of a One-Way ANOVA Repeated Measurement of all autonomy components of the experimental group yielded statistically significant differences (p < .05), the self-regulation component was an exception.

Discussions

According to the first objective of the study, a Confirmatory Factor Analysis significantly verified that the adolescent students' autonomy components consisted of seven factors; namely, self-efficacy, self-regulation, self-reliance, self-responsibility, self-assertiveness and self-evaluation. The model is consistent with Bekert's (2005) autonomy model that self-regulation, self-reliance, self-efficacy, self-responsibility, self-evaluation and confidence in one's own goals, decision-making and rationality are key factors.

The model is also congruent with Noom (1999) and Noom et al., (2001) that autonomy functioning is composed of self-regulation, self-

confidence, self-assertiveness and self-evaluation. Accordingly, Russel and Bakken (2002) referred adolescents' autonomy as the development of self-governance, self-reliance, responsibility, independence, conformity and decision-making.

Regarding adolescent autonomy indicators, the analysis is consistent with Delaware Department of Education (2002) that four adolescent development dimensions comprised academic performance, personal care, peer relationship and parental/guardian connectedness. Moreover, Noom (1999) also indicated that adolescent autonomy development concerns individual and social factors.

In accordance with the second phase of the study, it aimed at comparing the effectiveness of group counseling enhancing adolescents' autonomy. Firstly, an ANOVA yielded a statistically significant difference in the total autonomy of the experimental group. The result of the analysis evinced that the group counseling was a key factor in enhancing positive changes in the adolescent students' autonomy. The result was consistent with Balakrishnan and Nasir's (2009) study that group therapy intervention has been effective intervention in enhancing the autonomy or self empowerment of adolescent girls.

However, a significant difference in total autonomy of the control group is consistent with McLeod's (1994) reasons for a control group's improvement: spontaneous recovery, help expectation, willingness and initial support from assessment interview.

Secondly, each of the seven autonomy factor comparisons by an ANOVA leads to a conclusion that statistically significant differences in each component of the autonomy between the experimental group and the control group were found to exist before counseling, after counseling and the period after the follow up. The comparative results were consistent with other various studies. For instance, in enhancing self-efficacy, the result gains a support from the study of Washington (1999) that a group therapy enhanced people's belief in their ability to successfully perform tasks and control outcomes and self-awareness on self-efficacy of chemically dependent adult women.

Regarding self-reliance enhancement, the result gains a sustenance from the study of Trotter (2006) that group counseling statistically significant improved adaptive behaviors of at-risk middle school students.

Moreover, the result is congruent with Jalali and Nazari's (2009) study which indicated that a social skills training group was effective in improving intermediary school students' self-confidence and self-assertiveness. In enhancing self-evaluation, the result gained no supports from any research that is consistent with Beckert (2005) that self-evaluation is one of the critical components that have been somewhat overlooked. However, the selfregulation component obtained a non-significant result; and it was supported from the conclusion of Gestsdottir and Lerner (2008) that self-regulation is a challenging task for a critical basic adolescence adjustment; sometimes it has an obstacle leading to the adolescence development. The effective results can be proved in the context of group counseling for enhancing adolescent students' autonomy. A qualitative-manner evaluation manifested that group members disclosed their potentialities to develop themselves with impressive performances regarding all of the confirmed autonomy components. For instance, the statement- "I believe that I can practice to public speaking in front of class." represents the self-efficacy factor. To reflect the selfregulation component, a group member expressed "If I share my friend's personal secret with others, then I feel better. But he may not go out with me. So I won't reveal his personal life to others." Regarding the selfreliance component, a client shared his experience "My parents always give my younger brother everything he wants; so I got angry and upset. My irrational belief is that I must get what I expect; otherwise I will be useless. So I myself will spend my own recourses to get what I want."

Additionally, group members disclosed themselves regarding their self-confidence "I have to be confident in my own capability and attempt to reach my own goals; though there are obstacles." Clients also shared their self-responsibility as "Cleaning what a mess I made, take out the garbage, replace what is used up, return what I borrow, wake up early, conduct my own account and say 'sorry' when I have done something wrong."

According to the self-assertiveness enhancement, group members expressed "It is so easy to 'say no' when others convince me to do something wrong, e.g. just 'say no' when a friend asks to go out at night, and 'say no' when a friend borrows money."

Group members explored both positive and negative aspects as a means to their self-evaluation, "I am impulsive-cautious, relaxed-tense, interesting-boring, secure-insecure, happy-sad, productive-lazy, rigid-

flexible, competent-incompetent, and pleasant-abrasive." Finally, the group participants elaborated on their autonomy, "I rely on myself to learn what I want. I feel confident that I can protect myself from the dangerous environment and take good care of myself. I have the courage to speak in public, make new friends and make others happy. I am aware that I am a good person and can give love to others."

References

- Balakrishnan, V. A/P., & Nasir, R. (2009). The Efficacy of Expressive Arts Person-Centered Group Therapy to Enhance Self Empowerment of Adolescent Girls. *European Journal of Social Sciences*, 10(2), 317-333.
- Beckert, T. E. (2005). Fostering Autonomy in Adolescents: A Model of Cognitive Autonomy and Self-evaluation. Paper presented at the American Association of Behavioral and Social Sciences, Utah State University, Las Vegas, Nevada.
- Buranacharearnkit, S. (2003). The effects of a self confidence development program and a rational emotion and behavior group counseling on self confidence of Matthayomsuksa 1 students (Master's thesis).

 Burapha University, Chonburi, Thailand. (In Thai)
- Corey, G. (2004). *Theory and Practice of Group Counseling* (6th ed.). CA: Thomson Brooks/Cole.
- Corey, M. S., & Corey, G. (2006). *Groups Process and Practice* (7th ed.). CA: Thomson Brooks/Cole.
- Deci, E. L., & Ryan, R. M. (1987). The Support of Autonomy and the Control of Behavior. *Journal of Personality and Social Psychology*, 53(6), 1024-1037.
- Delaware Department of Education. (2002). Delaware Model Counseling Program: A Guide for School Districts Developing a K-12 Counseling Program. Willmington: Delaware Technical & Community College Press.
- Dworkin, J., & Lee, C. S. (2005). Individuation Revisited: Implications for Parent Education. *Journal of Extension*, *43*(6). Retrieved from http://www.joe.org/joe/2005december/rb8p.shtml

- Ekstrom, L. W. (2005). Autonomy and Personal Integration. In J. S. Taylor (Ed), *Personal Autonomy: New Essays on Personal Autonomy and Its Role in Contemporary Moral Philosophy* (pp. 143-161). New York: Cambridge University Press.
- Falco, L. D. (2008). Skill-Builders: Enhancing Middle School Students' Self-efficacy and adaptive Learning Strategies in Mathematics (Doctoral dissertation). University of Arizona.
- Geldard, K., & Geldard, D. (2002). *Counselling Children: A Practical Introduction* (2nd ed). California: Sage Publications.
- Gestsdottir, S., & Lerner, R. M. (2008). Positive Development in Adolescence: The Development and Role of Intentional Self-Regulation. *Journal of Human Development*. *51*, 202-224.
- Grolnick, S., & Ryan, M. (1987). Autonomy in Children's Learning: An Experimental and Individual Difference Investigation. *Journal of Personality and Social Psychology*, *52*(5), 890-898.
- Grolnick, S., Ryan, M. (1989). Parent Styles Associated With Children's Self-Regulation and Competence in School. *Journal of Educational Psychology*, 81(2), 143-154.
- Ho, R. (2006). *Handbook of Univariate and Multivariate Data Analysis and Interpretation with SPSS*. NW: Chapman & Hall/CRC.
- Jacobs, E. E., Masson, R. L.; & Harvill, R. L. (2002). *Group Counseling Strategies and Skills* (4th ed.). California: Brook/Cole.
- Jalali, D., & Nazari, A. (2009). Effects of Social Learning Group Model Training on Self-esteem, Self-confidence, Self-assertiveness and Academic Achievement in Third Grade Students of Intermediary Schools. Journal of Research in Behavioural Sciences, 7(1), Retrieved from http://journals.mui.ac.ir/index.php/rbs1/article/view Article/4059
- Jöreskog, C. G., & Sörbom, D. (1993). *Structural Equation Modeling with the SIMPLIStm Command Language*. Illinois: Scientific Software International, Inc.
- Kirdpitak, P. (2002). A Comparison of Counseling Theories and Practices. In S. Thongdee (Ed.), *Theory and Practice in Counseling* (pp. 167-249). Nonthaburi: Sukhothaithammathirat University. (In Thai)
- McLeod, J. (1994). *Doing Counselling Research*. London: Sage Publications.

- Milne, A. (2003). Teach Yourself Counselling. London: Cox & Wyman.
- Morganett, R. S. (1990). Skills for Living: Group Counseling Activities for Young Adolescents (Vol. 1). Illinois: Research Press.
- Naiyapat, O. (2005). Quantitative and Qualitative Research Methodologies in Behavioral and Social Sciences. Bangkok: Sam Lada.
- Noom, M. (1999). *Adolescent Autonomy Characteristics and Correlates*. Delft: Eburon.
- Noom, M. J., Dekovic, M., & Meeus, W. (2001). Conceptual Analysis and Measurement of Adolescent Autonomy. *Journal of Youth and Adolescence*, *30*(5), 577-595.
- Office of National Economic and Social Development Board. (2006). *Thai Social Circumstance in the Second Quarter*. Retrieved from http://www.moph.go.th/show_hot new.php?i dHot_new=1176
- Osgood, C. E., Suci, G. J., & Tannenbaum, P. H. (1957). *The Measurement of Meaning*. Urbana: University of Illinois Press.
- Panapithakkul, O. (1996). Personal status factors relating to autonomy, social, adjustment, mental health and physical health of preadolescents in the congested community (Master's thesis). Srinakharintharawirot University, Bangkok, Thailand. (In Thai)
- Russel, S., & Bakken, R. J. (2002). Development of Autonomy in Adolescence. NebGuide G1449. Retrieved from http://www.ianrpubs.unl.edu/epublic/archive/g1449/build/g1449.pdf
- Ryan, M. (1991). The Nature of the Self in Autonomy and Relatedness. In G. R. Goethals & J. Strauss (Eds.), *Multidisciplinary perspectives on the self*. New York: Springer-Verlag.
- Smead, R. (2000). Skills for Living: Group Counseling Activities for Young Adolescents (Vol. 2). Illinois: Research Press.
- Smith, R. (1998). The Education of Autonomous Citizens. In D. Bridges (ed.), *Education, Autonomy and Democratic Citizenship* (pp. 127-137). Retrieved from http://www.dur.ac.uk/r.d.smith/autonomy.htm
- Stevens, J. (2002). *Applied Multivariate Statistics for the Social Sciences* (4th ed.). New Jersey: Lawrence Erlbaum Associates.
- Tabachnick, B. C., & Fidell, L. S. (2001). *Using Multivariate Statistics* (4th ed.). MA: Pearson Education.
- Tangrid, J. (2006). The Effects of Group Counseling Based on Rogers'
 Theory on Responsibility and Self Confidence of Upper Secondary

- School Students (Independent study). Chiang Mai University, Chiang Mai, Thailand. (In Thai)
- The Ministry of Public Health. (2011). *Thai Adolescents Having STD on the Rise*. Retrieved from http://www.thailandnews.co/2011/04/thai-adolescents-having-std-on-the-rise/
- The Office of the Basic Education Commission. (2008). The Statistic Report Categorized in Accordance with Student Numbers and Grade Levels from all Schools under the Supervision of the Office of the Basic Education Commission, Ministry of Education, Thailand. Retrieved from http://doc.obec.go.th/onwebcheck2550/report3spt.php?PG=9
- Thompson, R. A. (2003). *Counseling Techniques Improving Relationships* with Others. Ourselves, our Families, and our Environment (2nd ed.). New York: Taylor & Francis.
- Trotter, K. S. (2006). *The Efficacy of Equine Assisted Group Counseling with At-risk Children and Adolescents* (Doctoral dissertation, University of North Texas). Retrieved from http://www.equineconnection.ca/uploads/dissertation.pdf
- Washington, O. (1999). Effects of Cognitive and Experiential Group Therapy on Self-efficacy and Perceptions of Employability of Chemically Dependent Women. *Mental Health Nursing*, 20(3), 181-198.