

Emotion Dampening Strategy and Internalizing Problem Behavior: Affect Intensity as Control Variables

Jia-Ru Li, Chia-Jung Li, and Ching-Wen Lin

Abstract—Contrary to negative emotion regulation, coping with positive moods have received less attention in adolescent adjustment. However, some research has found that everyone is different on dealing with their positive emotions, which affects their adaptation and well-being. The purpose of the present study was to investigate the relationship between positive emotions dampening and internalizing behavior problems of adolescent in Taiwan. A survey was conducted and 208 students (12 to 14 years old) completed the strengths and difficulties questionnaire (SDQ), the Affect Intensity Measure, and the positive emotions dampening scale. Analysis methods such as descriptive statistics, t-test, Pearson correlations and multiple regression were adapted. The results were as follows: Emotionality and internalizing problem behavior have significant gender differences. Compared to boys, girls have a higher score on negative emotionality and are at a higher risk for internalizing symptoms. However, there are no gender differences on positive emotion dampening. Additionally, in the circumstance that negative emotionality acted as the control variable, positive emotion dampening strategy was (positive) related to internalizing behavior problems. Given the results of this study, it is suggested that coaching deconstructive positive emotion strategies is to assist adolescents with internalizing behavior problems is encouraged.

Keywords—Emotion dampening strategies, internalizing problem behaviors, affect intensity.

I. INTRODUCTION

EMOTION dampening strategy refers to the tendency to respond to positive moods states with fault finding or catastrophic strategies, where the purpose is to reduce the intensity and duration of the positive mood state [1] [2]. Individuals dampen their positive experiences through engaging in worries that are unrelated to the current positive event, or paying attention to the negative elements of otherwise positive situations [2]. The tendency to experience lapses of attention has been related with negative adaptation [3]. Emotion dampening strategy has been found to be negatively associated with happiness, self-esteem, and life satisfaction [4] [5], and positively correlate with depression

and anxiety disorders [1] [6] [7]. Loss of pleasurable engagement is a typical characteristic of depression [8], thus emotion dampening strategy seems to be a risk factor for internalizing problem behaviors.

Affect intensity refers to individual differences in response intensity to a given level of emotion-provoking stimulation [9]. Affect intensity was considered as a multidimensional construct, which consists of positive intensity, negative affectivity, and serenity [10]. It was postulated that individuals who has negative affectivity are less satisfied with their relationships and general life [11], and friends or family showing less support to them would accelerate poor psychological outcomes such as depression [12]. On the other hand, individuals with low positive affect might lose motivation and lead to serious consequences in terms of social behaviors [13]. Evidence shows that positive affect was negatively related to depression, and negative affect was positively related to anxiety and depression [8]. Owing to affect intensity was a critical predictor for internalizing problem behavior; it was orientated as a control variable in the present study.

Internalizing problem behavior consists of several aspects, including withdrawal, fearfulness, inhibition, anxiety and somatic symptoms [14]. Individuals with internalizing problem behavior tend to direct negative emotions toward themselves rather than others [15]. Besides, internalizing problem behavior was postulated from excessive self-regulation [16] [17], which bring about various problems including school, peer relationships and mental health [18] [19]. Previous research has shown that children exhibit internalizing problem behaviors present poor classroom performance and cognitive functioning [20], and are more socially rejected by their peers [21] along with a lower self-esteem [22].

Research on internalizing problem behaviors strongly focuses on negative emotion regulation strategies. There is a paucity of research in the positive emotion regulation strategy domain; therefore the present study assesses which positive emotion regulation strategy could provide valuable insights on internalizing problem behaviors. The present study examines the associations between adolescents' emotion dampening strategy and their internalizing problem behavior with affect intensity under control.

C. W. Lin is with the Department of Guidance & Counseling, National Changhau University of Education, Changhua City, Taiwan, R.O.C. (e-mail: gucwlin@yahoo.com).

J. R. Li is with the Department of Guidance & Counseling, National Changhau University of Education, Changhua City, Taiwan, R.O.C. (e-mail: gpethic2008@yahoo.com.tw).

C. J. Li is with the Graduate Institute of Guidance and Counseling, National Chi Nan University, Taiwan, R.O.C. (e-mail: lindali40@yahoo.com.tw).

II. METHOD

A. Sample

Participants composed of 208 12-14-years old senior high school students, attending two state schools in Taiwan. Both schools were selected to represent a broad mix of social class backgrounds. The sample consisted of 93 boys and 115 girls with a mean age of 13.5 years.

III. MEASURES

A. Emotions Dampening Subscale

The emotion dampening scale was developed [23] to assess the tendency of children toward to dampen their positive emotions. The answer categories for each of the items range from 1 [rarely] to 7[always]. The internal consistency was .80 in the current study.

B. The Strengths and Difficulties Questionnaire (SDQ)

The Strengths and Difficulties Questionnaire (SDQ) is a 25 items of behavior screening questionnaire about 11-16 year olds[24]. The scale includes five components: emotional symptoms (5 items), conduct problems (5 items), hyperactivity/inattention (5 items), peer relationship problems (5 items), and prosocial behaviors (5 items). Accepted reliability and validity of this instrument have provided in empirical studies [24] [25]. The scale of statement was 0–2. The internal consistency of emotional symptoms in the current study was .68.

C. The Short Affect Intensity Scale

The short Affect Intensity Scale [26] is a 20-item questionnaire designed to measure how strongly or weakly an individual tends to experience emotions which response to stimulus in their everyday life. The Short Affect Intensity Scale is composed of three factors (positive intensity, negative affectivity, and serenity) with the answer categories for each of the items ranges from 1 [rarely] to 6[always]. The statements such as “I feel pretty bad when I lie”, or “When I do feel anxiety it is normally very strong,”. Good reliability and validity of this instrument has attested in empirical studies [26][27][28]. The internal consistency in the current study was .90.

IV. RESULTS

A. Preliminary Analysis

Means, standard deviations, and estimates of skew and kurtosis for each variable are reported in Table I.

One-way analysis of variance found significant gender differences were found for positive emotion dampening strategy, $F(1, 206) = 4.32, p < .05$ (Table II). Boys were rated as significantly use more positive emotion dampening strategy.

TABLE I
MEANS, STANDARD DEVIATIONS, AND SKEW AND KURTOSIS ESTIMATES FOR THE MEASURES

	M	SD	Skew	Kurtosis
N	21.	7.7	.0	-.88
A	90	3	6	
P	34.	9.6	-.	-.57
A	05	9	49	
S	21.	7.7	-.	-.51
E	90	3	01	
P	13.	6.9	.8	.12
D	13	2	6	
I	34.	10.	-.7	-.20
N	84	40	1	

Note. NA= Negative affectivity, PA= Positive intensity, SE= Serenity, DE = positive emotion dampening strategy. IN=internalizing behavior problem

TABLE II
COMPARISON OF MEAN VALUES OF BOYS AND GIRLS

		M	SD	F	p
N	boys	20.66	7.55	2.4	.12
A	girls	22.89	7.76	5	
P	boys	33.39	10.21	.76	.38
A	girls	34.58	9.27		
S	boys	21.85	7.85	.60	.44
E	girls	21.08	6.40		
P	boys	13.96	6.97	4.3	.04
D	girls	12.45		2	*
I	boys	32.75	10.68	2.1	.14
N	girls	36.51	9.90	9	

Note. NA= Negative affectivity, PA= Positive intensity, SE= Serenity, DE = positive emotion dampening strategy. IN=internalizing behavior problem

* $p < .05$ ** $p < .01$

B. Intercorrelations among Affect Intensity, Positive Emotion Dampening Strategy, and Internalizing Problem Behavior

Zero-order correlations were conducted to determine the relations among negative emotionality, positive emotion dampening strategy, and internalizing problem behavior. As expected, negative affectivity is mild related to emotion dampening strategy and internalizing behavior problem which presents in Table III. Positive intensity was rarely associated with dampening strategy and internalizing behavior problem. Negative affectivity is mild related to emotion dampening strategy and internalizing behavior problem.

Students who assessed themselves as having more negative affectivity reported using more positive emotion dampening

strategy, and was more likely to rated as higher levels of internalizing behavior problem

TABLE III
INTERCORRELATIONS AMONG AFFECT INTENSITY, POSITIVE EMOTION
DAMPENING STRATEGY, AND INTERNALIZING PROBLEM BEHAVIOR

	1	2	3	4	5
1.NA					
2.PA	.53				
3.SE	.32	.36			
4. DE	.45	.05	.39		
5.IN	.37	-.08	-.11	.38	

Note. NA= Negative affectivity, PA= Positive intensity, SE= Serenity, DE = positive emotion dampening strategy. IN=internalizing behavior problem

C.Relations between Positive Emotion Dampening Strategies, and Internalizing Problem Behavior

As shown in Table IV, to test the hypotheses that whether positive emotion dampening strategy as a predictor of internalizing behavior problem, multiple regression analysis were performed.

Affect intensity which was as control variable to the relationship between positive emotion dampening strategy and internalizing behavior problem entered on Step1. In Step 2, positive emotion dampening strategy was entered. The standardized beta coefficients are displayed in Table IV.

TABLE IV
MULTI REGRESSION ANALYSES PREDICTING INTERNALIZING BEHAVIOR
PROBLEM

	β	ΔR^2	t
Step 1			
PA	-.33	.27	-4.51**
SE	-.18		-2.74**
NA	.06		8.32**
Step2			
PA	-.23	.05	-3.04**
SE	-.28		-4.06**
NA	.04		5.71**
DE	.02		3.85**

Note. NA= Negative affectivity, PA= Positive intensity, SE= Serenity, DE = positive emotion dampening strategy. IN=internalizing behavior problem
* $p < .05$ ** $p < .01$

Consist with previous research, negative affectivity shows positively significant power in predicting internalizing behavior problem and positive intensity and serenity demonstrates negatively significant power in predicting internalizing behavior problem. Negative affectivity, positive intensity and Serenity together explained 27% percent of the variance in internalizing behavior problem.

Negative affectivity still remained a significant predictor of internalizing behavior problem when positive emotion dampening strategy was entered as step2. This reduction was

significant for negative affectivity, and the increase was significant for positive intensity and serenity, indicating that emotion dampening strategy partially accounted for the influence of affect intensity on internalizing behavior problem. The addition of dampening strategy increased 5% predicted variance in internalizing behavior problem. Positive emotion dampening strategy made a significant contribution beyond affectivity intensity. Both of variables continuously to be significant predictors, even at step2, suggesting the contribution of these variables are independent. Together, negative affectivity, affective intensity and emotion dampening strategy explained 32% percent of the variance in internalizing behavior problem.

V. DISCUSSION

This study provides additional support for the role of dampening strategy in internalizing problem behavior and clarifies some of the uniquely affective contributors (rather than temperature) to internalizing behavior problem. The present results indicate that children's positive emotion regulation is connected with their internalizing behavior problem, even after controlling for the influence of negative emotionality.

REFERENCES

- [1] G. C. Feldman, J. Joormann, and S. L. Johnson, "Responses to positive affect: a self-report measure of rumination and dampening." *Cognitive Therapy and Research*, vol. 32, pp. 507-525, 2008.
- [2] J. Quoidbach, E. Berry, M. Hansenne, and M. Mikolajczak, "Positive emotion regulation and well-being: Comparing the impact of eight savoring and dampening strategies." *Personality and Individual Differences*, vol. 49, pp. 368-373, 2010.
- [3] J. S. A. Carriere, J. A. Cheyne, and D. Smilek, "Everyday Attention Lapses and Memory Failures: The Affective Consequences of Mindlessness." *Consciousness and Cognition*, vol.17, pp.835-847, 2008.
- [4] J. T. Larsen, and A. R. McKibban, "Is happiness having what you want, wanting what you have, or both?" *Psychological Science*, vol.19, pp.371-377, 2008.
- [5] B. Schwartz, A. Ward, J. Monterosso, S. Lyubomirsky, K. White, and D. R. Lehman, "Maximizing versus satisficing: Happiness is a matter of choice." *Journal of Personality and Social Psychology*, vol. 83, pp.1178-1197, 2002.
- [6] F. B. Bryant, "Savoring Beliefs Inventory (SBI): A scale for measuring beliefs about savouring." *Journal of Mental Health*, vol. 12, pp.175-196, 2003.
- [7] H. Min'er, and G. Dejun, Emotion regulation and depression of college students. *Chinese Mental Health Journal*, vol. 15, pp.438 - 441, 2001.
- [8] D. Watson, L. A. Clark, and G. Carey, "Positive and negative affectivity and their relation to anxiety and depressive disorders." *Journal of Abnormal Psychology*, vol. 97, no. 3, pp. 346-353, 1988.
- [9] E. Diener, R. J. Larsen, S. Levine, and R. A. Emmons, "Intensity and frequency: Dimensions underlying positive and negative affect" *Journal of Personality and Social Psychology*, vol. 48, pp.1253-1265, 1985.
- [10] M. Geuens, and P. De Pelsmacker, "Role of humor in the persuasion of individuals varying in need for cognition." *Advances in Consumer Research*, vol. 29, pp.50-56, 2002.
- [11] T. D. Fisher, and J. K. McNulty, Neuroticism and marital satisfaction: The mediating role played by the sexual relationship. *Journal of Family Psychology*, vol. 22, no. 1, pp. 112-122, 2008.
- [12] J. F. Finch, and W. G. Graziano, Predicting Depression From Temperament, Personality, and Patterns of Social Relations. *Journal of Personality*, vol. 69, pp. 27-55, 2001.
- [13] E. E. Forbes, and R. E. Dahl, Neural systems of positive affect: Relevance to understanding child and adolescent depression? *Development and Psychopathology*, vol. 17, pp. 827-850, 2005.

- [14] N. Eisenberg, A. Cumberland, T. L. Spinrad, R. A. Fabes, S. A. Shepard, M. Reiser, et al." The relations of regulation and emotion-ality to children s externalizing and internalizing problem behavior." *Child Development*, vol. 72, pp.1112-1134, 2001.
- [15] R. W. Roeser, and J. S. Eccles, "Adolescents' perceptions of middle school: Relation to longitudinal changes in academic and psychological adjustment." *Journal of Research on Adolescence*, vol. 8, pp. 123-158, 1998.
- [16] J. H. Block, and J. Block, "The role of ego-control and ego-resiliency in the origination of behavior." In W. A. Collings (Ed.), *The Minnesota Symposia on Child Psychology*, vol. 13, pp. 39-101, 1980.
- [17] P. M. Cole, C. Zahn-Waxler, N. A. Fox, B. A. Usher, and J. D. Welch, "Individual differences in emotion regulation and behavior problems in preschool children" *Journal of Abnormal Psychology*, vol. 105, pp. 518-529, 1996.
- [18] S. P. Hinshaw, "Externalizing behavior problems and academic underachievement in childhood and adolescence: Causal relationships and underlying mechanisms." *Psychological Bulletin*, vol. 111, pp. 127-155, 1992.
- [19] R. Roeser, J. Eccles, and K. Strobel, "Linking the study of schooling and mental health: selected issues and empirical illustrations at the level of the individual." *Educational Psychologist*, vol. 33, no. 4, pp.153-176. 1998.
- [20] M. D. Rapport, C. B. Denney, and K. Chung, "Internalizing behavior problems and scholastic achievement in children: Cognitive and behavioral pathways as mediators of outcome." *Journal of Clinical Child Psychology*, vol. 30, pp. 536-551, 2001.
- [21] S. Pedersen, F. Vitaro, and E. D. Barker, "he timing of middle-childhood peer rejection and friendship: Linking early behavior to early-adolescent adjustment." *Child Development*, vol.78, no. 4, pp. 1037-1051, 2007.
- [22] K. Aunola, H. Stattin, & J. E.Nurmi, "Parenting styles and adolescents' achievement strategies." *Journal of Adolescence*, vol. 23, pp. 205-222, 2000.
- [23] Jia. Ru. Li, & Ching-Wen, Lin. "Psychometric properties of the Negative Emotion regulation strategies." submitted for publication.
- [24] R. Goodman, "The Strengths and Difficulties Questionnaire: A Research Note." *Journal of Child Psychology and Psychiatry*, vol. 38, pp. 581-586, 1997.
- [25] K. Y. C. Lai, E. S. L. Luk, P. W. L. Leung, A. S. Y. Wong, L. Law, and Ho. Karen, "Validation of the Chinese version of the strengths and difficulties questionnaire in Hong Kong." *Social Psychiatry and Psychiatric Epidemiology*, vol. 45, no. 12, pp. 1179-1186, 2010.
- [26] M. Geuens, and P. de Pelsmacker, "Developing a Short Affect Intensity Scale." *Psychological Reports*, vol. 91, no. 2, pp. 657-670, 2002.
- [27] R. E. Goldsmith, and H. Walters, "A validity study of the Affect Intensity Measure." *Journal of Social Behavior and Personality*, vol. 4, pp. 133-140, 1989.
- [28] R. J. Larsen, and E. Diener, "Affect intensity as an individual difference characteristic: A review." *Journal of Research in Personality*, vol. 21, pp. 1-39, 1987.