THE DEVELOPMENT AND TESTING OF A POSITIVE PSYCHOLOGY-BASED PROGRAM FOR INCREASING HAPPINESS AMONG PARENTS OF CHILDREN WITH AUTISM SPECTRUM DISORDER IN THAILAND

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Abstract: The current research investigated the role of positive psychology in contributing to the development of happiness among parents of children with autism spectrum disorder (ASD). To fulfill the main objectives, this research comprised three studies. Study I employed a qualitative design which used the hermeneutic phenomenological framework in which in-depth interviews were conducted to identify thematic dimensions to inform the development of the Happiness in Parents of Children with ASD Scale (HPCA). Study II involved a quantitative approach in which exploratory factor analysis, reliability analysis, and confirmatory factor analysis were used to develop a psychometrically sound measurement instrument– the HPCA Scale. Tests of validity via both convergent and divergent tests of validity showed that this newly developed scale is valid. Study III employed the nine-component factor structure identified for the HPCA to develop the modified positive psychology-based intervention program and test its effectiveness. The last study investigated the effectiveness of the modified positive psychology-based program via multivariate 2 x 2 mixed-repeated measures design. The results of Study I found three main themes for creating the new survey questionnaire. The results of Study II revealed the final nine-component structure of Happiness in Parents of Children with ASD Scale (HPCA). The findings in Study III indicated that seven of the nine components were significant, namely, hope in the child's independence, positive acceptance of the child's disorder, parental self-efficacy, confidence in helping child development, mind-body relaxation, contribution to society, and stress management. Promoting positive family support and resilience were not found to be significantly related to developing happiness among parents. The modified program also had an effect on decreasing depression, one of the components in the DASS-21. Further application of the program that integrates positive psychology should be considered in promoting parental happiness in other areas of child and adolescent disabilities.

Keywords: Positive Psychology-Based Program, Happiness, Autism Spectrum Disorder, Hermeneutic Phenomenology.

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Introduction

The number of children diagnosed with autism spectrum disorder (ASD) has grown at an alarming rate (CDC, 2014). This increase in number is having an impact on the mental health and well-being of affected parents and their families; receiving an ASD diagnosis often elicits strong emotional reaction from parents. Understandably, parents are overcome with feelings of loss and emotional devastation upon learning that their child is suffering from ASD (Hall, 2008; Altiere & von Kluge, 2009). Caring for children with ASD brings a heavy burden to parents who are usually the primary caregivers. In addition, parents of children with ASD lack knowledge about this developmental disorder and, unfortunately, do not have the skills needed to adequately care for the affected children (Woodgate, Ateah, & Secco, 2008). Not surprisingly, many of them experience chronic anxiety, depression, marital difficulties, stress, and social isolation (Risdal & Singer, 2004; Kovshoff, Grindle, & Hastings, 2006). These lead them to meet enormous negative mental health outcomes after discovering that their child has ASD. Insofar as parental adaptation is concerned, Hutton and Caron (2005) found that upon diagnosis of their child with ASD, 52% of parents felt relieved, 43% felt grief and loss, 29% felt shocked or surprised, and 10% felt like they were being blamed. Not surprisingly, the stress and anxiety of raising a child with special needs impact heavily on many areas of parents' lives. Their lack of knowledge and understanding of the disorder aggravate their predicament. Needless to say, they need effective interventions to help them manage their child's behavioral difficulties and still maintain high levels of confidence in their own abilities. Parents need to know and understand that their situation is not entirely insurmountable; that, in spite of hardship, they can meet life's challenges in positive ways. The challenge, therefore, is to create effective procedures for helping these children and their families.

Adaptation in parents of children with ASD may relate with crucial factors such as specific characteristics of the child, social support, perception of the problem, and coping strategies (Pozo, Sarriá, & Brioso, 2011). The current literature revealed that parents who displayed a positive perception of the problem they faced with an ASD child were more willing to mobilize resources to help their children in any possible way, compared to those with a negative perception (Altiere & von Kluge, 2009). While chronic depression was found in many parents, some showed better tolerance of their stressors through social support, personal hardiness, a sense of optimism, and internal locus of control which positively affected stress-related mental health problems (Higgins, Bailey, & Pearce, 2005). While there is a number of existing intervention strategies for children with ASD, there are, conversely, limited interventions for parents. It is important to help them find effective approaches to deal with these hardships. Thus, effective intervention is of paramount concern, not only for the children but for their families as well.

In Thailand, due to scarcity in intervention schemes for parents, a team of Thai researchers introduced a parental training program that is based on positive psychology (Pongpanich, Ananpatiwet, Ruamkratok, & Sraethawichaporn, 2012). The *Family Skills Training Program Based on Positive Psychology Approach* was modified for parents of children with ASD at the Yuwaprasart Waithayoprathum Child Psychiatric Hospital in Thailand. Interview data revealed that parents were

happier after participating in the said training program. The program, however, does not appear to include crucial variables deemed vital to parental mental health outcomes such as, in particular, happiness and its predictive factors.

Based on current literature, there are a few predictor variables related to healthy adaptation and happiness in parents of children with ASD. What is known is that these variables include: notions of the perception of the problem (Pozo et al., 2011), parental self-efficacy (Hastings & Brown, 2002; Kozlowski, Matson, Horovitz, Worley, & Neal, 2011), and hope (Ekas, 2009; Cooke, 2010; Monsson, 2010; Hayes, 2011). While these notions and constructs have been linked to healthy adaptation and happiness, the cited studies were all Western-based. More importantly, it is not known if such findings can be generalized to Thai parents inasmuch as none of the reviewed studies offered any evidence within the Southeast Asian context. Given the lack of relevant empirical evidence and lack of related studies in culturally-diverse settings, clinicians need to be cautious with regard to the generalization of interventions based on studies and approaches that utilized non-Thai populations. Although there is a program that is based on positive psychology for use with parents of ASD children in Thailand (Pongpanich et al., 2012), little is known about its effectiveness. The current study attempted to address this problem.

Research Objectives

The purpose of the current study was to develop a positive psychology-based program and test its effectiveness for developing happiness among parents of children with ASD in Thailand. The study identified the following aims and objectives:

1. To identify parental happiness among Thai parents of children with ASD.
2. To determine the influential factors in developing happiness in Thai parents of children with ASD.
3. To develop a modified positive psychology-based program using component scales derived from qualitative and quantitative studies, and to investigate its effectiveness in developing happiness among Thai parents of children with ASD.

Conceptual Framework

Positive psychology is a new approach towards developing happiness in various groups. A review of the literature presented a number of variables that help explain parents' healthy adaptation such as perception of the problem, parental self-efficacy, and hope. Most researches on ASD and its impact on family life were conducted in the West. These studies focused mainly on researchers' perspectives on account of their predilection for the quantitative approach over the qualitative method. Thus, there are limitations and knowledge gaps in studies involving parents due to lack of in-depth information about their personal experiences, innermost feelings, and perceptions. The present study attempted to address these issues by investigating variables deemed essential for developing happiness in parents of children with ASD in Thailand by utilizing both qualitative and quantitative methodologies in Study I and Study II. Thus, mixed research designs were utilized to develop the psychometric properties of the new Thai Happiness for Parents of Children with ASD (HPCA) scale. Study III aimed to develop the modified positive psychology-based program

for parents of ASD children by incorporating components derived from the new measure designed in Study I and Study II and, subsequently, test its effectiveness. The program worked through group therapy in increasing therapeutic factors. Eight activities were introduced in the positive psychology-based intervention in developing happiness for Thai parents of children with ASD, as shown in Figure 1.

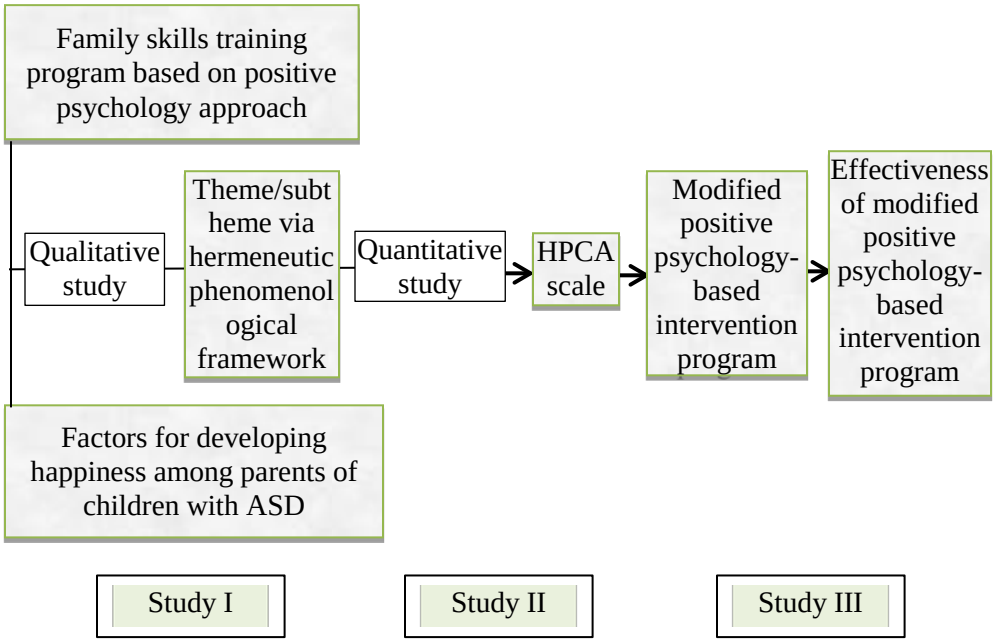

Figure 1: Conceptual Framework of the Study

Method

The current research utilized the mixed methods design that employed both qualitative and quantitative research methods. More specifically, it used the mixed method exploratory design which entailed the collection and analysis of qualitative data initially, the results of which were used to initiate the subsequent quantitative analysis. The exploratory design connected the phases of this investigation by using the qualitative results to shape the quantitative study by specifying research questions and variables prior to developing the new measuring instrument. This research comprised three phases (studies). Study I and Study II focused on developing the new Thai-based research instrument. The first study utilized a phenomenological framework and designed to understand the experiences of parents of children with autism spectrum disorder (ASD), with a view to enhancing their happiness at a later stage. The second study was designed to generalize the findings from the first study to a broader population by using a large-scale survey. Data analysis involved the widely-used processes of instrument development–exploratory factor analysis (EFA), reliability analysis, and confirmatory factor analysis (CFA). In addition, the validity

of the new survey questionnaire was tested via convergent and divergent validity. Study III focused on the modification of an existing positive psychology-based program and subsequent examination of its effectiveness.

Participants

This research consisted of three studies, each with its own targeted participants. For Study I (*N*=8), 87% of the participants were female and 13% were male, aged between 35 and 46 years. All of these participants were parents or primary caregivers who had earlier attended the 'Family Skills Training Program Based on Positive Psychology Approach' at the Yuwaprasart Waithayoprathum Child Psychiatric Hospital where their children with ASD were being treated. They had scores TMHI-15 greater than or equal to the average mental health among Thais, had passed the criteria for selecting primary caregiver (inter-rater), and had signified their willingness to participate. It was deemed acceptable to have eight participants in this case because while sample size in qualitative studies largely depends on the saturation of the data, Kuzel (1992) suggested that there should be, ideally, six to eight participants (with similar characteristics) in a qualitative study.

The participants of Study II (*N*=964) consisted of primary caregivers of children with ASD from all regions in Thailand. Three steps were undertaken to develop a new research instrument with sound psychometric properties, namely, EFA, reliability analysis, and CFA. The participants in the EFA stage consisted of 482 parents (50% of the total number of participants) (117 males, 24%; 365 females, 76%). The remaining 50% (130 males, 27%; 352 females, 73%) were involved in the CFA stage of the study.

The participants of Study III consisted of 64 parents/primary caregivers who routinely take their ASD children for periodic checkup/treatment at the said hospital. Of the 64 participants, 32 (50%) were randomly assigned to the experimental group, code-named PP + TAU (attendees of the positive psychology-based intervention program with treatment as usual) while the other group of 32 were assigned to the control group and code-named TAU. After applying the inclusion criteria, the final experimental group consisted of 25 parents/primary caregivers whereas the control group consisted of 22.

Research Instrument

Study I. The research instruments employed in the first study consisted of the following: Respondent's Profile, the Thai Mental Health Indicator Version 2007 (TMHI-15) (Mongkol et al., 2009), and semi-structured one-on-one in-depth interviews.

Study II. The research instruments employed in the second study consisted of the following: Respondent's Profile, the Happiness in Parents Questionnaire (HPQ), and the Parental Adjustment Based on Positive Thinking Questionnaire (PAPTQ), the Happiness Enhancement Questionnaire (HEQ), the TMHI-15, and the Stress Questionnaire for Parents of Autistic Children (Hongngam, 2003).

Study III. The research instruments employed in the third study consisted of the following: Respondent's Profile, the Happiness in Parents of Children with ASD (HPCA), and the Depression, Anxiety, and Stress Scale (DASS-21). Study III also involved the delivery of a modified positive psychology-based intervention program

aimed at developing happiness in parents of children with ASD. The program contained eight sessions featuring a variety of activities for specific purposes. Session 1 consisted of activities for establishing relationship and relieving suffering; session 2 included activities for accepting the child's disorder with positive thinking; session 3 included activities for strengthening parental ability to care for children and resilience; session 4 featured activities for enhancing child development and increasing parental strength in positive ways; session 5 had activities for receiving family and social support and promoting mind-body relaxation; session 6 had activities for enhancing positive thinking and emotion in everyday life; session 7 featured activities for enhancing positive thinking and emotion in everyday life; and session 8 consisted of activities aimed at summarizing the guidelines/concepts in developing parental happiness.

Data Analysis

Data analysis consisted of the following methodologies, according to each phase of the study: In Study I, data analysis was accomplished through the use of the phenomenological-hermeneutic approach which attempted to examine the 'lived experience' of a person in relation to a concept or phenomenon of interest, through in-depth interviewing (Creswell, 2012). In Study II, the statistical procedures employed to test the validity and reliability of the new measures were alpha-coefficient, exploratory factor analysis, confirmatory factor analysis, and Pearson product moment correlation coefficient. In Study III, examination of the effectiveness of the modified intervention program was conducted via a multivariate 2 X 2 mixed-repeated measures design.

Results

Study I

The overall result of the first study has met its foremost research objective which was to examine the 'lived' experiences of Thai parents of children with ASD in developing happiness, based on the positive psychology approach. The analysis of qualitative information resulted in the identification of main themes and subthemes relative to the development of happiness. These themes and subthemes were utilized to create a new instrument for use with Thai parents of children with ASD. An overview of the themes and subthemes that emerged from the phenomenological analysis of in-depth interview responses with corresponding item statements from the new 62-item scale is depicted in Figure 2.

(See Figure 2 on the next page)

Study II

Three steps were conducted in order to develop a new research instrument with sound psychometric properties. First, EFA was conducted. The participants' responses to the 62-item instrument were subjected to principal component analysis, followed by varimax rotation. In the first run, using the criterion of retaining only factors with

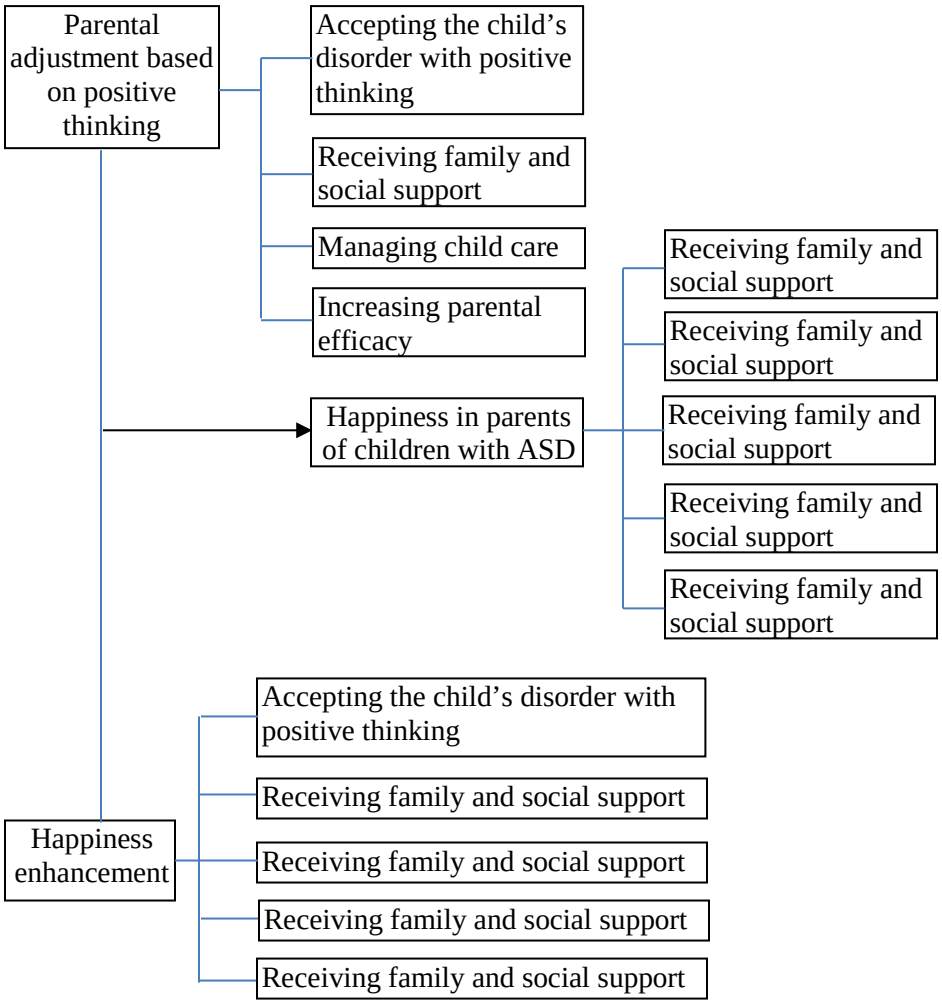

Figure 2: Overview of the Themes/Subthemes Relative to Developing Happiness among Thai Parents of Children with ASD Derived from the Phenomenological Analysis of In-Depth Interview Responses

eigenvalues of 1 or greater (Ho, 2014), twelve factors were retained for rotation. However, the rotated component matrix showed that two components consisted of only one item on both components. So, a second run was conducted for the ten-component model. In the second run, nine factors were retained with eigenvalues of 1 or greater for rotation. Responses from 49 items were then subjected to a second principal component analysis. In the third run, responses from 47 items were, then, subjected to a third principal component analysis; the rotated component matrix revealed nine components (see Figure 3). These nine factors accounted for a total of 67.75% of the total variance. Second, reliability analysis was conducted. The results showed that the computed Cronbach's alpha coefficients for the nine components ranged from 0.76 to 0.91. Third, CFA was utilized to test the null hypothesis that the sample covariance matrix was obtained from a population that has the proposed model structure. Table 1 presents the goodness-of-fit indices for this model.

Table 1: χ^2 Goodness-of-Fit Value, Normed Fit Index (NFI), Incremental Fit Index (IFI), Tucker Lewis Index (TLI), Comparative Fit Index (CFI), and Root Mean Square Error of Approximation (RMSEA) of Happiness in Parents of Children with ASD (HPCA) Scale

Model	χ^2 (N=482)	df	p	NFI	IFI	TLI	CFI	RMSEA
Null Model	16762.53	1081	<.001	0.00	0.00	0.00	0.00	.17
Nine-component Model of Parental Happiness	3113.24	998	<.001	.81	.87	.85	.87	.07

Results indicated that the model fitted the data covariance matrix fairly well (i.e., the CFA model is acceptable). Although the overall chi-square value was significant, $\chi^2(df = 998, N = 1{,}128) = 3113.24$, $p < .001$, the incremental fit indices (normed fit index-NFI, incremental fit index-IFI, Tucker Lewis index-TLI, and comparative fit index-CFI) ranged from 0.81 to 0.87. These fit indices indicated that the model provided a good fit relative to a null or independent model. The RMSEA value of 0.07 was also within the range (.04 to .08) suggested by Browne and Cudeck (1993), indicating that the model fits the population covariance matrix reasonably well.

The standardized regression coefficients (factor loadings) for the measurement indicators were all positive and significant by the critical ratio test, (C.R. > +1.96, p <.001). Standardized loadings ranged from 0.56 to 0.93. These values suggested that the indicator variables hypothesized to represent their respective latent constructs did so in a reliable manner. The percentage of residual (unexplained) variance for the 47 indicator variables ranged from 68% (i.e., 32 % of the variable explained) (H1) to 14% (i.e., 86 % of the variable explained) (H20). The nine-component measurement model representing the HPCA scale is depicted in Figure 3.

In addition, the correlations between the Thai TMHI-15 scores and the HPCA factors of overall scale score are positive and statistically significant ($r = 0.631$, $p <$ .001). In contrast, the correlations between the Thai Stress Questionnaire for Parents of Autistic Children scores and the HPCA components of overall scale score are negative and statistically significant ($r = -.426$, $p < .001$). Therefore, these results indicate that the new HPCA scale has both convergent validity and divergent validity.

(See Figure 3 and Table 2 on the next page)

Study III

Study III attempted to develop a new Thai program for increasing happiness among parents of children with ASD and, subsequently, investigate its effectiveness. The modified program contained a set of activities based on the results of Study I and II. In order to investigate whether the changes in the dependent (within-subjects) variables (HPCA components, DASS-21 components) from pre- to post-intervention are similar or significantly different for the experimental group exposed to the new positive psychology-based program with treatment as usual (PP + TAU) and the control group (TAU), a series of 2 (PP + TAU *vs.* TAU) x 2 (pre- *vs.* post-intervention) MANOVA for repeated measures were conducted on the nine HPCA components and the three DASS-21 components (see Figures 4-7). Table 3 reports the results of the multivariate tests of significance of all HPCA components and DASS-21 components.

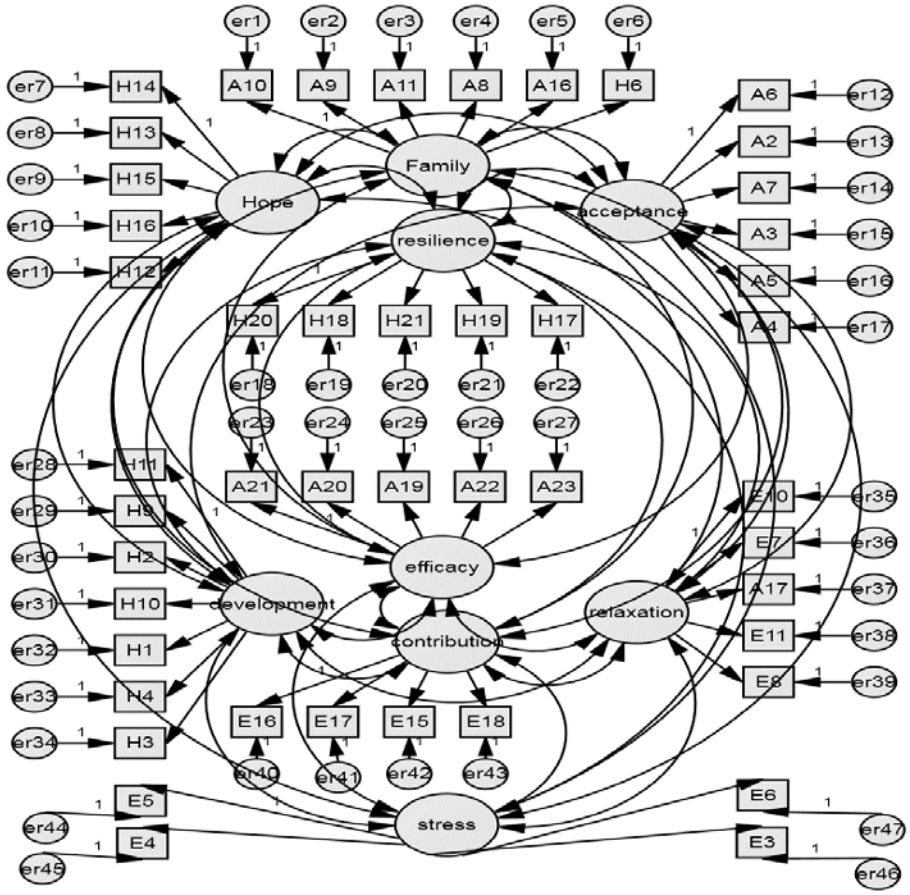

Figure 3: The Nine-Component Measurement Model Representing the HPCA Scale

Table 2: Correlations between the Thai TMHI-15 and the Thai Stress Questionnaire for Parents of Autistic Children on the HPCA Scale

Component	Thai TMHI-15	Thai Stress Questionnaire
- Positive family support	.543***	-.328***
- Hope in the child's independence	.348***	-.218***
- Positive acceptance of the child's disorder	.476***	-.356***
- Resilience	.514***	-.369***
- Parental self-efficacy	.412***	-.306***
- Confidence in helping child development	.447***	-.312***
- Mind-body relaxation	.529***	-.410***
- Contribution to society	.452***	-.225***
- Stress management	.502***	-.309***
- The nine-scale of happiness scale	.631***	-.426***

***$p < .001$

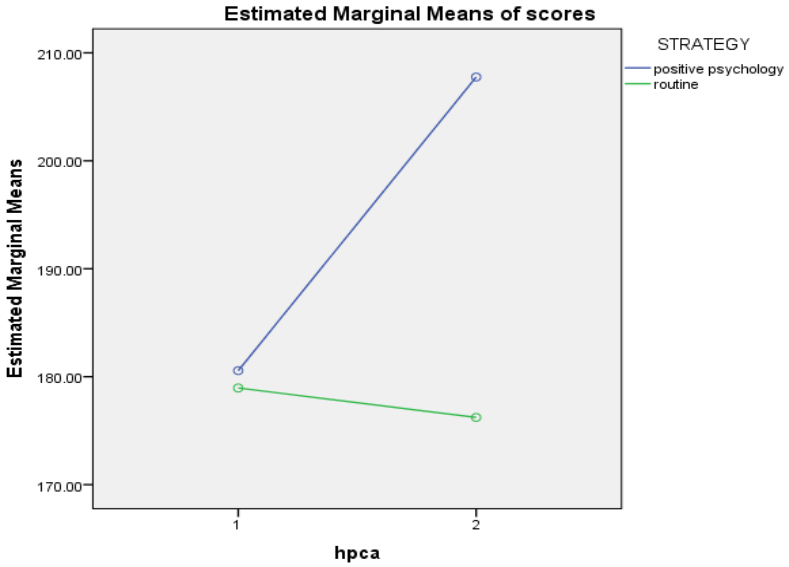

Figure 4: The HPCA*Strategy Interaction

Figure 4 shows that the changes in the *HPCA* scores between the pre- and post-intervention conditions are different across the two groups (PP + TAU *vs.* TAU). For the PP + TAU group, there is an increase in HPCA scores (-27.20), while for the TAU group there is a decrease (2.73), and this difference is statistically significant.

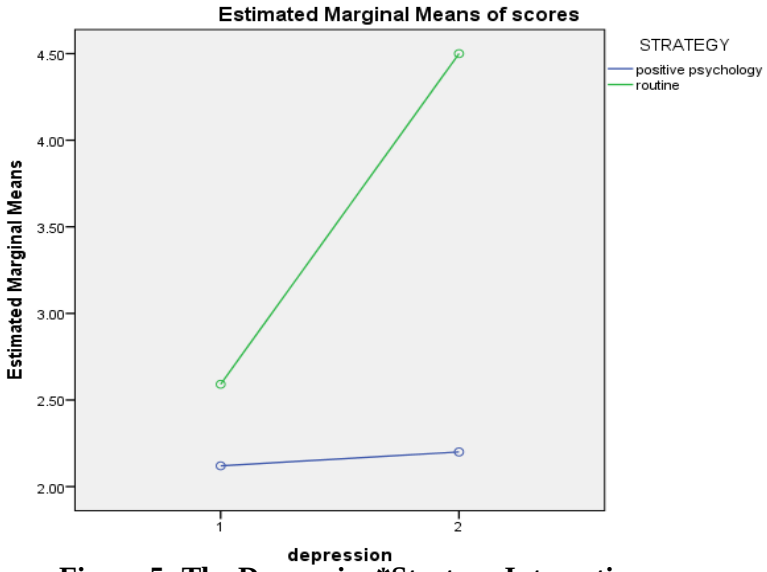

Figure 5: The Depression*Strategy Interaction

Figure 5 shows that the increase in the *depression* scores made between the pre- and post-intervention conditions is different across the two groups (PP + TAU *vs.* TAU). The increase is lower for the PP + TAU group (-0.08) than for the TAU group (-1.91), and this difference is statistically significant.

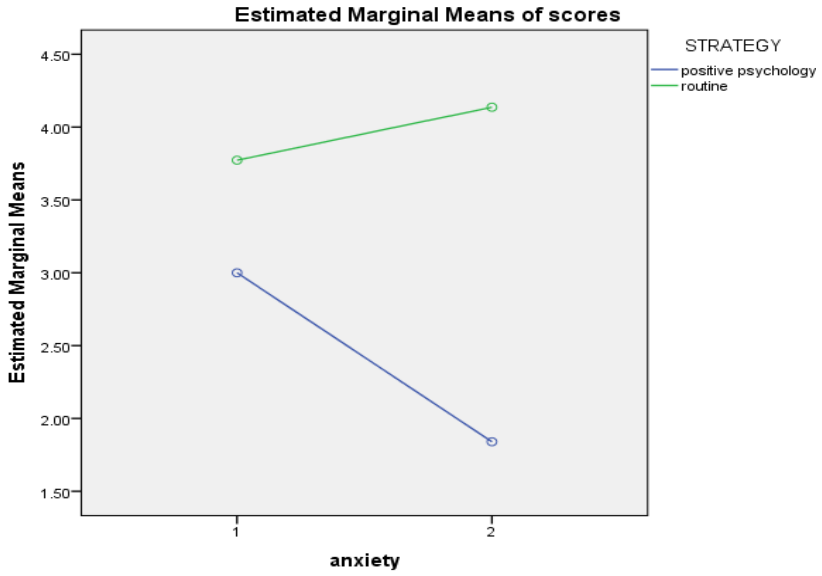

Figure 6: The Anxiety*Strategy Interaction

Figure 6 shows that the changes in the anxiety scores between the pre- and post-intervention conditions are similar across the two groups (PP + TAU vs. TAU). For the PP + TAU group, there is a decrease in anxiety scores (1.16), while for the TAU group, there is an increase (-0.37), and this difference is not statistically significant.

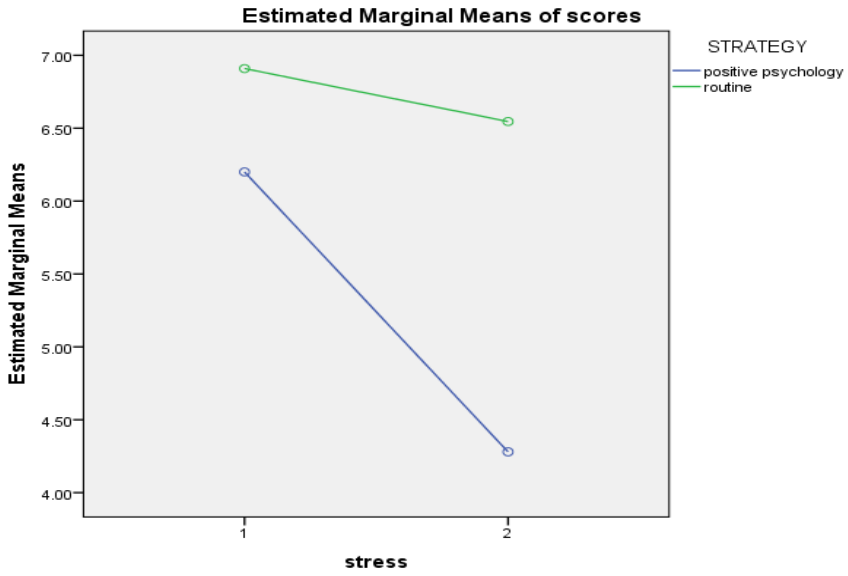

Figure 7: The Stress*Strategy Interaction

Figure 7 shows that the decrease in the stress scores made between the pre- and post-intervention conditions is different across the two groups (PP + TAU vs. TAU).

The decrease is higher for the PP + TAU group (1.92) than for the TAU group (0.36), and this difference is not statistically significant.

Table 3: The Multivariate Tests of Significance

The HPCA factors*strategy interaction	The tests within-Subjects contrasts	Mean Difference (pre- vs. post-intervention)					
		Pre-		Post-		Mean difference	
		PP+ TAU	TAU	PP+ TAU	TAU	PP+ TAU	TAU
family* strategy	F(1,45) = 3.19, p > .05	24.52	22.96	26.44	23.00	-1.92	-0.04
hope* strategy	F(1,45) =12.99, *p* < .01	21.12	20.86	23.16	20.00	-2.04	0.86
acceptance* strategy	F(1,45)=177.02, *p* < .001	20.76	20.64	27.04	24.14	-6.28	-3.50
resilience* strategy	F(1,45) = 2.90, *p* > .05	20.32	20.64	22.04	20.59	-1.72	0.05
efficacy* strategy	F(1,45) = 35.34, *p* < .001	17.52	19.18	22.08	18.46	-4.56	0.72
development* strategy	F(1,45)=23.95, *p* < .001	26.92	28.18	32.72	28.50	-5.80	-0.32
relaxation* strategy	F(1,45)=16.39, *p* < .001	16.60	14.36	20.76	14.55	-4.16	-0.19
contribution* strategy	F(1,45)=13.89, *p* < .01	14.20	13.86	16.36	13.23	-2.16	0.63
management* strategy	F(1,45) = 25.33, *p* < .001	14.32	14.36	17.16	13.77	-2.84	0.59
HPCA* strategy	F(1,45) = 42.11, *p* < .001	180.56	178.96	207.76	176.23	-27.20	2.73
The DASS-21 factors*strategy interaction							
depression* strategy	F(1,45)=10.51, *p* < .01	2.12	2.59	2.20	4.50	-0.08	-1.91
anxiety* strategy	F(1,45) = 2.03, *p* > .05	3.00	3.77	1.84	4.14	1.16	-0.37
stress* strategy	F(1,45)=1.73, *p* > .05	6.20	6.91	4.28	6.55	1.92	0.36

Discussion

The current study attempted to develop a positive psychology-based intervention program and test its effectiveness in developing happiness among parents of children with ASD in Thailand. The results revealed the final nine-component structure of the new Thai Happiness in Parents of Children with ASD scale (HPCA). Furthermore, the findings also demonstrated that the eight sessions of the new positive psychology-based program have positively influenced the development of happiness and other

positive outcomes among parents of children with ASD, especially seven factors of the HPCA scale and depression, one of the components in the DASS-21 scale.

The results of Study I and II indicated that the mixed research design utilized was an appropriate methodology for developing the psychometric properties of the new Thai happiness scale for parents. The modified positive-psychology-based program was developed by utilizing the concepts of the nine-component scale derived from Study I and II, and infused with concepts of positive psychology. The findings demonstrated the effectiveness of the modified program by showing that there are statistically significant differences in the development of hope in the child's independence, acceptance of the child's disorder, parental self-efficacy, confidence in helping towards child development, mind-body relaxation, contribution to society, and stress management. The results of Study III indicated that the modified positive psychology-based program has the efficacy to develop happiness for parents of ASD children in terms of three core factors, namely, (a) enhancing parental positive emotions, (b) promoting positive child development, and (c) reducing parental negative emotions.

Relative to *enhancing parental positive emotions*, while parents with ASD children share their experiences in childcare with other similar parents, they build up essential positive emotions by working in groups, a process described as therapeutic (Yalom & Leszcz, 2005). Through interchange of ideas and experiences, parents develop interpersonal learning techniques that would empower them to help their children more, thus, increasing their sense of hope and optimism. Developing hope in the child's independence is crucial in terms of increasing parents' positive emotions and well-being (Ekas, 2009; Cooke, 2010; Seligman, 2011). In a similar vein, Faso, Neal-Beevers, and Carlson (2013) demonstrated that vicarious futurity, hope, and well-being in parents of children with ASD predicted life satisfaction, regardless of child symptom severity. Seligman (2006) posited that parents who do things that have positive impact on others or are useful to others are valued for what they do and, consequently, build self-esteem for themselves. In effect, the parents of ASD children may experience positive emotion increase and negative emotion decrease simultaneously. As Seligman (2002) stated, "...if you have a lot of negative emotion in your life, you may have somewhat less positive emotion than average; similarly, if you have a lot of positive emotion in your life, it only protects you moderately well from sorrows" (p. 57). In relation to *promoting positive child development*, Brewer (2013) established that highly resolved parents express greater parenting self-efficacy, including greater confidence in managing behaviors, teaching skills, and advocating for support than their unresolved counterparts. Furthermore, parents who are confident can better resolve and manage their child's disorder, leading to a significant increase in their positive emotions and corresponding decrease in their distressed and detached emotions. In this study's intervention program, the matter of acceptance of the child's disorder needed to be resolved in the early sessions as it is the initial factor which motivates the parents to take their ASD children to health professionals to receive proper treatment. In relation to *reducing parental negative emotions*, parents of ASD children have to learn to balance their emotions to remain positive. Not unexpectedly, these parents are, initially, at risk of experiencing a number of negative emotions such as feelings of being overwhelmed

and anger at their spouse, healthcare providers, or even themselves. Other negative emotions include despair, guilt, frustration, feelings of social isolation, embarrassment at the child's behavior in public, and so on. However, parents who are emotionally healthy are in control of their emotions and behaviors and are able to handle challenges, build strong relationships, and recover from setbacks (Bekhet, Johnson, & Zauszniewski, 2012).

Of the nine components identified, promoting positive family support and resilience were not found to be significantly related to developing happiness among Thai parents of children with ASD. Perhaps, the parents involved in the present investigation did not perceive these factors to be critical enough as to play a significant role. This outcome is not consistent with those of previous studies which established that family members' understanding is a crucial aspect for promoting happiness among primary caregivers (Banach, Iudice, Conway, & Couse, 2010; Fuentes, 2012; Meral & Cavkaytar, 2012). By the same token, it had been suggested that resilience reflected the capacity to make realistic plans and take steps to carry them out, a positive view of oneself, confidence in one's strengths and abilities, and the capacity to manage strong feelings and impulses which are believed to be factors that people need to develop themselves (APA, 2007; Fredrickson & Branigan, 2003). Perhaps, further exploration of the role played by these two factors is warranted for more conclusive results. Finally, the intervention program was found to decrease depression. This comes as no surprise since the program focused on strengthening positive emotions in practically all the sessions.

Conclusion and Implications

The current research attempted to develop and examine the effectiveness of a positive psychology-based program for increasing happiness among parents of children with ASD in Thailand. It can be concluded that the Thai positive psychology-based program that utilized the results of the final nine-component structure of the Happiness in Parents of Children with ASD Scale (HPCA) is effective and serves as a valuable knowledge resource for mental health professionals with its insights into new ways to make a positive impact on parents experiencing hardships due to their child's disorder. The results of the three major studies in this research can be utilized by health care providers or related professionals from various disciplines in their attempt to develop happiness among parents of ASD children. Furthermore, the new knowledge derived from this investigation may be utilized as catalysts that could precipitate further studies aimed at enhancing positive mental health outcomes while reducing negative ones among affected parents. It is suggested that the positive psychology-based program be integrated with other related interventions in order to fortify parental self-efficacy and self-confidence in caring for children with ASD.

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