Assessing the AQS/TAS-45 Indonesia Version for Children Attachment in Yogyakarta

Titik Muti'ah Faculty of Psychology Sarjanawiyata University tmutiah2000@yahoo.com

Abstract

The purpose of this study was to examine the Indonesia versions of the Attachment Q-Sort/ AQS-Toddler Attachment Sort-45/TAS-45 (Bimler & Kirkland, 2002). Assessing the child's attachment in Indonesia has not been done lately. Data were collected through observation of 84 Indonesian toddlers residing in Yogyakarta. The validity of the TAS-45 was determined by Kirkland (2008) through mapping TAS-45 for the Indonesian users. This study had the inter-rater reliability of 0.92 that indicated the convincing score. The study finding shows the Indonesian AQS/TAS-45 is reliable and valid in for Indonesia children sample and suggest that the TAS-45 Indonesia version reflect similar concept to those in the original English versions.

Keywords: AQS/TAS-45, child, attachment

Introduction

Population Indonesia in the world reaches as the fourth largest population with a total of 231 million people (UNICEF, 2007). The population growth rate is 1.14% per annum and the total fertility rate is 2.3 children per woman, given the enormous opportunities to provide relatively low cost for a healthier lifestyle, it is in this country's interest to advance an understanding of contributing influences. It is known that the nature of child-parent attachment has a lifelong effect. Hence it is in the best interests of society to find what is optimal and promote this as a high priority. Therefore Indonesia extremely needs to apply the latest instrument to assess the child's attachment and also to decide the child attachment styles.

The Toddler Attachment Set-45/TAS-45 (Bimler & Kirkland, 2002 & pers. comm.) was used to assess the toddler attachment security and also toddler attachment style. TAS-45 is reduced and modified from the well-established of 90 items Attachment Q-Sort/AQS (Water, 1987 & pers. comm). The TAS-45 is relatively short (list of items), more practical and quicker to be learnt by new users to measure the quality of the attachment relationship between the children and the primary caregivers.

Attachment theory explains how an emotional bond that develops between a young child and mother (parents) forms the basis for further child development of secure attachment. Child attachment security is defined as a state of being secure or untroubled of the attachment-figure (the mother) availability and emotional stability as a direct consequence in the children psychological growth. Child attachment security is based on the attachment theory which has been employed by many researchers (Bowlby, 1969, 1973, & 1988; Ainsworth, 1969; Main, *et al.*, 1985) and had been linked to psychodynamic theories (e.g. Fonagy, 1999, 2002; Raphael-Leff, 1993, 2001; Winnicott, 1958).

Bowlby's attachment theory which was an essential part of Freud's insights about close relationships with competence-motivated infant using its primary caregiver as a secure base, as a heaven of safety and source of comfort (Bowlby, 1973, 1988; Waters and Cumming, 2000). This attachment style is an important development because it becomes internalized into a working model of self and in relationship with others which is enduring and carried forward into adulthood (Waters et al. 1995; Waters, et al., 2000; Crittenden, 2000).

The secure attachment relationship has its root in the earliest of life which contributes to a valuable relationship (i.e.: Bowlby 1969, 1973, 1980; Raphael-Leff, 1991; Condon, 1993; Snyder and Lopez, 2007). The formation of secure attachment in early life is likely a protective factors in which the child is able to use the mother (parent) as a secure base to explore freely new or unique stimuli around them (environment). It acquire a sense of confidence and adaptability of challenging situation (without interruption from anxiety and anger), and provide the bestknown psychological precondition for tensionfree playful exploration (Waters and Cumming, 2000). The development of attachment security has been concerned with behavioral system, conceived as having an inner organization as well as outward manifestation and having a context not only in terms of the environment but also in terms of the intra-organismic neuro-physiological state (Ainsworth, 1969). Moreover, according to Schore as neuropsychoanalyst (1997, 2002, 2003), attachment to the primary caregiver influenced the evolution of structures in the child's brain, especially into the maturation of region of the right cortex, the orbitofrontal cortex (which might store the internal working models of attachment). Research in cognitive neuroscience has also shown that there was a very rapid increase in the development of brain for young children, especially those under three of age (toddle ages) and after that age, plasticity (the ability of the brain to develop cells connections) continues at a slower rate until the age of ten (Riley, 2003). Because of that, the first three years of life are considered as a crucial ages to children (Bransford, et al., 2000).

The individual differences in the organization of secure-base behavior and associated differences in affective expression happen as a consequence of quantitative and qualitative differences in the pattern of interactions over the first years of life (Water, et al., 1995). This differences support the construction of qualitatively distinct internal working model of the attachment relationship, the self, and the general social world (Vaughn and Bost, 1999).

The essential for mental health is when an infant or young child can experience a warm, intimate and continuous relationship with his / her mother in satisfaction and enjoyment (Bowlby, 1953, 1969; Fonagy, 2001a; van Ijzendoorn and Bakersmans-Kranenburg, 2002; Bakersmans-Kranenburg, et al., 2003). The secure attachment child is investigated from several indications, which are the interaction/relationship between the child and the mother, the process of internal working model (self representation) and child secure base behavior, regulatory behavior, and influence later competence and adjustment (Cassidy and Shaver, 1999).

A number of studies have documented how securely attached children, compared with insecurely attached children, develop more initiatives. competent exploratory more successful close relationships with caregivers, and more positive representations of self, relationships to other people (Kanieski, 2007; Belsky and Cassidy, 1994; Sroufe, 1996; Thompson, 1998), children show more competent in problem-solving skill as toddlers (Mates, et al., 1978). The child with a "secure base" of psychological assurance enables them to explore freely and with confidence asking to the caregiver's assistance if found unexpected difficulty or danger ensues (Ainsworth, et al., 1978). Exploratory confidence not only contributes to the development of behavioral competence and greater self-efficacy in children as they develop internal representations of themselves as competent and capable, in contrast with the self-representations of less secure children as incapable (Bretherton, 1985).

There is considerable evidence that the number of children who develop a secure pattern of attachment is proportionately similar across cultures (Bimler and Kirkland, 2002; U.S. Department of Education, National Center for Education Statistics 2003-2004). In African, Chinese, Israeli, Japanese, Western European, and American cultures alike, most children, about two-thirds, are securely attached to their caregivers (van Ijzendoorn and Kroonenberg, 1988; Reebye, et al., 1999; Bakermans-Kranburg, et al., 2004; Chaimongkol and Flick, 2006). They exposed that the proportion of children who are insecure-avoidant or insecure-ambivalent, varies across the cultures, such as in Japan which had higher proportion of children are classified as ambivalent and a lower proportion of children are classified as avoidant than in Western European and American cultures.

Various studies have found that stability of attachment classification is positively related to the socioeconomic status (Egeland and Sroufe, 1981; Spieker and Booth, 1988). Even though an income itself is an unreliable predictor of attachment security (Spieker and Booth, 1988; Diener et al., 2003). According to Zevalkink and Riksen-Walraven (2001) of Indonesian family, the socioeconomic factors have a stronger impact on the quality of parenting than the cultural factors.

Methods

The data were collected natural observation of participants to 84 toddles in Yogyakarta province (Muti'ah, 2009). Yogyakarta was chosen for this research because of its miniature representation of Indonesia and Javanese ethnic (Indonesian biggest ethnic).

This study applied a non-probability of purposive with **proportional quota** and convenience sampling techniques. They came from low and middle-class families which were required to fulfill some criteria in order to minimize the confounding factors as the research objective expectation. The participants were toddlers (24-35 months) and grown-up in a relatively stable social-cultural environment and physicallymentally normal.

TAS-45 instrument is originally from Western countries which have been tested the validity and reliability for the Indonesia - user. The instruments were translated from English to Indonesian and then retranslated into English. The translated instruments were certainly still maintaining its original content. For that reason, the translated instruments were justified by Indonesian child and clinical psychologists or professional, then retranslated back into English by the professional translator. This procedure was essentially done to establish them (items of the instruments) as adequately valid instruments for their new users in Indonesia.

Socio-economic factors consisted of mother's age, family income, child's age in months and gender, mother's occupation into three categories of a full-time job, a part-time job and a housewife, mother's education into many years of their attendances in the education institution. In particular of family income it was classified into two categories of low income (less than 1 million Indonesia Rupiah per month) and middle income (more than 1 million Indonesia Rupiah per month) (Jakarta Post, 2008; Resource and Support Development Directorate, 2006). Table 3.4 summarizes the description of socioeconomic factors of respondents.

In some Indonesian families, the financial income is not only gained from a certain permanent job but sometimes also obtained from other financial sources such great family (parents, parent in law, families, and others). Family income is divided into two categories: low income (less than 1 million Indonesia Rupiah) and middle income (more than 1 million Indonesia Rupiah) as the standard minimum for living cost is 1 million Indonesia Rupiah (PT. Post Indonesia, 2008). Based on the observation, the 70.2% of the respondents were of middle income families and the 29.8% were of low income families.

Table 1.1 Description of Respondents (n=84)

Characteristics		Frequency	Percent
Mothers age	< 20 years	3	3.6
	20.1 - 25 years	48	57.1
	25.1 - 30 years	23	27.4
	> 30.1 years	10	11.9
Mother education	<high school<="" td=""><td>10</td><td>11.9</td></high>	10	11.9
	high school>	39	46.4
	Graduate	35	41.7
Mother Occupation	house wife	31	36.9
	part-time job	11	13.1
	fulltime job	42	50.0
Family Income	Low (≤1 million Rupiah)	25	29.8
	Middle (>1 million Rupiah)	59	70.2
Family Housing	As Nucleus Family	30	35.7
	Mixture (Extended)	16	19.0
	As Extended Family	38	45.2

Characteristics		Frequency	Percent
Child-Gender	male	43	51.2
	female	41	48.8
Child Age	24 – 27 months	31	36.9
	28 - 31 months	27	32.1
	32 - 35 months	26	31.0

The TAS-45 consists of 45-items and is designed to provide a comprehensive description of a child 'secure base' behavior with caregivers. The TAS-45' application can refer to the Q-sorting procedure, even it can also be generated using an online software. In manual procedure, the 45 items TAS had to be transferred or printed into the 45 cards-size papers. They were sorted into nine piles along a range from those items least-like descriptive/uncharacteristic to those most-like (group 1) /descriptive of the child during observation. Bimler and Kirkland (2002) classified the items into 9 groups, namely group 1 (4-items with maximal width)-hugs mother comforted, group 2 (5-items)-listens/obeys to mother, group 3 (5-items) - enjoys others, group 4 (6-items)-independent from mother, group 5 (5-items) –attention to mother, group 6 (4-items)-clingy to mother, group 7(4-items)unsociable, group 8(5-items) -fussy/upset and group 9 (7-items with minimum width)unconnected/unsure. The items of extremely child's descriptive were put on the final sort (in pile 1-3), while the items of un-descriptive of the child were put on the low final sort (in pile 7-9). The items neither descriptive/characteristic nor uncharacteristic/un-descriptive were put in the middle piles (4-6). The child security score was an item-by-item correlation between the

91

observer's sort for a particular child and a group width as explained above.

The TAS-45 was considerably valid for measuring the attachment security in the Indonesia children. This was convinced from the previous meta-analysis of 139 AQS studies covering 13,835 children from various cross-cultures (Chinese, Colombian, German, Israel, Japanese, Norwegian and U.S.). This has demonstrated a close association between Q-set security scores, on the 90-items AQS, the 45-items measure and the classification of infant Strange Situation (Posada, et al., 1995), and referred to their reliability and validity (Pederson, et al., 1990). Much of ongoing research has been carrying out using the TAS-45 such as being done in the U.S., England, Germany, New Zealand and Thailand. The (inter-observer) reliability of the TAS-45 reported in Thailand was 0.87. This study also had the inter-rater reliability of 0.92 that indicating the convincing score.

Kirkland and Bimler (2002) have developed and explored a shortened version of the AQS became TAS-45 for 2-year on the project of 'Early Childhood Longitudinal Study Birth Cohort (ECLS-B)'. They made data collection using AQS datasets acquired from researchers in many different countries. They have been using Multidimensional Scaling and facet cluster analysis to identify the AQS items and obtained the best possible information about the children's security of attachment. That was a procedure used to maintain the reliability during the data collection for years. The validity of the TAS-45 was varied with demographic variables and with outcome measures as children's Bayley Short Form–Research Edition (BSF-R) mental and motor scale scores. The detail of TAS-45 reliability and validity has been described by Andreassen and Frethcer (2006) on the ECLS-B Psychometric Report for the 2-year data collection (NCES).

Kirkland (2008) also determined the validity of TAS-45 in this study into a number of validity types through mapping TAS-45 for the Indonesian users. For that purpose, the researcher obtained some additional data (MoT/Method of Triads) on the 100 tables of TAS-45 items as previously sent the TAS-45 data to Kirkland (Kirkland, pers. comm.) for further statistical calculation and classification the attachment of 84 respondents. The results obtained have demonstrated the strong evidence of the TAS-45 validity for the Indonesian users.

Result

The Indonesia version of TAS-45 distribution scores obtained are ranged from 0.03 to 0.84 where the mean, trimmed mean and median are 0.52, 0.53 and 0.56, respectively. The standard deviation is 0.22 while variance is 0.48. The 25th percentile of TAS-45 is 0.33 and the 75th percentile is 0.68, thus the IQR was 0.35. The scores obtained for 25th and 75th percentile suggest that 50% of the children have the score between 0.33 and 0.68. Skewness is -0.522, indicating that the distribution was negatively skewed and approaching a normal distribution.

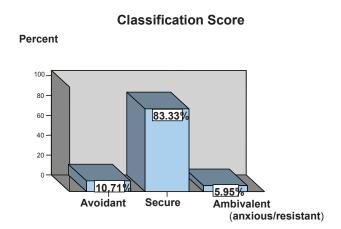


Figure 1.1. Classification Score of TAS-45

TAS-45 has 9 components, which are comfortable cuddy (M =0.56, SD =0.20), cooperative to mother ($\underline{M} = 0.37$, $\underline{SD} = 0.29$), enjoy company $(\underline{M} = 0.23, \underline{SD} = 0.18)$, independent $(\underline{M} = 0.56, \underline{SD})$ =0.28), attention-seeker (M = 0.14, SD = 0.23), upset by separation (M =-0.098, SD =0.199), demanding (M =-0.076, SD =0.23), disorganized (\underline{M} =0.56, \underline{SD} =0.20), unconnected/unsure (\underline{M} =-0.82, SD =0.37). These components reflect to specific toddler attachment styles which can be classified into three types of secure behavior (the 'B'), insecure-avoidant (the 'A') and insecureambivalent (the 'C'). By using Kirkland and Bimler's calculation (Pers. Comm.), 83% toddler respondents are classified as type 'B', 10.7% as type 'A' and 6% as type 'C'. The percentage of Indonesian toddler attachment (TAS-45) classification is shown in Figure 1.1 The results obtained were closed to and consistent with the results obtained by Early Childhood Longitudinal Study, Birth Cohort (ECLS-B) report. This was 61.70% of respondents fall under secure type, 13.64 % as insecure-avoidant and 12.22% as insecure-ambivalent (U.S. Department of Education, National Center for Education

Statistics, 2004). However, the Indonesian toddler attachment security is found higher than the ECLS-B' study classification. This indicates that their family environment is conducive for the toddler to develop attachment security.

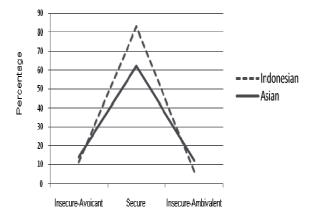


Figure 1.2. Indonesian and Asian child attachment classification.

The effect of socio-economic factors on the toddler attachment security can be noticed below. An independent sample t-test was conducted to compare between the mean toddler attachment score for male and female, and to check the normality and equality of variance. The t-test showed that the mean TAS-45' score for female are slightly higher than for male toddler. This showed a significant difference in the mean score of TAS for male ($\underline{M} = .449$, $\underline{SD} = .226$) and female toddler [M = .593, SD = .190; t (82) = -3.157, p = .002]. The result obtained from the assessment done to two means suggested that the female toddlers are more securely attach compare to the male toddler. The eta-squared value ($\eta 2 = .108$) is considered large. This large effect suggests that the mean different score of TAS for male and female toddler was more than moderate.

The independent sample t-test was also conducted to compare the mean score between low and middle family incomes and to check the normality and equality of variance. The result showed that the mean score of TAS-45 for a low family income is slightly lower. The result showed that there was no significant difference in the mean toddler attachment scores for a low family income ($\underline{M} = .472$, $\underline{SD} = .209$) and a middle family income [$\underline{M} = .539$, $\underline{SD} = .223$; *t* (82) = -1.296, *p* = .199]. The assessment carried out for two means suggests the similarity on the TAS scores between low and middle family incomes.

The independent sample t-test was used to compare the mean score of toddler attachment between housewife and working-wives. The result showed that there was no difference in the mean TAS score for the respondent of recent occupation. This indicates that the TAS mean score for housewives and working-wives is similar. There was no significant difference in the mean TAS mean scores for housewife respondents ($\underline{M} = .476$, $\underline{SD} = .213$) and working respondents ($\underline{M} = .556$, $\underline{SD} = .222$; t(82) = 1.674, p = .098]. Thus, the respondent's occupation did not affect the toddler security attachment.

The one way ANOVA was also performed to investigate the influence of mother education (lower than high school; high school; graduate) on the toddler attachment means score. It showed a significant effect of education background [$\underline{F}(2,81)=3.598$, $\underline{p}=.032$], however the effect

size found was small (eta squared=.08). The eta-square indicates the mean difference among three groups of mother education background is moderate. Bonferroni Post Hoc multiple comparison test was done and the results show that there was a statistical difference in the mean test score for graduate and less than high school education background but not for high school. These results indicated that the less than high school education background provided a statistically lower mean score (M=.3697, SD=.187) than graduate (M=.573, SD=.242) and high school education (M=.509, SD=.192). The above finding reveals that the graduate respondents offer more encouragement to the toddler security attachment. This confirms some points which convince the first research question that there is the effect of socio-economic factors to the toddler attachment security.

Discussion

The effect of social-economic factors to the toddler attachment security was occurred to the child gender (female performed more secure than male), the education background (the higher grade performed better to the toddler attachment security) and the family income. This study has found that the low income respondents did not affect to the decreasing the sense of toddler attachment security. However, in earlier Ainsworth (1967) has confirmed that the development of attachment was not immune against the contextual influences and the presence of socio-economic risks could increase the probability of insecure attachment (Belsky *et*

al., 1995; Vondra *et al.*, 2001). This phenomenon is conceivably happened due to unreliable predictors of the family-income itself as a part of socio-economic factors in the study of children attachment security (Spieker & Booth, 1988; Diener *et al.*, 2003). The family socio-economic stability is necessary for children to grow and to develop being secured.

The child differences of a secure and insecure (avoidant and anxiety) attachment associated with differences in the affective expression arose as a consequence of quantitative and qualitative differences in the pattern of interactions. These differences support the construction of internal working model of children about the self and general social world (Bowlby, 1973, 1988; Bretherton, 1985; Main, Kaplan & Cassidy, 1985). This difference of attachment styles and security in this study showed the same pattern as Asian proportion of attachment style (secure and insecure).

The implication of the study has proven that the research finding on children attachment in Indonesia has no difference compare than the studies done in Western (Europe) and U.S. countries. It is strengthen the central tenet of attachment theory that early experiences between young children and their mothers provide a model for intimate relationship in children later life.

The quality of attachment relationship between children and their primary caregivers, as manifested by the attachment security has been a paramount importance to the mental health across the child life span. Secure children engage in mutually rewarding interaction with their mothers. The harmony between mother and child has benefits for the further development of peer relationship. Securely attached children are more likely to have close friends, be more socially competent, more acceptable by their peer groups, have more empathy for others and able to read emotional cues. Secure children are more self reliant and better problem solvers.

This result is expected to give some ideas, input and suggestions next researchers by using this TAS-45. This instrument can help student (education institutions), child psychologist and parenting consultant to assess the child attachment styles and later strengthen children mental health of new family. Then it can be enlarge to provide consistent support, assistance and assessment the child's healthy development which will prevent or reduce the need for more expensive interventions once psychopathology has emerged.

Measuring child attachment is need a valid and reliable instruments. This can also improve the statistical requirement of a research study. With the large numbers of sample size, it will encourage to obtain a path-type model or structural equation model, which needs to be developed and tested for optimal finding in child attachment.

References

- Ainsworth, M.D.S. (1969). Object relations, dependency and attachment: a theoretical review of the infant-mother relationship. *Child Development, 40*, 969-1025.
- Ainsworth, M.D.S. (1969). *Maternal sensitivity scale*. From mimeograph JHU, Baltimore. 3/10/69. from http://www.psychology.sunysb.edu/ewaters/552/senscoop.htm
- Ainsworth, M.D.S., Blehar, M.C., Waters, E., & Wall, S. (1978). *Pattern of attachment*. Hillsdale, NJ: Erlbaum.
- Ainsworth, M.D.S., Bell, S.M., & Stayton, D.J. (1974). Infant-mother attachment and development: "Socialization" as a product of reciprocal responsiveness to signals. In M.P. Richards (Ed.), *The integration of a child into a social world*. London: Cambridge University Press, 9-135
- Andreassen, C. & Fletcher, P. (2006). Early Childhood Longitudinal Study, Birth Cohort (ECLS-B) Psychometric Report for the 2-Year Data Collection (NCES 2006-045). U.S. Department of Education (pp.1-28). Washington, DC: National Center for Education Statistics.
- Bakermans-Kranburg M.J., van Ijzendoorm M.H., & Kroonenberg P.M. (2004). Differences in attachment security between African-American and white children: ethnicity or socio-economic status? *Infant Behavior & Development*, 27 (3), 417-433.
- Belsky, J. & Cassidy, J. (1994). Attachment: Theory and evidence. In M. Ruller and D. Hay (Eds.), *Development through life* (pp.373-402). Oxford: Blackwell.

- Bimler, D. & Kirkland, J. (2002). Unifying versions and criterion sorts of the Attachment Q-set with a spatial model. *Canadian Journal of Infancy and Early Childhood*, 9(1), 2–18.
- Bowlby J. (1953). Child care and the growth of love (pp. 13). Melbourne, Australia: Penguin Books.
- Bowlby, J. (1969). Attachment and loss (vol.1). New York: Basic Books.
- Bowlby, J. (1973). Attachment and loss: separation, anxiety and anger. New York: Basic Books.
- Bowlby, J. (1988) A secure base: Clinical implications of attachment theory. London: Routledge.
- Brandon, Anna Rachel (2006). *Maternal and fetal representations, dimensions of personality, and prenatal attachment in women hospitalized with risk pregnancy*. Dissertation PhD, University of Texas Southwestern Medical Center, Dallas.
- Bretherton, I. (1985). Attachment Theory: Retrospect and Prospect. *Monographs of the Society for Research in Child Development*, *50*(1-2), 3-35.
- Bretherton, I., & Waters, E. (1985). Growing point in attachment theory and research. *Monographs of the Society for Research in Child Development*, 50, Serial No. 209 (1-2), 3-35.
- Cassidy, J. & Shaver, P.R. (Eds.) (1999). *Handbook of Attachment: Theory, Research and Clinical Application*. New York, London: The Guilford Press.
- Chaimongkol, N.N. & Flick, L.H. (2006). Maternal sensitivity and attachment security in Thailand: Cross-cultural validation of Western measures. *Journal of Nursing Measurement*, 14(1), 5-17.
- Condon, J.T. (1993). The assessment of antenatal emotional attachment: Development of a questionnaire instrument. *British journal of Medical Psychology*, *66*, 167-183.
- Crittenden, P.M. & Claussen, A.H. (2000). *The organization of attachment relationships*. Cambridge: University Press.
- Diener, M.L, Nievar, M.A., & Wright, C. (2003). Attachment security among mothers and their young children living in poverty: Associations with maternal, child, and contextual characteristics, October 2003. Merrill-Palmer Quarterly, 49(4), 518-521.
- Egeland, B. & Sroufe, L.A. (1981). Attachment and early maltreatment, Child Development, 52, 44-52.
- Fonagy, P., Gergely, G., Jurist, E.L., & Target, M. (2002) *Affect regulation, Mentalization and the Development of the Self.* New York: Other Press.
- Fonagy, P. (1999). Transgenerational consistencies of attachment: a New theory. Paper to the Developmental and Psychoanalytic Discussion Group, 13 May 1999, *American Psychoanalytic Association Meeting*, Washington DC.
- Fonagy, P., Steele, M., Moran, G., Steele, H., & Higgitt, A. (1993). Measuring the ghost in the nursery: An empirical study of the relation between parents' mental representations of childhood experiences and their infants' security of attachment. *Journal of the American Psychoanalytic Association*, 41, 957 – 989.

- Jakarta Post (May 27, 2008) Cash aid fails to reach low-income workers. *National News* from http://old.thejakartapost.com/yesterdaydetail.asp?fileid=20080527.@03
- Kanieski, M.A. (2007). Best Be the Ties that Bind: Bonding and Attachment. Presented *at Monitoring Parents: Childrearing in the Age of 'Intensive Parenting'*. In the School of Social Policy, Sociology and Social Research at the University of Kent, May 22. from www.parentingculturestudies.org/ resources/kanieski.pdf
- Main, M., Kaplan, N., & Cassidy, J. (1985). Security in infancy, childhood and adulthood: A move to the level of representation. In I. Bretherton & E. Waters (Eds.). Growing point of attachment theory and research (pp. 66-104). *monographs of the Society for Research in Child Development*, 50(1-2) No.209.
- Mates, L., Arend, R.A., & Sroufe, L.A. (1978). Continuity of adaptation in the second year: the relationship between quality of attachment and later competence. *Child Development*, 47, 511-514.
- Muti'ah, Titik. (2009). Thesis: Maternal Antenatal Attachment, Toddler Temperament, Maternal Sensitivity and Toddler Attachment Security in Indonesia
- PT Pos Indonesia (Persero). (2008). Bantuan Langsung Tunai (BLT) from http://www.posindonesia. co.id
- Raphael-Leff, Joan. (1993, 2001). Pregnancy : The Inside Story. London: Sheldon.
- Reebye, P.N., Ross, S.E., and Jamieson, K. (1999). A Review of the Literature on the Development of Attachment Theory and the Study of Cross-Cultural Practices Influencing Attachment. from http://www.attachmentacrosscultures.org/research/
- Riley, J. (Ed.) (2003). *Learning on the Early Years: A Guide for Teachers of 3-7*. London: Paul Chapman Publishing.
- Schore, A.N. (2005). Attachment, affect regulation, and the developing right brain: Linking developmental neuroscience to pediatrics. *Pediatrics in Review*, *26*, 204–211.
- Schore, A.N. (2003). Affect Regulation and the Repair of the Self. New York: Norton.
- Schore, A.N. (2002). Advances in neuropsychoanalysis, attachment theory, and trauma research: Implications for self psychology. *Psychoanalytic Inquiry*, *22*, 433–484.
- Schore, J.R. (1997). *Rethinking the brain: New insight into early development*. New York: Families and Work institute.
- Snyder, C.R., & Lopez, S.J. (2007). *Positive Psychology: The scientific and practical exploration of human strength*. U.S.A.: Sage Publications, Inc.
- Spieker, S., & Booth, C. (1988). Maternal antecedents of attachment quality. In: J. Belsky and T. Neworski, Editors, *Clinical implications of attachment* (pp. 95–135). Hillsdale, NJ: Erlbaum.

- Sroufe, L. (1996). *Emotional development: The organization of emotional life in the early years* (Cambridge studies in social and emotional developmental). New York: Cambridge University Press.
- Thompson, R.A. (1998). Early sociopersonality development. In N. Eisenberg (Ed.), W. Damon (Series Ed.), Handbook of child psychology: *Social, Emotional and Personality Development* (Vol. 3, pp. 25-104). New York: Wiley.
- U.S. Departement of Education (2003-2004), National Center for Education Statistics, *Early Childhood Longitudinal Study, Birth Cohort (ECLS), 2-years data collection.* from http://www.childcareresearch.org/SendPdf?resourceId=1357
- Van Ijzendoorn, M.H. & Bakermans-Kranenburg, M.J. (2003). Attachment disorders and disorganized attachment: similar and different. *Attachment and Human Development*, *5*, 313-320.
- Van Ijzendoorn, M.H. & Kroonenberg, P.M. (1988). Cross-cultural pattern of attachment: A metaanalysis of the Strange Situation. *Child Development*, 59, 147-156.
- Vaughn, B.E. & Bost Kelly, K. (1999). Attachment and temparement. In Cassidy, J. & Shaver, P.R. (Eds.). *Handbook of Attachment* (pp.198-225). New York, London: The Guilford Press.
- Waters, E. (1987). Attachment Q-set (Version 3): Items and explanations. http://www.johnbowlby. com.
- Waters, B.E., Vaughn, G. Posada, & K. Kondo-Ikemura, Eds. (1995). Caregiving, cultural, and cognitive perspectives on secure-base behaviour and working models: New growing points of attachment theory and research. *Monographs of the Society for Research in Child Development*, 60(244), 2–3.
- Waters, E. and Cumming, E.M. (2000). A secure base from which to explore close relationships. *Child Development*, 71(1), 164-172.
- Waters, E., Hamilton, C.E. and Weinfield, N.S. (2000). *The Stability of Attachment Security from Infancy to*
- Winnicott, D.W. (1958). *Collected papers: Through Pediatrics to Psychoanalysis*. New York: Basic Books.
- Zevalkink, J., Riksen-Walraven, J., & Cornelis, F.M., Van, L. (1999). Attachment in the Indonesian caregiving context. Social Development, 8(1), 21-40.
- Zevalkink, J. & Riksen-Walraven, J.M. (2001). Parenting in Indonesia: Inter- and intracultural differences in mothers' interactions with their young children. *International Journal of Behavioral Development*, 25(2), 167–175.