

The Influence of Attachment Types on Academic Performance of Children

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ABSTRACT

Academic performance has been recognized as one of the educational evaluations, and preceding research has revealed a relationship between attachment types and academic success. When considering the influence of parents on children's learning, attachment theory is one of the theories that may be applied in school practice. Differences in children's academic achievement, according to attachment theory, might be explained by different security levels perceived from different types of attachment with parents or teachers. These disparities can be attributed to the fact that children's non-intellectual abilities, such as motivation, attention, and self-concept, are affected by the varied security levels they get, and hence have a direct impact on academic achievement. In this study, we will look at how attachment theory influences students' academic performance based on different non-intellective skills, and we will explore how attachment theory may be used based on the effects on non-intellective abilities.

Keywords: *Attachment theory, academic performance, attention, motivation, self-concept*

1. INTRODUCTION

The path to success for children, which is a major concern for parents and teachers, has received a lot of attention in the field of educational psychology. Academic achievement is one of the most important predictors of success, since most parents believe that the greater one's academic performance, the better one's chances of success. School psychologists have investigated many factors of academic success in attempt to understand the dynamics of academic performance in school. Aside from inherent characteristics, prior study has shown that non-intellectual factors such as motivation and cognitive ability account for almost 70% of academic performance [1]. School psychologists have begun to bring different theories into intervention strategies in order to improve kids' academic performance. When evaluating the effect of parents on children's learning, attachment theory is one of the theories that may be applied in school practise. Differences in students' academic performance, according to the attachment theory, can be explained by different security levels perceived from different types of attachment with parents or teachers, as previous research has shown that students who have a more secure attachment with their parents tend to get better grades than those who do not [2].

The attachment theory, which is first proposed by Bowlby, describes the attachment developed between caregiver and infants [3]. During the infant stage, children have an intrinsic need to develop a strong bond with their caregiver (typically their mother) and exhibit social releaser behaviours like as sucking and crying, which can elicit care and response from the caregiver. Based on their attachment, children will build an internal working model (IWM), which include their own self-perception and the reliance of others to give required attention and care [2]. Forming IWM will benefit children's future cognition, ability to develop coping strategies for stressful situations, and so on.

Based on different behaviors of infants towards caregivers, infants are classified into four types including secure, anxious-ambivalent, anxious-avoidant and disorganized-disoriented. Other than secure attachment, the other three attachment types can be categorized as insecure attachment, indicating that the early attachment quality between children and caregivers is generally low and has a detrimental impact on IWM development. They may develop problematic behaviours and be rejected by their environment, such as peers, as they grow up. The characteristics of children with different attachment types are shown in the table below.

Table 1. Characteristics of children with different attachment types.

| Secure attachment | Insecure attachment | | |
|--|---|--|--|
| Secure | Anxious-ambivalent | Anxious-avoidant | Disorganized-disoriented |
| <ul style="list-style-type: none"> · Feel safe and confident enough to explore their surroundings · Having faith in their abilities · Learn how to be resilient and independent · Believe and trust that their needs will be met | <ul style="list-style-type: none"> · Feel stressed and insecure · Experience emotional abandonment · Being more impulsive, unsociable and aggressive · Cannot rely on their needs being met | <ul style="list-style-type: none"> · Feel rejected, scared and stressed · Suffer from emotional isolation · Not believe their needs will be met | <ul style="list-style-type: none"> · Feel scared and sad · Having low-esteem, and being passive · Confused with no strategy to have needs met |

Previous study has highlighted the link between various types of attachment and students' academic performance, and it has been discovered that attachment security plays an important role. Children that have a secure attachment are more confident and willing to explore their environment, and they also exhibit more interest and attention to learning, which improves their academic achievement [2,3]. Since cognition and the ability to create strategies are critical to academic achievement, children who have a secure attachment likely to develop IWM earlier and perform better academically. Insecurely attached children, on the other hand, are frequently anxious, insecure, and rejected [4]. Children are afraid to explore and interact with their environment because of the uncertainty in their relationship with their parents. These youngsters are less goal-oriented and focused when learning, and as a result, their academic performance will suffer.

However, attachment styles do not directly impact children's academic achievement; rather, different attachment styles affect diverse children's non-intellectual skills, which in turn affect children's academic success. Therefore, considering several main determinants of academic performance, such as motivation, attention and self-concept of students, how they play a role in the relationship between attachment styles and academic performance will be discussed. Moreover, how attachment theory can be applied in students' learning process based on different non-intellective abilities will also be explored.

2. ATTACHMENT AND ACADEMIC PERFORMANCE THROUGH ATTENTION

Previous study has discovered a relationship between mother-child attachment, academic achievement, and cognitive development, with a more secure attachment leading to higher academic performance. [6]. Attention is one of the cognitive

abilities that might explain academic achievement, as securely attached kids have superior cognitive performance and academic performance. Jacobsen's longitudinal study demonstrates the relationship between different types of attachment and variances in attention involvement among children in middle childhood and adolescence. In this study, attachment representations are assessed from children's responses at age of 7, and at ages 9, 12, and 15, attention and GPA of these children are examined using questionnaires. The results show that both attention-participation ($p < .001$) and attachment types ($p < .05$) are significantly correlated to children's GPA in age of 15. This finding is explained by Bowlby's theory of secure attachment, which states that children with secure attachments are more confidence in their caregivers' responsiveness and availability. Van IJzendoorn further says that children who have a secure attachment are less concerned, and their attachment system is activated less frequently, which allows for better concentration and attention in the classroom [7]. As a result, these children can be more attentive and motivated to engage in learning throughout regular school lessons, and secure attachment enhances their preparedness to fully engage in examination during examination time. As a result, children that have a secure attachment will perform better academically.

In the experiment done by Stams, which focus on cognitive development in relation to attachment, suggests the relationship between parent-child relationship and cognitive development [8]. Attachment security, on the other hand, is not established as a significant individual predictor in predicting cognitive attachment, because of link between disorganized attachment and poorer cognitive development is not significant. This might imply that the variation in children's attention is not related to differences in attachment security, but rather to the connection

between parents and children, which affects academic achievement.

For other insecure attachments, attention problem is also found. Ambivalent attachment at 36 months in related to lower grades in middle childhood is founded in West's experiment [9]. The disparity in academic performance between children with secure attachment and those with ambivalent attachment is attributed to the stress of being away from their safe basis. Children with ambivalent attachment have worse cognitive performance and pay less attention in school since their exploration is restricted [10]. Apart from ambivalent attachment, disorganized attachment also predicts lower grades in middle childhood, as the difficulties in communication of caregivers and children indicates lower cognitive performance [11]. It is also claimed that children with disorganised attachment may struggle with self-control behaviours, affecting their involvement in classroom learning. Adopted children, like children with ambivalent attachment, have greater rates of attention issues than nonadopted children, since stress from adoption can severely influence children's cognitive development, particularly attention [12]. In latter longitudinal study done by Stams, the mother-child relationship and cognitive development of adopted children placed before age 6 months are examined in middle childhood. According to the findings, higher quality mother-child relationships, which also imply more secure attachment, predict better cognitive development in adopted children [8]. Meanwhile, it has been established that early mother-child relationships account for roughly 20% of variance in cognitive development, indicating the importance of parenting in connection to attention and academic achievement.

3. ATTACHMENT AND ACADEMIC PERFORMANCE THROUGH MOTIVATION

Individual motivation is constructed and built up by fundamental human needs such as belongingness [13]. Motivation has been emphasised by both parents and teachers as a major predictor of academic achievement in order to promote children's learning. When children study with motivation, they are more likely to plan, evaluate, and choose depending on the efficacy of their plans in order to make more appropriate and goal-oriented decisions [14]. These behaviours are referred to as strategies, and they are only performed by children who are motivated and eager to put out effort in academics. As a result, students who put in more effort tend to receive higher marks and do better in school. Furthermore, attachment to parents has been linked to academic motivation and hence predicts academic achievement. Duchesne conducted a research in which attachment with parents, academic motivation, and performance were measured using scales, and a positive

correlation was discovered [15]. For students with an insecure attachment relationship, they tend to have lower academic motivation. It is explained that these children may have internalized and externalized problem behaviours such as sadness and aggressiveness, and these behaviours act as a way for children to express their needs for security [3]. These behaviours will also affect the perception of peers and teachers, that these children with insecure attachments may be rejected by others, leading to a decrease in motivation. Some studies also show that maternal behaviours can also lead to low motivation in children. During the insecure attachment, parents of avoidant and ambivalent children are observed being overly restrictive and intrusive [4]. These maternal behaviours will negatively affect the persistence and mastery motivation of young children. However, for children with secure attachment, the high quality of attachment helps them to better manage their negative emotions. Meanwhile, when these children face stress and strange situations, it is easier for them to adapt to these situations compared to insecure attached children, which can also be seen as a protection against the development of problem behaviours [3]. With the ability to develop strategies for adapting to stressful situations and with confidence to overcome difficulties, secure-attached children are willing to spend more time and engage in school studying. When comparing children with secure or insecure attachment, secure attached children are comparatively more devoted to studying and have higher abilities to cope with the difficulties of studying. Therefore, the academic performance of children with secure attachment is expected to be better than children with insecure attachment.

4. ATTACHMENT AND ACADEMIC PERFORMANCE THROUGH SELF-CONCEPT

As psychologists study the effects of different attachment types on children's future development, attachment theory has also become a framework for individuals building their IWM of themselves and is important for individuals forming their beliefs and feelings about themselves. Prior studies have indicated the relationship between attachment security and self-concept using the sociometer hypothesis that being liked by others leads to more positive self-evaluations [16]. Since individuals with secure attachment have earlier social interaction experiences and get feedback more effectively from caregivers, it is easier for them to build their self-concept through stable and predictable feedback compared to children with insecure attachment. For children with avoidant or ambivalent attachment, they tend to distort their self-concept through denying or amplifying their feelings of distress [17]. In terms of attachment theory, they do not receive stable feedback in an effective way from caregivers,

which leads them to suspect both caregivers and themselves, thus leading to an unstable and relatively negative self-concept. Except for how children perceive themselves, the clarity of self-concept is also affected by attachment style [18]. According to Wu, insecure attachment is negatively related to self-concept due to unclear self-concept. Speaking of self-concept, it has also been recognized as a key determinant of academic success. According to previous theoretical studies, self-concept plays a role in learning, since they actively engage in achievement-related behaviors in order to confirm and maintain their self-perceptions [19]. Compared to children with lower and unclear self-perception, who may engage in self-handicapping behaviors such as procrastination, children with higher self-concept tend to find and take more chances to practice, which can enhance their academic performance. In other words, the difference between high and low self-concept children's academic performance is due to persistence and goal-oriented behaviors. Although the associations between attachment and self-concept, as well as self-concept and academic performance, have been studied in previous studies, there is a lack of studies studying all three variables. One study, which examines school performance in language mastery, has shown the effects of attachment and self-concept on academic performance [20]. In the study, 8-12-year-old children's attachment security from both fathers and mothers, and academic self-concept using scales are collected, and their grades on language mastery are obtained from their teachers. A strong mediation effect of self-concept has been found in the association between attachment security and academic performance in language. As mentioned above, effective communication between caregivers and children in a secure attachment will help children to gain confidence. When children obtain enough confidence from secure attachment, this confidence will turn into a more positive and clear self-concept. That is why children with secure attachment become more competent and exploratory in early childhood, which helps future engagement and persistence in school studying than children with insecure attachment.

5. APPLICATION AND LIMITATION OF ATTACHMENT THEORY

There are still some limitations of previous studies. Most previous studies that investigate the relationship between attachment styles and academic performance are correlational design, and this does not allow for finding any causal relationships. It is still possible that better academic performance will lead to more secure attachment developed with parents. For example, there is a research studying the reverse relationship between attachment and cognitive abilities [21]. When both cognitive abilities and attachment styles are assessed at

2 times, it is found that early cognitive abilities will affect attachment security in later time. Due to their low cognitive and reasoning abilities affecting communication with parents, this can be the risk of developing insecure attachment. Another limitation is because of the assessment of attachment. Some research only assesses the attachment styles at preschool age, and uses them as a variable to predict the later academic performance in school. For example, the longitudinal experiments done by Jacobsen. However, attachment styles may be different across time and affected by different environmental factors [22]. Therefore, in order to find the association between attachment style and academic performance, it is better to assess both preschool and later attachment styles to ensure consistency of attachment.

Some implications from attachment theory can be drawn from previous research. Based on previous discussion, the importance of attachment on children's development and academic performance has been shown. In order to enhance children's academic performance, some implications can be drawn from previous discussion and apply in children's education. Support and effective feedback are necessary for young children's cognitive development. Especially for some important time nodes that will cause more stress for children, including the transition of schools and examination periods, security attachment is needed. If secure attachment is not provided, children with insecure attachment are more likely to develop problem behaviors, or more seriously, psychopathy [2]. Therefore, in order to reduce the risk of insecure attachment and problem behaviors, systematic and effective methods have become the focus of recent research. One of the approaches is called the Circle of Security (COS), which is based on attachment theory, has been designed for caregivers and children to strengthen their bonds and build secure relationships [23]. Previous application of attachment theory has already been used as a behaviour evaluation of children, teachers and parents. And in this approach, it draws on the variances of secure and insecure attachment patterns. This approach is used to give caregivers clues on building secure attachment, thus leading to more positive developmental outcomes. The focus of this approach includes establishing a secure base for exploring the relationship between parents and children, enhancing caregivers' sensitivity and effective responses to meet the basic needs of children, and also facilitating caregivers' capacities to understand implicit and explicit cues elicited by children as a signal of internal needs. The effectiveness of this approach has also been tested by Hoffman, and the results have shown a significant positive impact of COS on high-risk and insecure attached children and their parents. It is also found that nearly 60% of children have shifted from disorganized groups to secure groups. Therefore,

in order to enhance children's cognitive development and academic performance, secure attachment is required by changing the behaviors of parents.

6. CONCLUSION

In conclusion, children's attachment styles with their parents can predict their future academic success by influencing their motivation, attention, and self-concept. It is also highlighted the importance of security in attachment and its link with cognitive development, confidence, and exploratory behaviors in the future, which will benefit children's studies. If the attachment is insecure, not only will academic performance suffer, but so will the risk of problem behaviors and psychopathy. According to COS, in order to strengthen attachments with children, parents should modify their sensitivity and response to children.

REFERENCES

- [1] Binder, D.M., Jones, J.G., & Strowig, R.W. Non-Intellective Self-Report Variables as Predictors of Scholastic Achievement. *The Journal of Educational Research*, 1970, 63(8), 364–366.
- [2] Kennedy, J.H., & Kennedy, C.E. Attachment theory: Implications for school psychology. *Psychology in the Schools*, 2004, 41(2), 247–259.
- [3] Moss, E., & St-Laurent, D. Attachment at school age and academic performance. *Developmental Psychology*, 2001, 37(6), 863–874.
- [4] Cassidy, J., & Berlin, L.J. The insecure/ambivalent pattern of attachment: Theory and research. *Child development*, 1994, 65(4), 971-991.
- [5] Bowlby, J. *Attachment and loss: 1969/1982(1)*. Loss. New York: Basic Books.
- [6] Jacobsen, T., & Hofmann, V. (n.d.). Children's Attachment Representations: Longitudinal Relations to School Behavior and Academic Competency in Middle Childhood and Adolescence. 8.
- [7] van IJzendoorn, M.H., Dijkstra, J., & Bus, A.G. Attachment, intelligence, and language: A meta-analysis. *Social development*, 1995, 4(2), 115-128.
- [8] Stams, G.-J.J.M., Juffer, F., & Van IJzendoorn, M.H. Maternal sensitivity, infant attachment, and temperament in early childhood predict adjustment in middle childhood: The case of adopted children and their biologically unrelated parents. *Developmental Psychology*, 2002, 38(5), 806–821.
- [9] West, K.K., Mathews, B.L., & Kerns, K.A. Mother-child attachment and cognitive performance in middle childhood: An examination of mediating mechanisms. *Early Childhood Research Quarterly*, 2013, 28(2), 259–270.
- [10] O'Connor, E., & McCartney, K. Attachment and cognitive skills: An investigation of mediating mechanisms. *Journal of Applied Developmental Psychology*, 2007, 28(5–6), 458–476.
- [11] Moss, E., St-Laurent, D., Dubois-Comtois, K., & Cyr, C. Quality of Attachment at School Age: Relations between Child Attachment Behavior, Psychosocial Functioning, and School Performance. 2005.
- [12] Stams, G.J.M., Juffer, F., Rispen, J., & Hoksbergen, R.A.C. The Development and Adjustment of 7-year-old Children Adopted in Infancy. *Journal of Child Psychology and Psychiatry*, 2000, 41(8), 1025–1037.
- [13] Deci, E.L., & Ryan, R.M. The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological inquiry*, 2000, 11(4), 227-268.
- [14] Bouffard, T., Boisvert, J., Vezeau, C., & Larouche, C. The impact of goal orientation on self-regulation and performance among college students. *British Journal of Educational Psychology*, 1995, 65(3), 317–329.
- [15] Duchesne, S., & Larose, S. Adolescent Parental Attachment and Academic Motivation and Performance in Early Adolescence. *Journal of Applied Social Psychology*, 2007, 37(7), 1501–1521.
- [16] Srivastava, S., & Beer, J.S. How self-evaluations relate to being liked by others: Integrating sociometer and attachment perspectives. *Journal of Personality and Social Psychology*, 2005, 89(6), 966–977.
- [17] Dozier, M., & Lee, S.W. Discrepancies between self-and other-report of psychiatric symptomatology: Effects of dismissing attachment strategies. *Development and Psychopathology*, 1995, 7(1), 217-226.
- [18] Wu, C. The relationship between attachment style and self-concept clarity: The mediation effect of self-esteem. *Personality and Individual Differences*, 2009, 47(1), 42–46.
- [19] Valentine, J.C., DuBois, D.L., & Cooper, H. The relation between self-beliefs and academic achievement: A meta-analytic review. *Educational psychologist*, 2004, 39(2), 111-133.
- [20] Bacro, F. Perceived Attachment Security to Father, Academic Self-Concept and School Performance

- in Language Mastery. *Journal of Child and Family Studies*, 2012, 21(6), 992–1002.
- [21] Stievenart, M., Roskam, I., Meunier, J.C., & Van de Moortele, G. The reciprocal relation between children's attachment representations and their cognitive ability. *International Journal of Behavioral Development*, 2011, 35(1), 58-66.
- [22] Davila, J., Burge, D., & Hammen, C. Why does attachment style change?. *Journal of personality and social psychology*, 1997, 73(4), 826.
- [23] Hoffman, K.T., Marvin, R.S., Cooper, G., & Powell, B. Changing toddlers' and preschoolers' attachment classifications: The circle of security intervention. *Journal of Consulting and Clinical Psychology*, 2006, 74(6), 1017–1026.